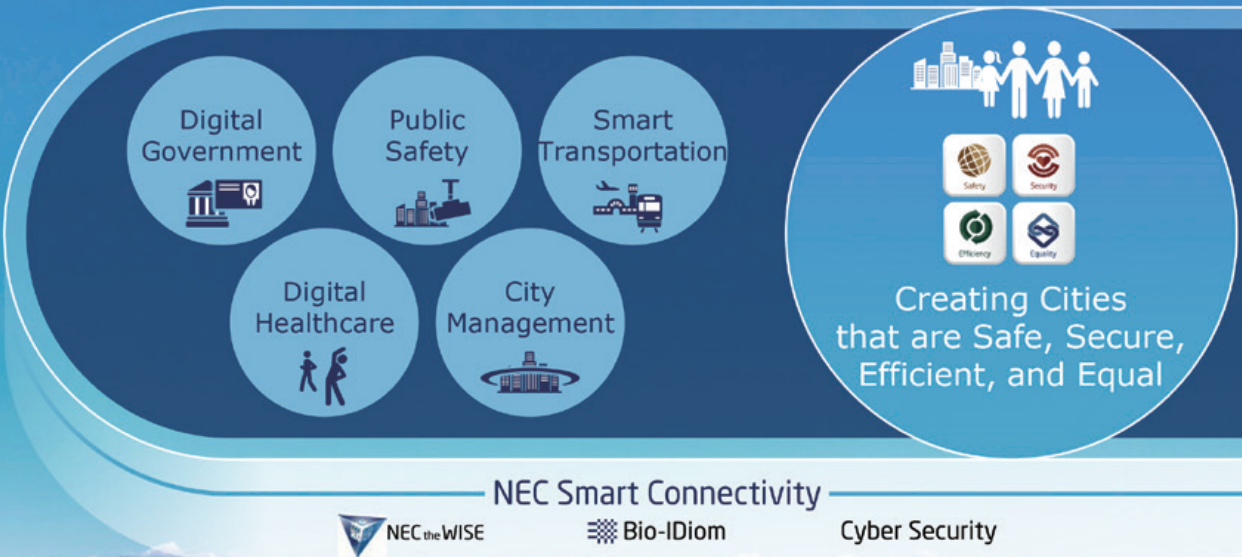# Feature

NEC Safer Cities

Vision

As populations rapidly concentrate in urban areas, new value is created through economic growth and the diversification of life and culture; At the same time, cities also face a wide range of social challenges, such as increasing levels of crime and terrorism. NEC will contribute to realizing safe, secure, efficient and equal cities where individuals can exhibit their potential to the full and live better lives, by utilizing cutting-edge technology such as biometric authentication, AI, and the IoT.

Digital Government · Public Safety · Smart Transportation · Digital Healthcare · City Management

Creating Cities that are Safe, Secure, Efficient, and Equal

NEC Smart Connectivity

NEC the WISE · Bio-IDiom · Cyber Security

Social Value to be Realized

Since fiscal 2018, we have been using business examples to highlight specific examples of the social values of safety, security, efficiency, and equality that we are providing through NEC Safer Cities in an effort to measure our progress on expanding value.

Currently, we are looking at some of our businesses in public safety and digital government (solutions for police forces and local governments) and examining ways to show the social values provided by these businesses quantitatively. In promoting our businesses in fiscal 2019, we posited that we would be able to contribute to the achievement of SDG targets 16[1] and 11[2], as well as increase the happiness of the communities living in the areas where we operate. Then, we referenced the statistics of the UN and other sources to consider their correlations.

The results of this investigation showed that the lower the crime rate in an area, and the more digitalized the government of an area, the higher the level of happiness tends to be among the residents.
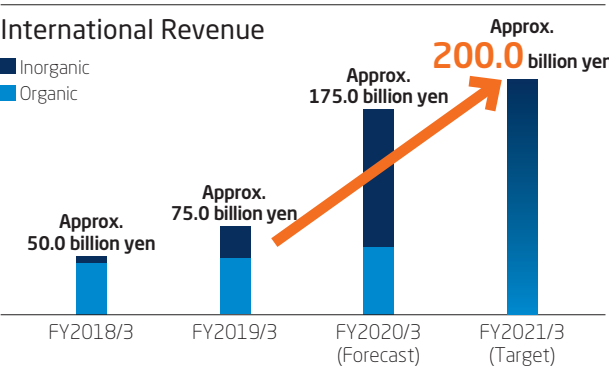
Moving forward, we will continue to promote the realization of social value and work to spread it wider to even more regions, while giving full consideration to human rights issues such as privacy. In doing so, we will strive to expand our role in increasing the happiness of people living in these areas, aiming to achieve both social and economic value.

[1] Target 16.a: "strengthen relevant national institutions, including through international cooperation, for building capacities at all levels, in particular in developing countries, for preventing violence and combating terrorism and crime"
[2] Target 11.3: "by 2030 enhance inclusive and sustainable urbanization and capacities for participatory, integrated and sustainable human settlement planning and management in all countries"

Economic Value to be Realized

NEC will shift to a business model with high revenue growth and a high profit margin. Our targets for international markets in fiscal 2021 are revenue of 200.0 billion yen, an operating profit ratio of over 5%, and EBITDA ratio of over 20%.

International Revenue

■ Inorganic
■ Organic

- FY2018/3: Approx. 50.0 billion yen
- FY2019/3: Approx. 75.0 billion yen
- FY2020/3 (Forecast): Approx. 175.0 billion yen
- FY2021/3 (Target): Approx. 200.0 billion yen

Digital Government

Realizing People-Friendly Societies through Digitalization and Social System Reforms

Digitalization can make administrative services more efficient and completely reform social systems, helping to create new services through cooperation between public and private sectors and create a society that is amenable for everyone -consumers, governments, and companies.

Public Safety

Realizing a Safe, Secure Society

NEC ascertains the status of people, things, and all manner of movement to provide advance warning of crime, disasters, and other events, and provide support after the events. We will support the creation of safe, secure cities.

Smart Transportation

Realizing safe, comfortable travel experiences

We will realize convenient, comfortable travel environments, offering simple, seamless connections between all modes of transportation, safely, securely, and with optimal routes and cost.

Digital Healthcare

Realizing a society where people enjoy good health and vitality

By using ICT, we provide solutions to various issues related to healthcare, while aiming to realize a healthy, long-living society where people enjoy good health and vitality.

City Management

Supporting the Creation of Smart, Comfortable Cities

With promotion of city digitalization and data utilization platform services, we will realize collaboration across public and private sectors on data use and services.

Initiatives for Creating Value

In our NEC Safer Cities initiative, we give top priority to privacy and human rights considerations in our business activities, including formulation of the NEC Group AI and Human Rights Principles and firm compliance with the legal systems of each country, such as the General Data Protection Regulation (GDPR).

These activities form the foundation for developing businesses predicated on our strengths in the "NEC the WISE" line up of advanced AI technologies, "Bio-IDiom" biometrics, "NEC Smart Connectivity" for providing smart connections between all manner of data, and "Cyber Security." Moreover, with a view to expanding our business, we acquired U.K.-based Northgate Public Services Limited (NPS) in fiscal 2018, and Denmark-based KMD Holding ApS (KMD) in fiscal 2019. Through these acquisitions, we obtained the two companies' assets in terms of platforms, customer bases, business models, and cultures.

By cultivating synergies with NEC's existing strengths and these new assets, while actively engaging in dialogue and co-creation with stakeholders, we will create social and economic value, helping to realizing cities that are safe, secure, efficient, and equal.

Expanding the Provision of Value through Synergies with Northgate Public Services Limited and KMD Holding ApS

NEC aims to expand its businesses and increase its earnings by promoting development of core technologies and solutions while acquiring new customer bases, delivery resources, core technologies, and business models through M&As and collaborative partnerships.

Northgate Public Services Limited

northgate
PUBLIC SERVICES
An NEC Company

NPS develops software and services for the public sector, mainly in the U.K., and employs approximately 1,400 software engineers throughout the U.K. and India. NPS works closely with the British police and government organizations to deploy a common business platform across a broad client base that includes local police forces, tax collection offices, social security offices and housing authorities.

KMD Holding ApS

KMD
An NEC Company

KMD mainly provides software and IT services in Denmark through business models that generate profit continuously on a recurring basis, such as software as a service (SaaS) offerings. Specifically, KMD has a strong customer base among central and local governments and has a wide variety of software for supporting the digitization of Denmark, which was the top ranking country in the "UN E-Government Survey 2018," announced by the United Nations Department of Economic and Social Affairs. In addition, KMD has a successful track record of executing strategic M&A, which has broadened its service offering in a number of key verticals.

Town-Hall Meeting at KMD

In February 2019, NEC Corporation Executive Vice President Yamashina conducted a town-hall meeting with the employees of KMD.

Over 1,000 people attended the meeting, offering various opinions and questions about matters such as NEC's technologies and business direction, differences in culture between European and Asian companies, and communication for learning NEC's technologies.

Using Synergies between Different Cultures to Create Business Capabilities

Masakazu Yamashina
Executive Vice President

NEC and KMD are from different countries with different corporate cultures. Through this dialogue, I had a strong sense of the extremely positive attitude and high level of expectation among KMD employees about becoming a member of the NEC Group. Denmark is a global leader in the application of digital government, and KMD has supported the Danish government's digitalization. We will use the knowledge that we acquire from KMD to promote the digital government business in Japan and other regions.

Town-hall meeting at KMD Head Office

Dialogue Session: Social Value Created by NEC Safer Cities

In April 2019, we asked a group of external experts in the fields of sustainable management, investment, and human rights to share their opinions on the theme of what social value is created by NEC Safer Cities and how that value can be measured. The participants in the dialogue included Executive Vice President Yamashina as a representative for the business divisions, along with the CMO and the general manager of the Digital Trust Business Strategy Division, to present examples of NEC Safer Cities businesses and explain the NEC Group AI and Human Rights Principles, which were announced in 2019. The experts commented that other cultures incorporated through acquisitions help to foster understanding of diversity and social tolerance, which will become strengths for NEC. They also noted that the social value created by NEC would be of an even higher level if it incorporated the human rights concepts of keeping people safer while ensuring humaneness and livability. In addition, they said that while it was best to quantify non-financial indicators where possible, the first priority should be to present a story explaining what the Company will invest in over the medium and long term, what assets will be invested, and how they will be allocated. Using the AI and human rights principles as a starting point, we will leverage consideration for diversity and high social tolerance as strengths to expand the social value provided by NEC Safer Cities.

Photograph from left: **Peter David Pedersen,**
Co-Founder, Next Leaders' Initiative for Sustainability (NELIS)
Hiroyuki Horii
Executive Officer, Chief Stewardship Officer
Sumitomo Mitsui Trust Asset Management Co., Ltd.
Asako Nagai
Director
BSR™ (Business for Social Responsibility)

Further details can be found in Sustainability Report 2019
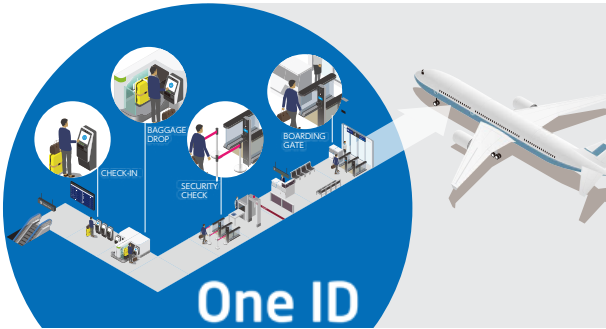**"Social Value Created by NEC Safer Cities."**

Example: Improving Safety and Convenience at Airports Using Biometrics

While the number of travelers is increasing rapidly around the world, the boarding procedure at airports is expected to become even more complex and time-consuming. NEC will use biometrics such as facial recognition to reduce burdensome procedures such as presenting a passport at multiple points, thereby enabling smooth boarding and arrival procedures. Furthermore, by increasing the identification accuracy in each procedure, the systems are expected to enable even better prevention of terrorist attacks and so forth. In addition, as labor shortages become a bigger challenge, automation of procedures will help to reduce labor needs, enabling operations to continue with fewer.

In Japan, Narita International Airport Corporation has decided to adopt NEC's facial recognition system for its new One ID boarding procedure. The system will begin rolling out from spring 2020. Internationally, NEC's systems have been introduced at a number of airports, helping to make them safe and comfortable to use.

In the future, we will look to expand the applications of biometrics beyond airports to enable provision of comfortable, smooth services in various facilities and services in towns, such as shopping payment and duty free processing, admission into sightseeing facilities, and swift, accurate healthcare services.

We will contribute to the creation of new experiences and value by connecting multiple airports with one another, and expanding into additional off-airport areas.

One ID

Computer generated image showing smooth boarding procedures using "One ID" at Narita Airport