

Network Infrastructures Business

March 19, 2021 Kazuhiko Takeuchi Senior Vice President and Member of the Board NEC Networks & System Integration Corporation (TSE: 1973, NESIC)

Self Introduction

Kazuhiko Takeuchi

Senior Vice President and Member of the Board Executive General Manager, Network Infrastructures Operations Unit



Career in brief

- Joined NESIC in 1985
- Successively held various responsible posts for sales/marketing, social infrastructure business and support service business
- Assigned to the present position in 2020.



Network Infrastructures Business in NESIC

Providing construction and various services regarding telecom carriers network and ICT infrastructure of governments and broadcasters to support society

ESS (Engineering & **NWI** (Network DSI (Segment) (Digital Solutions) Support Services) **Infrastructures**) **Marketing & Sales Operations Unit Business Design Operations Unit** (Organi-**Digital Solutions Business Network Infrastructures Engineering & Support** zation) Unit Services Business Unit **Business Unit** Five consolidated subsidiaries Four consolidated subsidiaries Seven consolidated subsidiaries such as such as K&N System including overseas subsidiaries **Q&A** Corporation **Integrations Corporation**

Network Infrastructures Business in NESIC

Promoting growth strategy of "5G fields"

(next generation high speed infra.)

toward "Digital x 5G" era

****Collaborating with Business Design Operations Unit**

<Biz. Areas>



Digital solutions field

Cloud

Workstyle

Innovation services

NESIC's synergies, owning both knowhow of enterprise ICT services and telecom. infrastructures

Digital x 5G



4G→5G migration

ICT SI



Full 5G

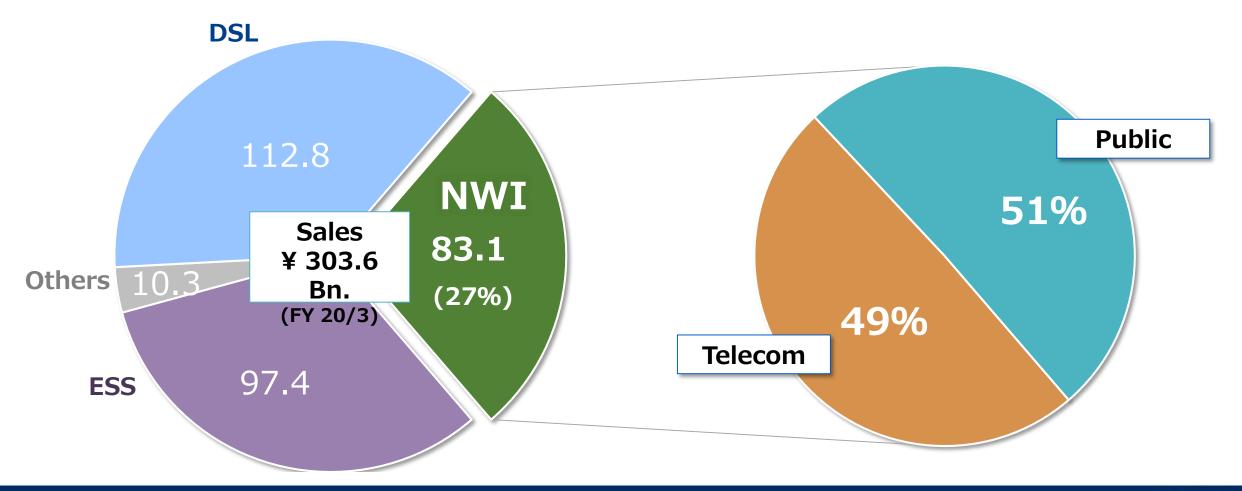
5G infrastructure field

Meaium-term

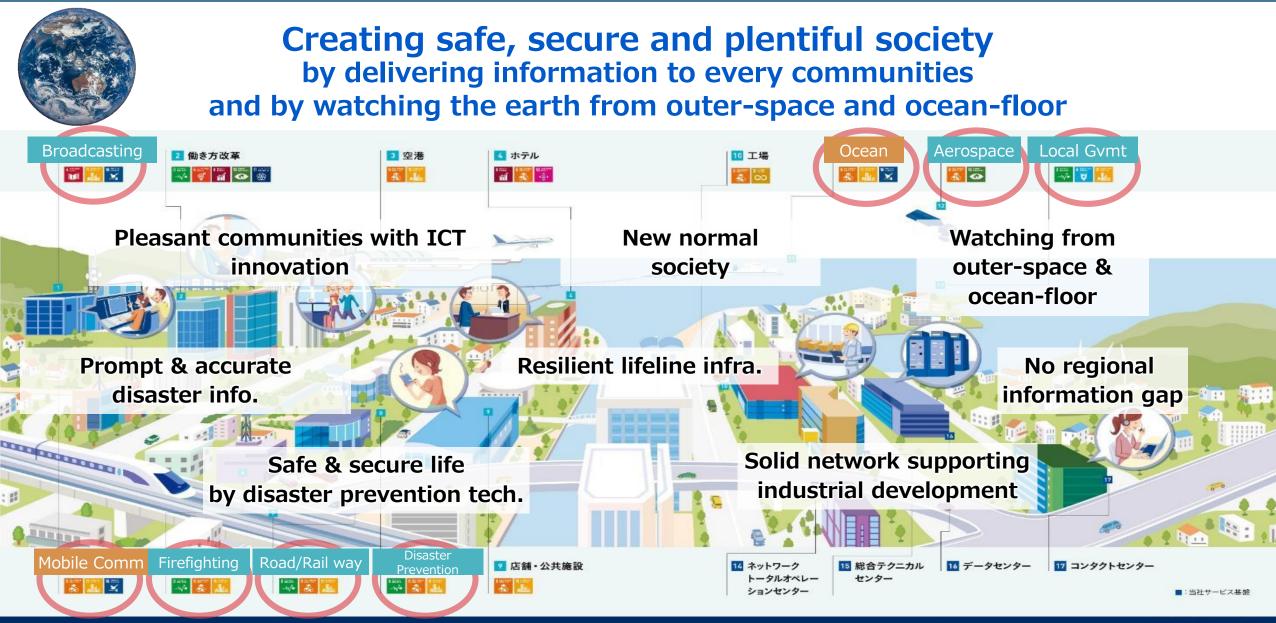
Long-term

Network Infrastructures Business in NESIC

Approx. 30% of company sales



Network Infrastructures in the Society



Competencies

Digital solution capabilities collaborating NESIC DX platform with high technological capabilities and broad customer base



1) Technological Capability & Knowhow



2) Nationwide support network



3) Digital solution capabilities

Competence 1: Technological Capability & Knowhow

Broad business development leveraging high technological capabilities as a NEC group SIer into multi-vendors SI

Strengths

- Deep technological skill via product development/ evaluation/failure analysis as an NEC group
- Accumulated knowhow via maintenance & operation
- Broad technological capabilities from Wi-Fi to satellite communication

Strengths in multi-vendors environment

- System design capability corresponding to customer demand
- Orchestrating capability for complicating systems
- ◆ Solution capability directly collaborating with vendors' developers

Market

Aerospace

Ocean

Firefighting(FF)

Disaster Prevention(DP)

Broadcasting

Railroad

Elec. power

CATV

Telecom.

Our strong areas

Strong area of SIer with its own products in the group

> Strong area of SIer dealing with multi-vendors products



Competence 2: Nationwide Support Network

Nationwide service basis to support mission critical communication infrastructures

Nationwide sales/maintenance system



Nationwide sales and maintenance network of 400 bases to support highly reliable social infrastructure

Network total operation centre



Inquiry acceptance, 24/7 security monitoring and network operation

Service delivery operation centre



24/7 logistics function with technical services such as evaluations and repairs.

Data centre



Providing stable service with user viewpoint with 3 data centres that can mutually back up

Competence 3: Digital Solution Capabilities

Create digital solutions services with existing assets x DX platform

Existing assets

Broad business fields and customer base

Accumulated business knowhow

Maintenance and operation bases

NESIC's DX platform

✓ Multi cloud coordination



✓ Data analysis



Via digital solution service creation

Solution capability for society & customers

(Value enforcement)



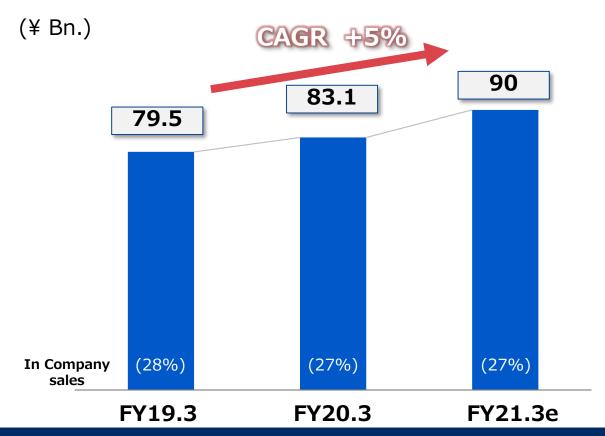
New competence



*Net sales and operating income for the FY 2019/3 and FY 2020/3 has been recalculated to reflect the change in the content of business segments. (FY2019/3 figures are un-audited)

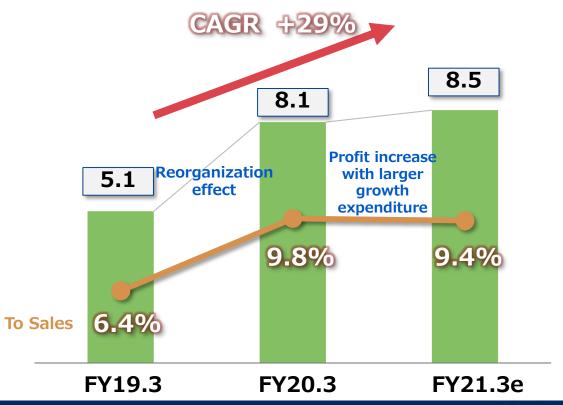
Net sales

- 5G related biz increases
- Acquiring FTTH improvement demand to eliminate digital divide



Operating income

- Improving sales mix (increase of SI area)
- Strengthening business capability (Results from reorganization at April 2020)
- Promoting on-site reform with DX



Growth Strategy of Network Infrastructures Business

Business Environment

Brisk demand in both telecom and social infrastructure fields

Telecom



Investment in the expansion of 5G areas is increasing despite a downward revision of mobile fees.

- Core networks: Developing to support higher speed and lower latency communication
- Base stations: Bringing forward two years or more than planned (at least 210K stations by 2023)
- Use of 5G: A number of demonstration trials began for disaster management, enhanced efficiency at plants, worksites and offices, and other purposes

Social infra.



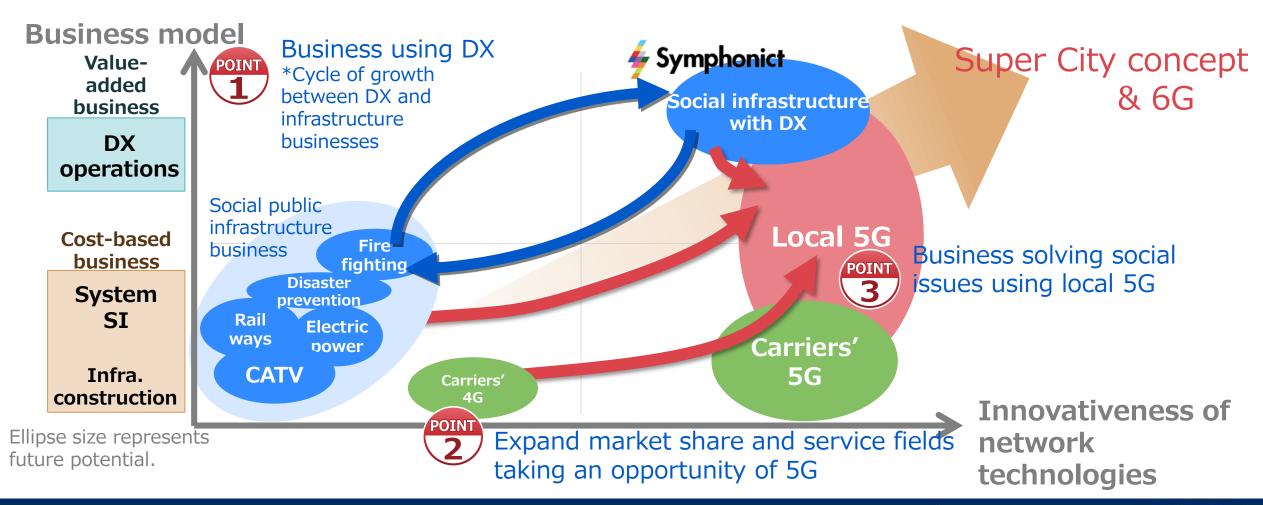
Construction of social infrastructure for Society 5.0 and Super City accelerates.

- The launch of a digital agency triggered the acceleration of municipal governments' digital transformation (DX).
- Strong construction of FTTH networks towards the elimination of the digital divide.
- Brisk disaster management construction projects in preparation for major disasters

Growth Strategy Perspective

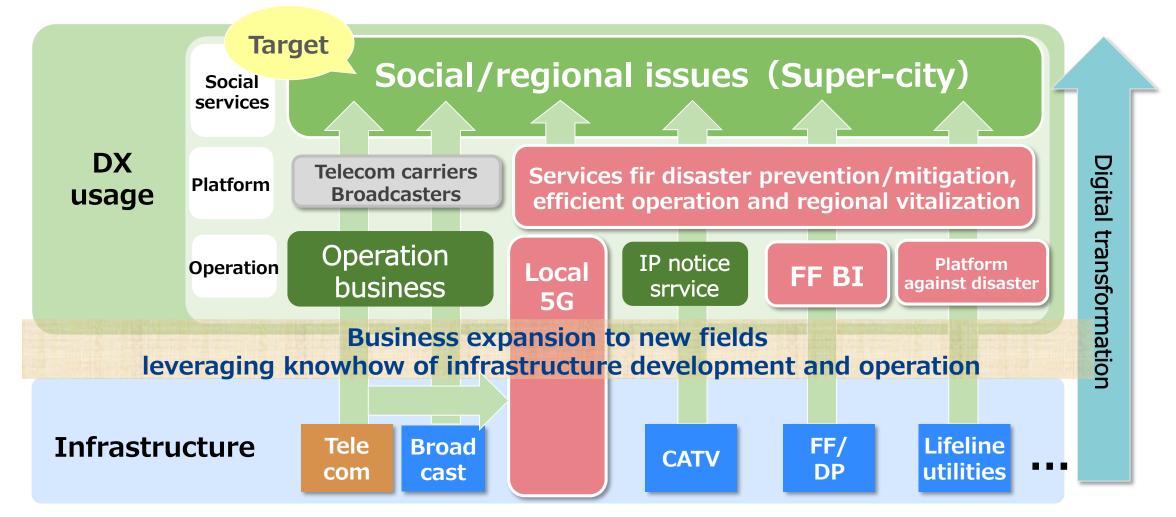
Expand business to resolve social and customer issues

- Synergy between DX, telecom and social infra businesses (realization of "Digital x 5G") -



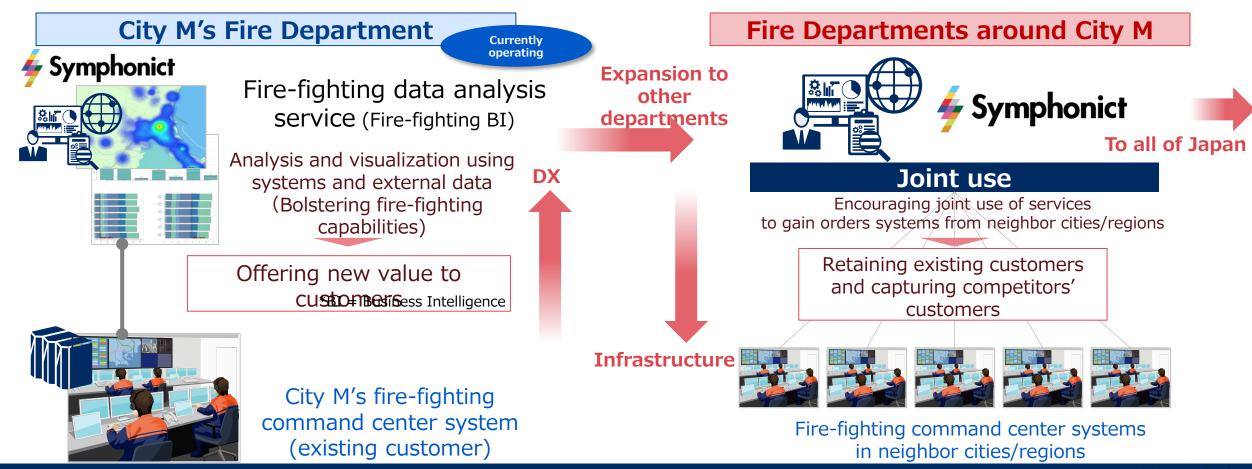
Point 1: Business Using DX

Contribute to super-city concept to solve social issues



Point 1: Business Using DX (e.g. Fire-fighting data analysis service)

Use big data from fire-fighting and expand to other fire departments to increase NESIC's share

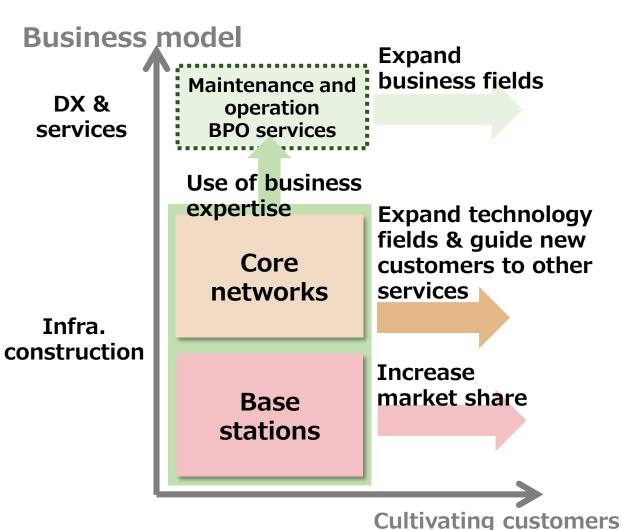


16

Utilization 9

Point 2: Expand Market Share and Service Fields after the Shift to 5G

Expand service fields taking an opportunity of 5G



Expansion of service businesses

- Accelerate the shift to services using business expertise
 - Support the operation of virtual networks

Core networks (Increasing speed and shift to software)

- Shift from product SI to software SI (virtualization) in line with the shift to 5G
 - Ability to handle cutting-edge technologies and personnel development

Base stations

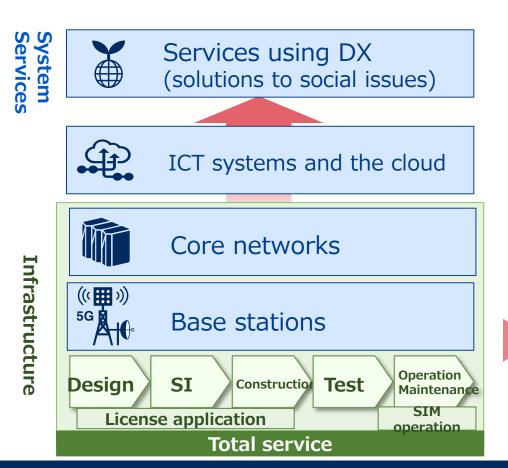
Increase market share on the basis of KNSI

- Increase efficiency in construction through DX

Point 3: Business Solving Social Issues Using Local 5G

Capitalize on our full support capability to create businesses solving social issues

- Ability to build infrastructure (base stations and core networks) for carriers and to provide services -



- Create services solving social issues through demonstration trials
 - ✓ Prioritize creation of markets for local governments and CATV operators which are our strength
 - ✓ Create killer content to drive the popularization of local 5G
 - Build local 5G infrastructure
 Offer one-stop services
 (leveraging the capability of constructing infrastructure for carriers)

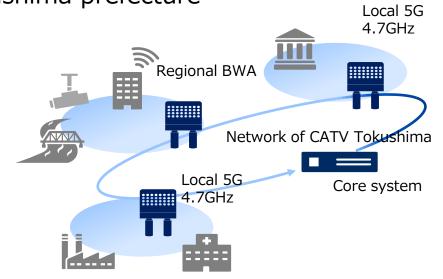
Packaging of solutions

Point 3: Business Solving Social Issues Using Local 5G

Creating regional problem solution service with CATV operator ~"Regional service platform"~

■ Leveraging local 5G environments onto high-speed network for medical, industrial and administration usage

Local 5G network connecting facilities in Tokushima prefecture



<Usage scene>

Remote exam.



Smart factory



Automated farm management



Monitoring of rivers



Points 2&3: Step Up Engineer Development & Expand Service Fields

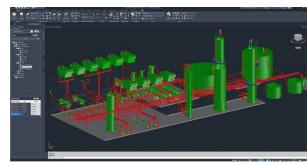
Use 5G Lab to step up engineer development and to expand service fields



Step up development of 5G engineers

Accelerate education and the verification and evaluation of technology in a multi-vendor environment for cutting-edge technologies (e.g. wireless, virtualization and slicing)





Wireless propagation simulation and 3D simulation (in a plant)

Increase the number of 5G-related engineers to four times the current number

 $(FY 2020/3 \rightarrow FY 2022/3)$

BPO services

Provide BPO services from the perspectives of customers and vendors

Example BPO services

- Software verification for carriers and vendors
- **Integrated services from consulting and license** application to construction and operation of local 5G
- Verification of applications and services to connect via **5G**

Step into the local 5G business using 5G technologies for carriers

Network Infrastructures Vision



21

Creating safe, secure and plentiful society by delivering information to every communities





Cautionary Statement

Forecasts and targets of results mentioned in this document are future estimates and are thus inclusive of risks and uncertain factors since they are not based on definite facts. Please be aware that a variety of factors could cause actual results to differ significantly from those projected. The major factors affecting actual results include the economic climate and social trends surrounding the business of this Company's group, consumer trends vis-a-vis systems and services provided by this Company's group, as well as pressure to lower prices and ability to cope with the market in response to intensified competition.

Factors affecting results are not limited to the ones mentioned above.

There were inter-segment transfer of some businesses and other changes in April 2020. Segment information for the FY 2019/3 and FY 2020/3 has been recalculated to reflect the change in the content of business segments. (FY2019/3 figures are un-audited)

Re-designing your Communication

NEC Networks & System Integration Corporation is committed to increasing customer value by redesigning future communications from the user's perspective.

nesic Search

NEC Networks & System Integration Corporation

https://www.nesic.co.jp/english/index.html

