

Public Business

Chikara Nakamata, Executive Vice President
Noritaka Taguma, Executive Vice President

Speakers



Chikara Nakamata

Public Solutions Business Unit



Noritaka Taguma

Public Infrastructure Business Unit

Public Segment

Overview of Public Business

Provide solutions for public infrastructure throughout Japan



Positioning of Public Business

Public Business supports sustainably NEC's business and management

NEC's Business Domains

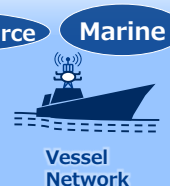
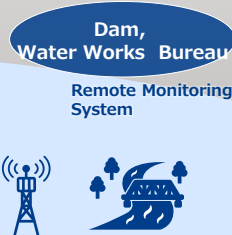
Global Business

System Platform Business

Enterprise Business

Network Service Business

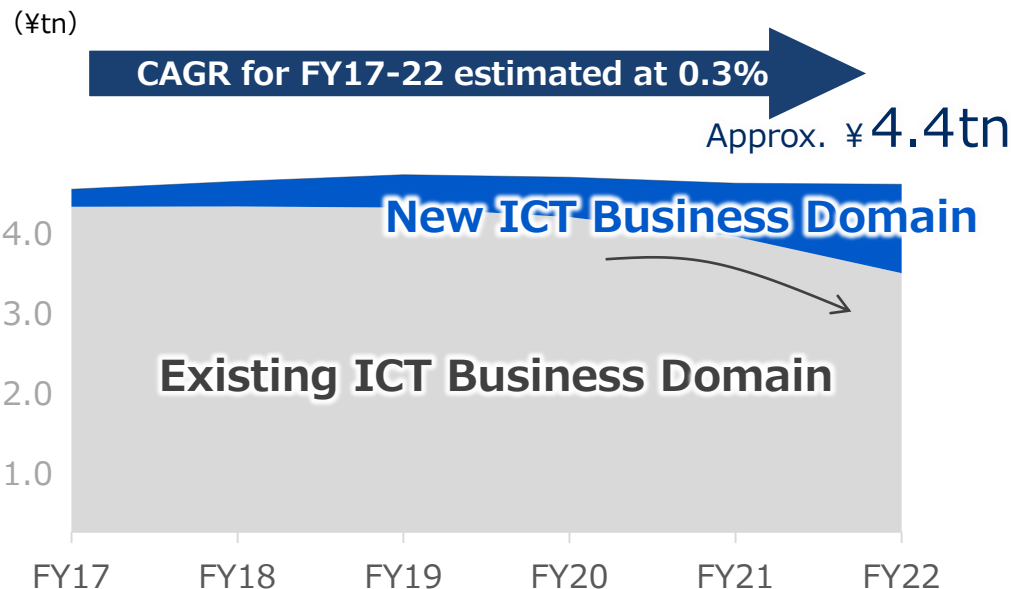
Public Business



Forecast for Public Business Market in Japan

Maintain a current base as demand for new ICT domain increases while existing ICT business domain diminishes

■ **Market Size** (NEC Estimate)



Opportunities

■ Expansion of New ICT Business Domain

- **Digital Government**
Creation of government common platform
Wider use of My Number System
- **Next Generation of Social Infrastructures**
Electricity, broadcasting, roads, etc.

Threats

- **Sharp Downsizing of Existing ICT Market**
- **New Entry of Game Changers**

Strengths and Challenges

■ Positioning

■ Advanced Technology and Reliability

**#1 Face
Recognition
in the World***



**#1 Iris
Recognition
in the World***



**World's
Top-class
AI Technology**

**World's
Top-class
Cyber Security**

■ Large Market Shares and Understanding of How Clients Operate

**Have Top-rank Shares
in Public Domains**

- Fire Defense / Disaster Prevention
- Police
- Local Governments, etc.



**Deep Understanding
of How Clients
Operate and Data
to be Handled
from Long-term
Experience**



Strengths

Advanced technology and reliability

Large market share and understanding of clients' operations

Delivery of solutions in a vertically integrated form

Challenges

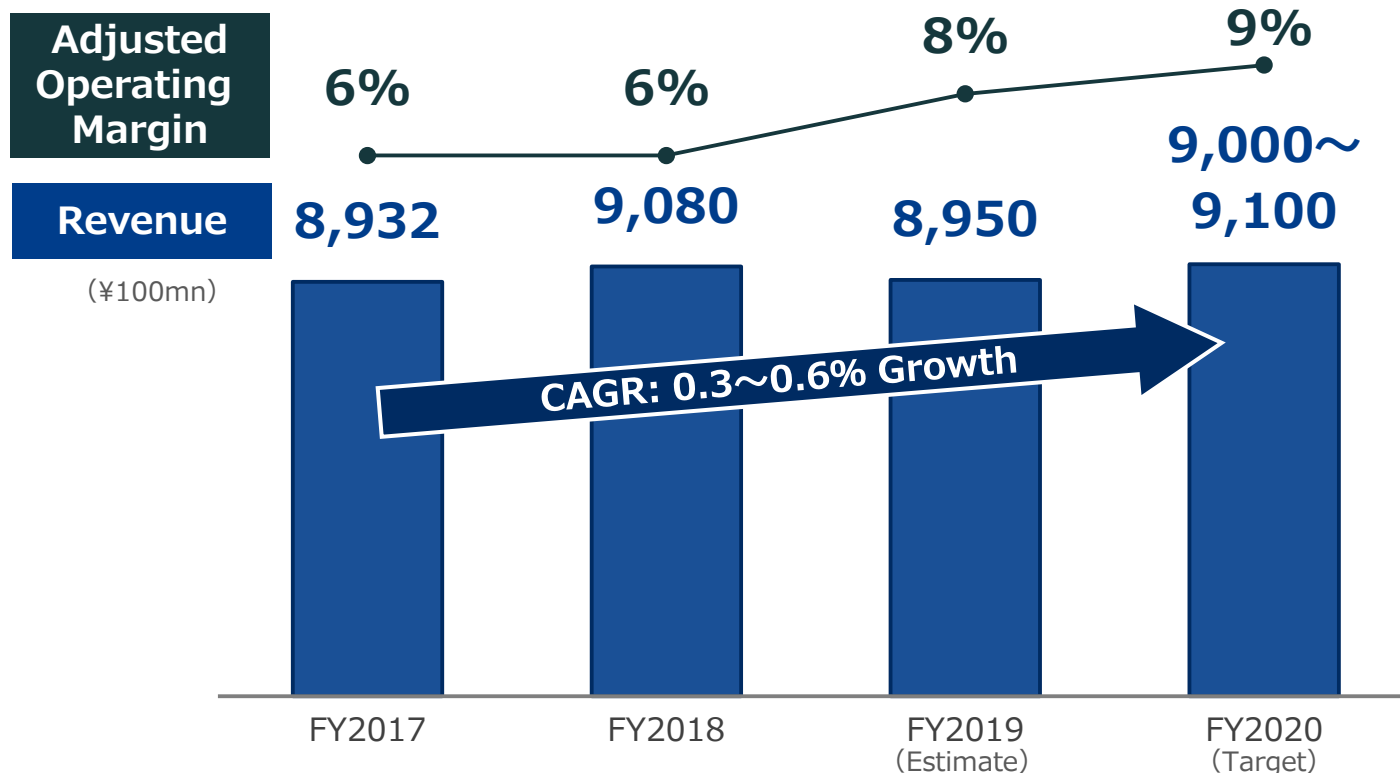
Difficulty of large-scale development with cutting-edge technologies

Needs for continuous investments to maintain advanced technologies and reliability

* Contest by National Institute of Standards and Technology (NIST)

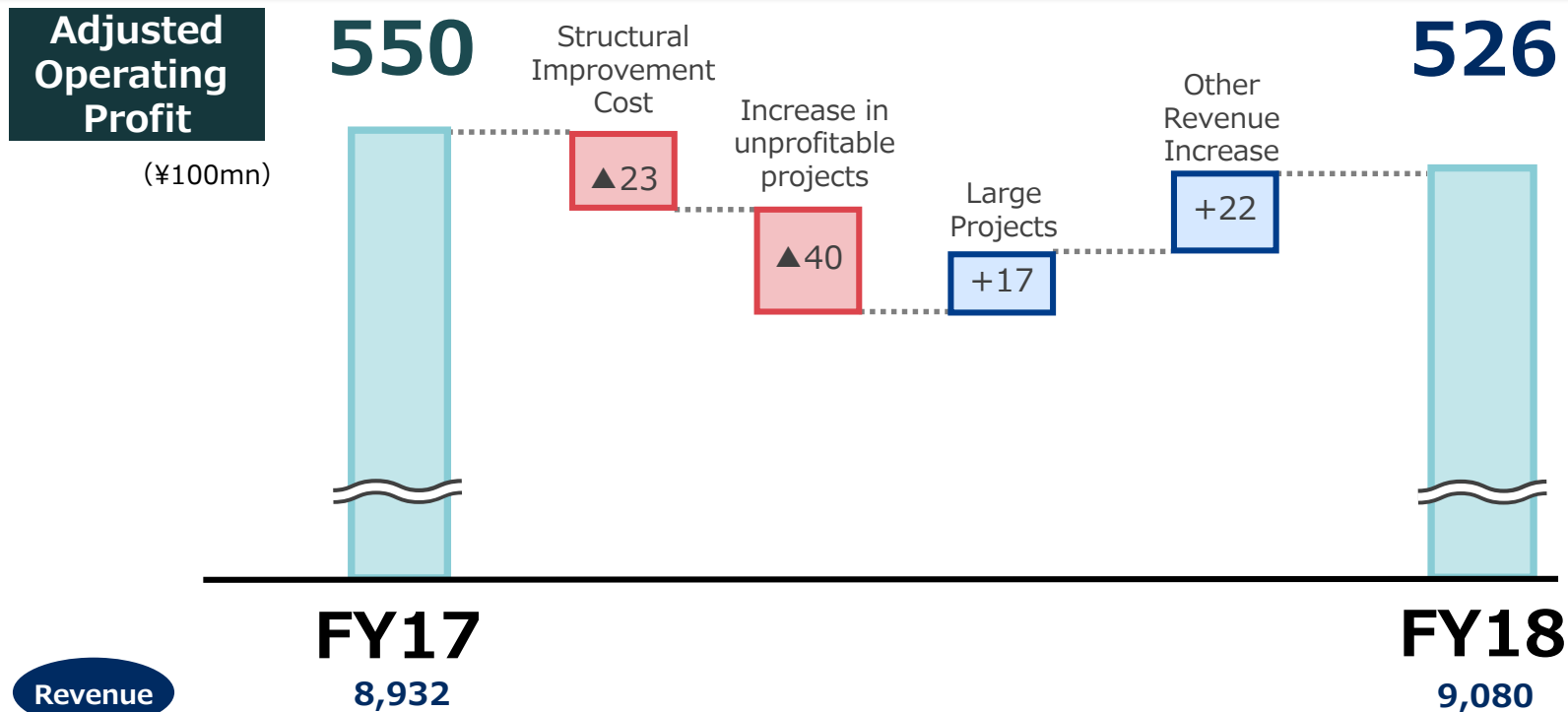
Overview of Targets in FY2020 Mid-term Management Plan

Secure **steady topline and enhance profitability** in a robust public-sector market



FY2018 Results

Profit down due to the structural improvement and unprofitable projects, but impacts were minimized due to a revenue increase



Summary of FY2018

Key Achievements

■ Preparation for creating future new businesses

Digital Government/Public Safety



Alteration of Phases in Social Infrastructure



■ Securing technological advantage



Challenges

■ Failed to minimize impacts of unprofitable projects

Business Development around FY2020 as a Key Year

Example: Narita Airport (Electronic Declaration Gate at the Customs)



Developing wide range of
businesses around
“2020 as a key year”

Air traffic control,
Passenger flow
management,
Fast Travel,
Redevelopment of
Haneda Airport

5G infrastructure,
Satellite 4K & 8K
broadcasting

Urban operation,
Networks for
municipalities

Customer
management
Systems,
Payment by
face recognition

Development
And Upgrade
of Traffic
Infrastructure

Communication
Broadcasting

Individual Services
for Finance
and Retail

Integrated video monitoring,
Security at important facilities,
Support for decision-making

Safety and
Security in
Cities/Events

Town Planning,
Community
Development,
Environment



FY2019 Outlook

Aim to achieve profit growth through effects of the structural improvement and measures to improve profitability

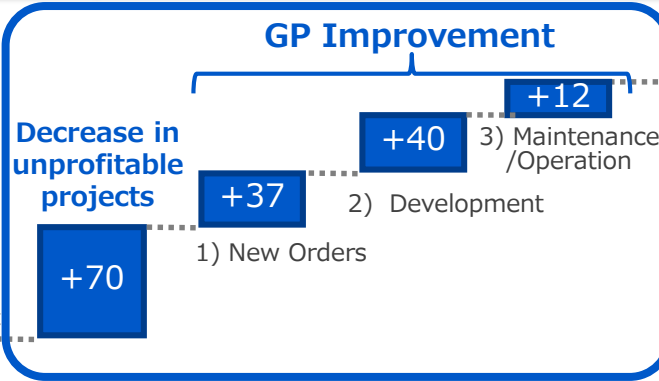
Adjusted Operating Profit

(¥100mn)

526

+53

Effect of Structural Improvement



▲48

Investment in Tech Development

690

FY18

9,080

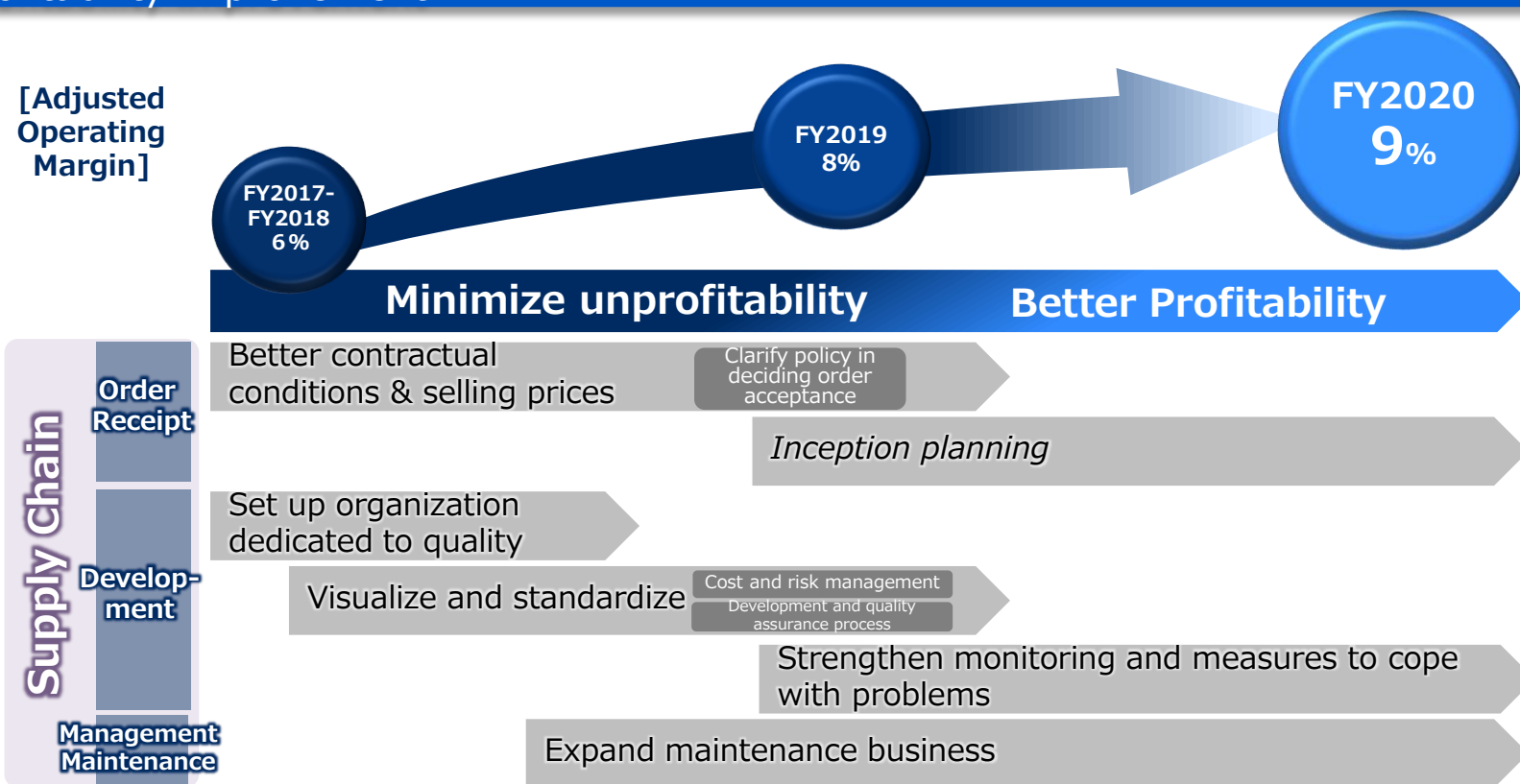
Revenue

FY19E

8,950

Measures to Minimize Unprofitable Projects and Improve Profitability

Continue to enforce improvement measures across supply chain for steady progress of profitability improvement



To Achieve Mid-term Management Plan

Numerical Targets (FY2020)

Revenue

¥900bn-910bn

**Adjusted
Operating
Margin**

9%

**Additional
Target**

**Continuous investment for
technological development**

Strategy to Achieve Targets

Steady top line growth

Tackling opportunities like
Digital Government and next generation
of social infrastructures

[Revenue growth +¥10bn-¥20bn]

**Contribute to entire company
as stable profit source**

Continuous measures to improve profitability
[Improvement of profitability +1%]

**Provide "seeds" of technologies
to entire company**

Continuous investment
for technological development

2020 Offers Opportunities for Replacing Social Systems and Infrastructures



60
years



Event

Tokyo Olympics (1964)

→

Tokyo Olympics (2020)

System

Universal insurance system
(1961-)

→

Fall in labor population,
Rise in social security costs

Road

Metropolitan Expressway
(1962-)

→

Aging road infrastructure

Railway

Tokaido Shinkansen (1964-)

→

Chuo Shinkansen SC maglev train
(2027-)

Broad-
casting

Satellite relay

→

4K/8K broadcasting

2020 Offers Opportunities for Replacing Social Systems and Infrastructures

Events



Rugby World Cup 2019™



Tokyo 2020 Olympics and Paralympics



World Masters Games 2021 Kansai



World Expo 2025 in Japan

FY2019

FY2020

FY2021

FY2022-27

Laws & Systems

- Consumption tax rate at 10%
- Digital Procedure Act promulgated
- Amended Family Registration Act promulgated
- Amended National Health Insurance Act promulgated

- Online license identification at medical institutions to start
- My Number system and health insurance cards to be integrated

- Integrated Resort Act to be effective

- Lowers age of adulthood 20 to 18

Reform of laws related to Digital Government

Infra-structures

- Fukuoka Airport to be privatized
- New National Stadium to be completed

- Seven airports in Hokkaido to be privatized
- Entire route of New Tomei Expressway to open
- Electricity generation and distribution to be separated
- 5G to be commercialized

- Hiroshima Airport to be privatized
- Electricity supply-demand adjustment market (VPP) to open

- Positioning satellites "Quasi-Zenith Satellites" to increase to seven
- Chuo Shinkansen SC maglev train to open
- Redevelopment of Shibuya station area to be finished

Digital Government - DX (Digital Transformation) of Administration

Cloud by Default



Digitalization of
Administrative
Services



Public-private Data
Linkage



Market Overview

FY2018

FY2019

FY2020-FY2023

FY2024-

★FY2018
Digital First
Act enacted

★FY2019-
Preparation
of legal system

★FY2020-
Systems start to spread from national and
regional govts to private sector



National / Regional
Govt Market

FY2018

Size **¥930** bn
(NEC Estimate)

Reform of national and
regional govt services
to be full-fledged

Public cloud to spread at
National / regional govts

Market to expand
with private demand

[Market Outlook]

(NEC Estimate)

Public-private Data Linkage

FY2023- : ~¥2tn

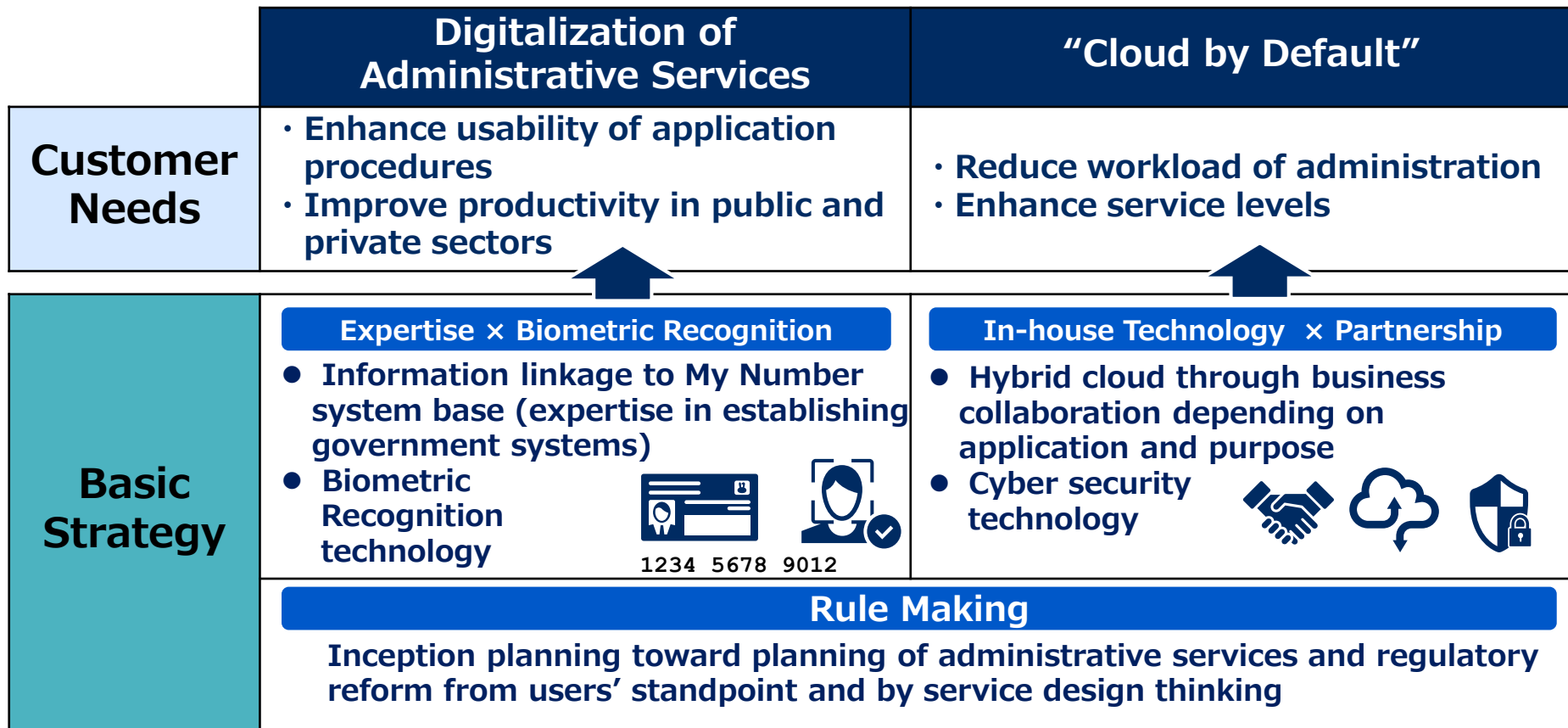
Digitalization of
Administrative Services

FY2023: ¥400bn

Cloud by Default

FY2023: ¥160bn

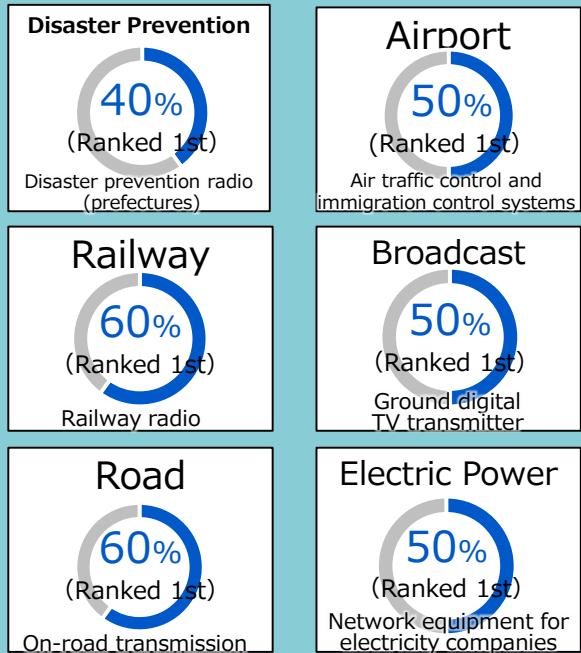
Digital Government (Strategy and Challenges)



Next Generation of Social Infrastructures

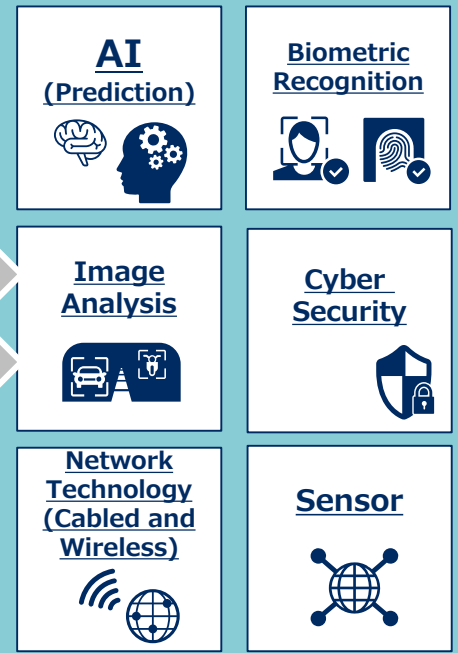
Creation of new value by collaborating “operational expertise” and “advantageous technologies”

Operational Expertise



(Market shares in Japan, NEC Estimates)

Technologies



New Values

Support for judging whether to issue disaster warning

Digitalization at airports

Advanced broadcasting

Advanced management of infrastructures

Electricity supply-demand adjustment

SDGs



Social problems

Social Insurance
Expenses

Labor Shortage

Regional Vitalization

Digital Healthcare

Smart Transportation

Spending
Investment

City Management

Finance

NEC Safer Cities

Public Safety

Digital Government

Data network platform

Digitalization



Cloud



AI



IoT



Cyber Security



Airport

Air traffic
Control system

Railway



Railway NW
Immigration
Control System

Broadcast
Station



Digital transmitter
TV Studio system

Hospital



Electronic Medical
Record System

Water Works
Bureau



Remote
monitoring system

Space



Satellite

Self Defense
Force



Communication system

Marine



Vessel NW

Electric
Power



Electric Power
ICT

Road



Traffic control
system,
ETC

Police



Fingerprint
Identification
system

Post Office
System



Post Office
System

Fire Defense



Fire Department System,
Disaster prevention system

School



Educational ICT



R&D

IT
Network

Sensing

Summary

【Positioning】 Support sustainably NEC's business and management

【Market Environment】 Steady moves expected

【Profit Projection】 Improve by minimizing unprofitable projects

【Advanced Investment】 Continue investment in advanced technologies

【Long-term Outlook】 Prepare for new businesses focused on social issues



\Orchestrating a brighter world

NEC brings together and integrates technology and expertise to create the ICT-enabled society of tomorrow.

We collaborate closely with partners and customers around the world, orchestrating each project to ensure all its parts are fine-tuned to local needs.

Every day, our innovative solutions for society contribute to greater safety, security, efficiency and equality, and enable people to live brighter lives.

 **Orchestrating** a brighter world

NEC