

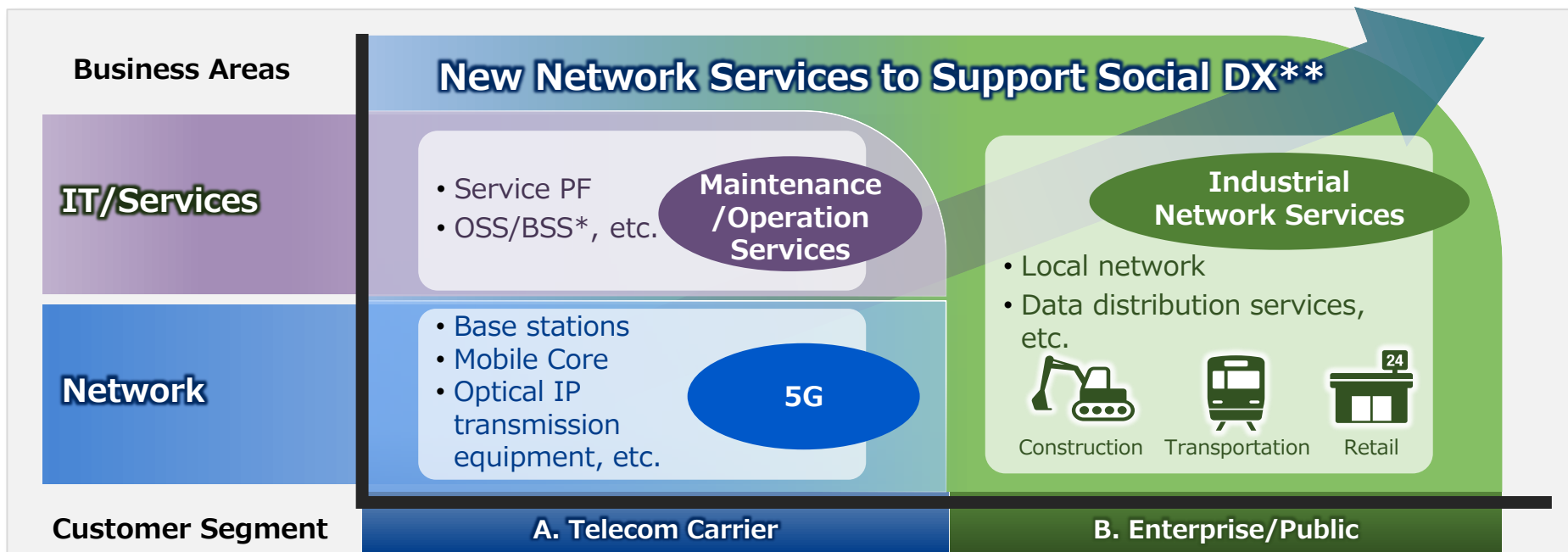
Network Services Business

Atsuo Kawamura, Executive Vice President



Overview of Network Services Business

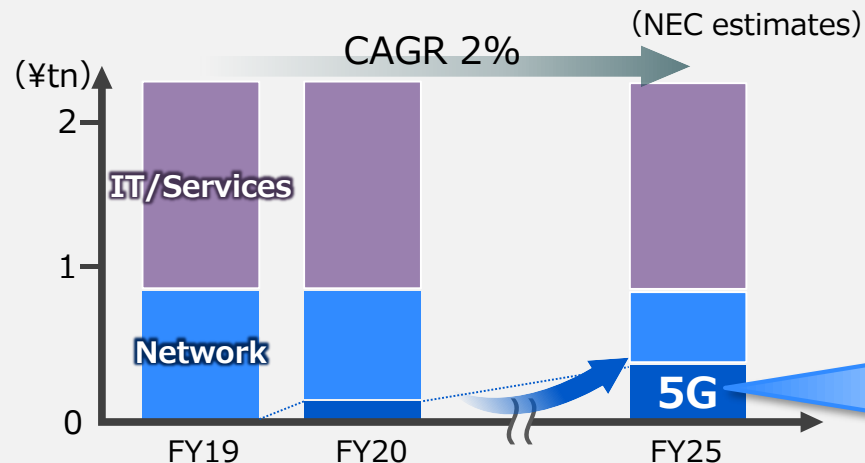
- Remain in a top position in the telecom carrier business
- Expand network services business to enterprise and public customers based on our strength in Network and IT



*OSS: Operations Support System BSS: Business Support System **Digital Transformation

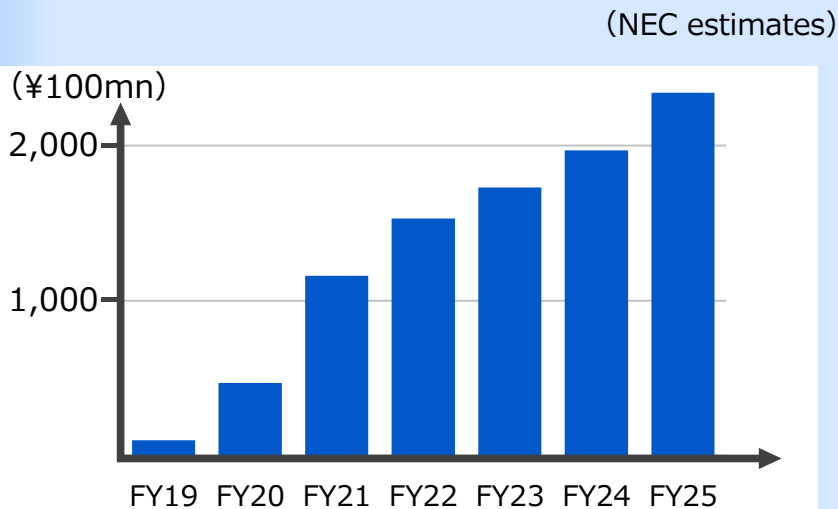
Market Environment [A. Telecom Carriers Domain]

Domestic Telecommunication Market



- Total market size will slightly increase from over ¥2tn
- Maintenance/operation services domain is approx. ¥600bn
- Composition of investments will change due to carriers' DX

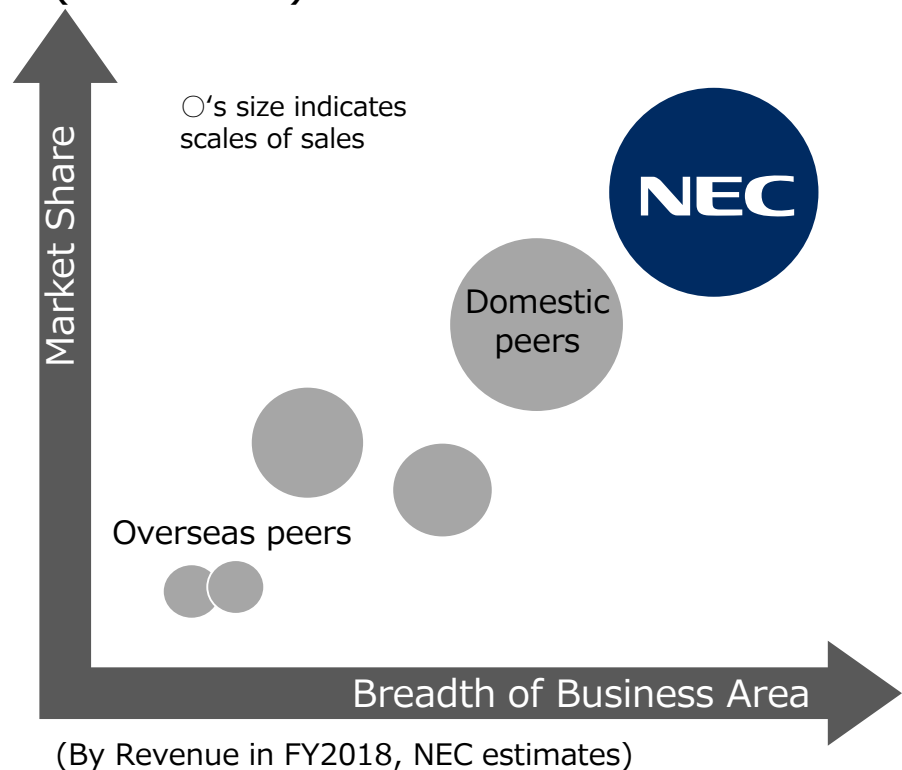
Domestic 5G Base Station Market



- Market will rapidly grow from FY2021
- Market will grow to approx. ¥250bn in FY2025

NEC's Positioning [A. Telecom Carriers Domain]

Positioning in Network Business (Domestic)

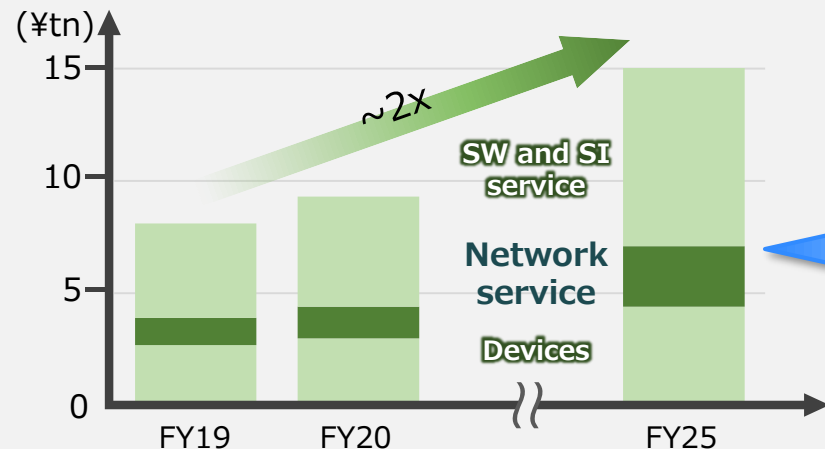


NEC's Strengths and Challenges

Strengths	Domestic top position
	Fine customer service capability
	High quality products / services
	Co-creation of 5G use case
Challenges	Expansion of customer portfolio
	Enhancing cost competitiveness

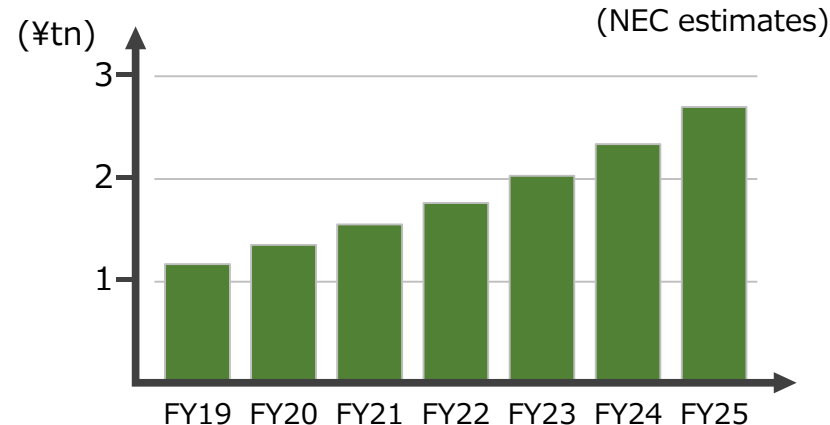
Market Environment [B. Enterprise and Public Domain]

Domestic IoT Market (NEC estimates)



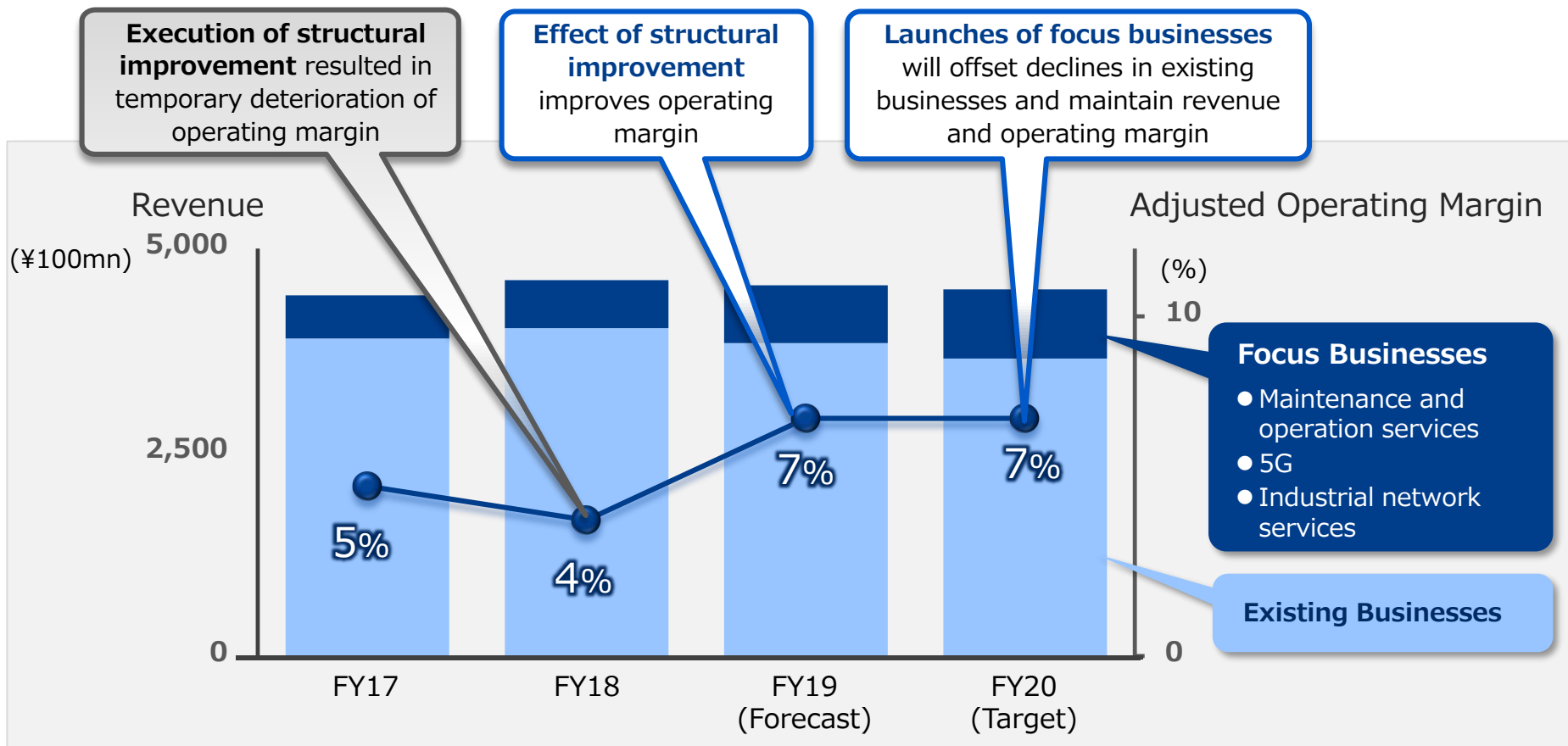
- Total market will be doubled
- Needs for network optimized for services
- Data utilization needs across the industries

Network Services Market (incl. local 5G) (NEC estimates)

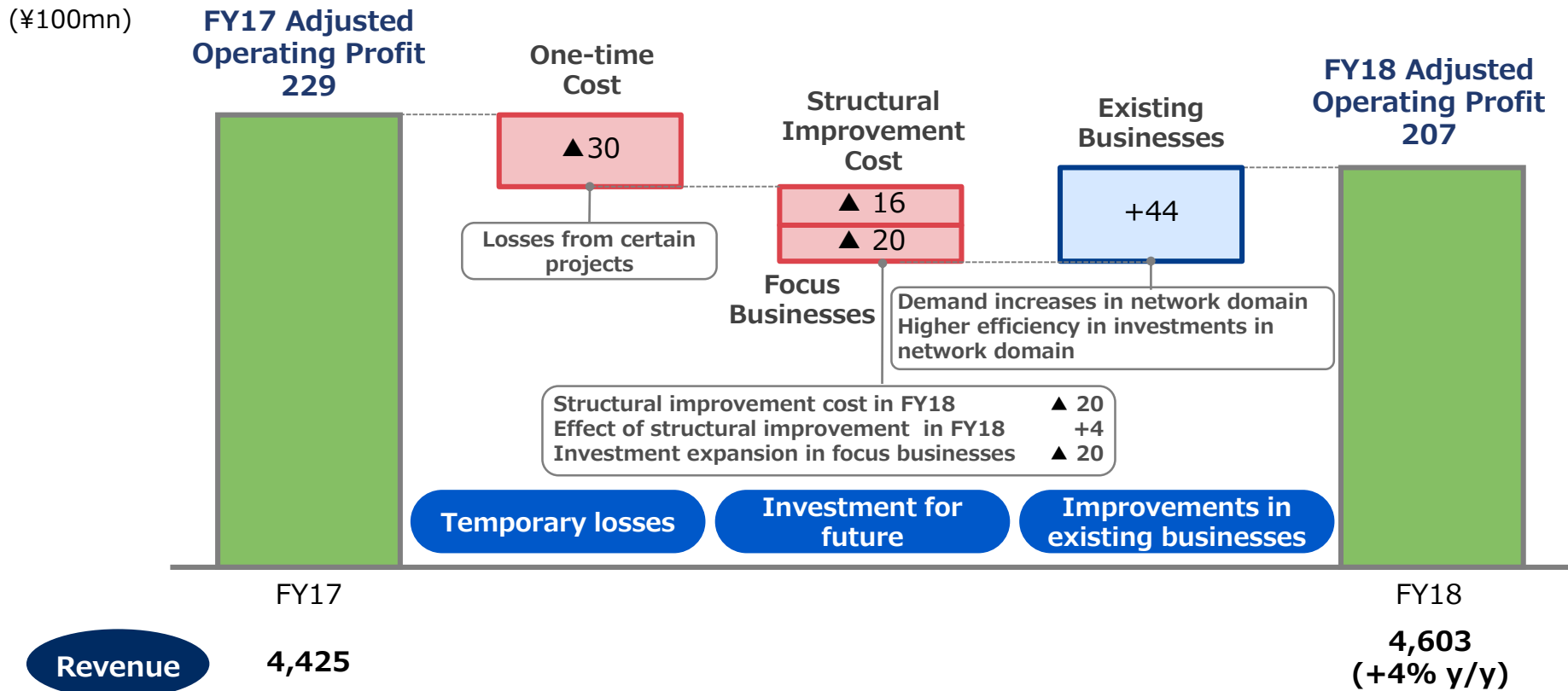


- Network services market will grow to ¥2.5tn in FY2025
- Rapid ramp-up of data distribution service domain

Trends of Revenue and Operating Margin from FY2017 to FY2020



FY2018 Results



Summary of FY2018

Key Achievements

<Securing of Future Earnings>

- Execution of restructuring initiatives

<Maintenance and Operation Services>

- Rakuten has selected NEC's OSS/BSS solutions

<5G>

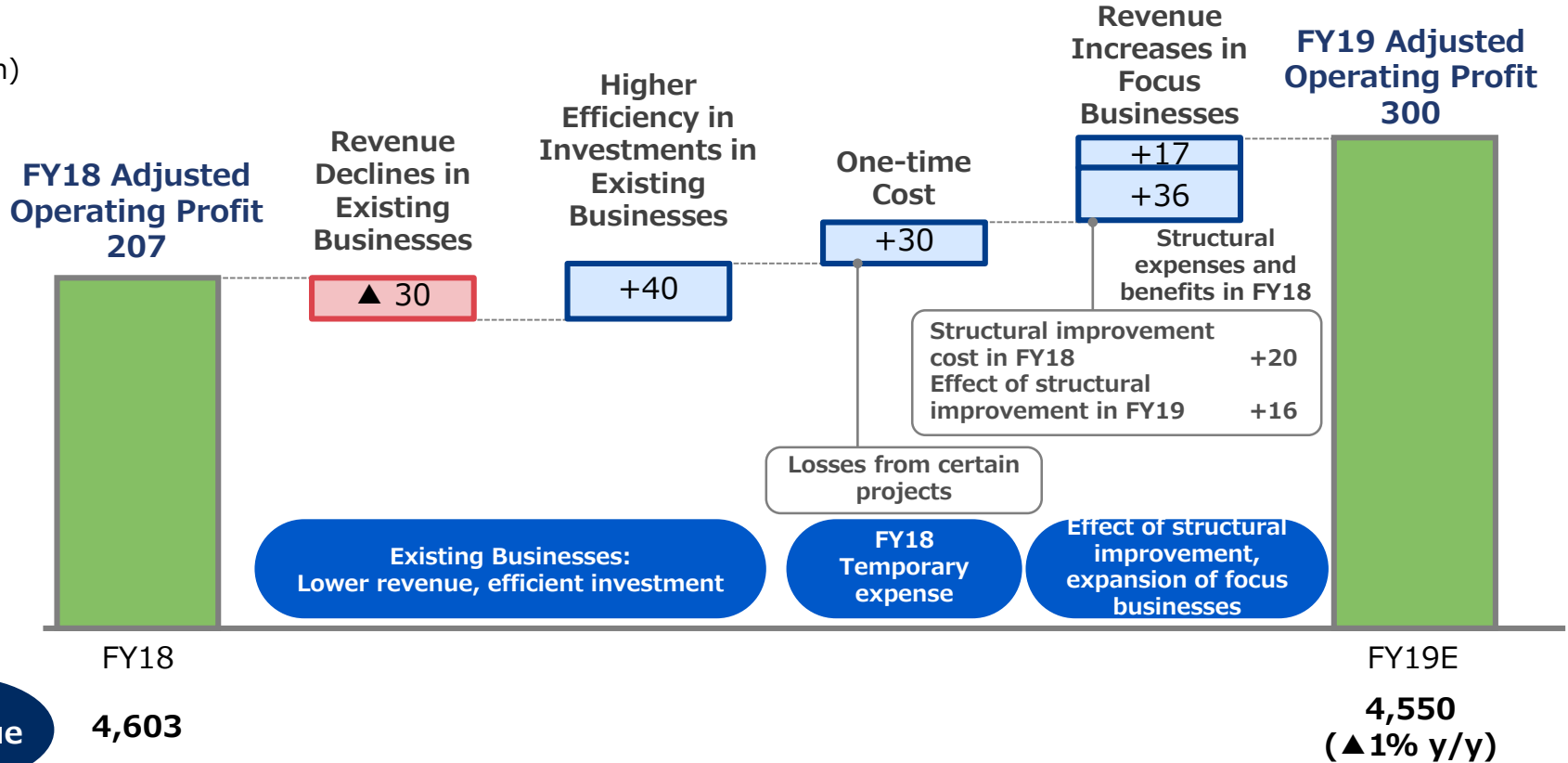
- Contracts with NTT DOCOMO for base station equipment for 5G services
- Collaboration with Samsung for portfolio expansion
- Promotion of 5G trials with carriers and industrial partners

Challenges

- **Secure stable earnings by expanding maintenance and operation services business**
- **Early expansion of 5G and industrial network services businesses**

FY2019 Outlook

(¥100mn)



Business Strategy in FY2019

Business Strategy

<Expansion of maintenance and operation services to secure stable earnings>

- Expansion of maintenance coverage of hardware

<Expansion of 5G and industrial network services for future growth>

- Maximization of entry opportunity to 5G businesses
- Acceleration of ramp-up in industrial network services businesses

Focus Initiatives

- **Maintenance and Operation Services**
Development of multi-vendor maintenance
- **5G**
Solid shipment for pre-commercial services
- **Industrial Network Services**
Building track record of local network business

To Achieve Mid-term Management Plan

Numerical Targets (FY2020)

Revenue	¥450bn to ¥470bn
Adjusted Operating Margin	7%
Revenue from Focus Businesses*	¥50bn to ¥70bn

Strategies to Achieve Numerical Targets

Strategy-1: Telecom Carrier Market

Remain in a top position by expanding maintenance and operation services business

Strategy-2: Telecom Carrier Market

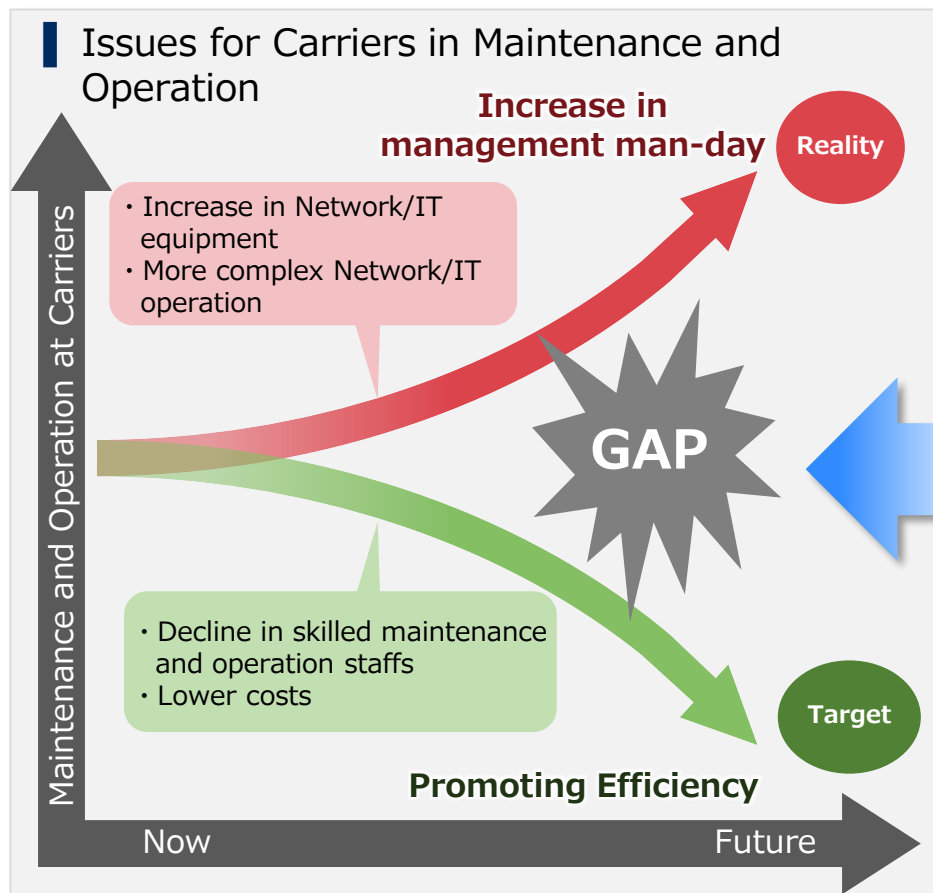
Establish business foundation for expansion of 5G business

Strategy-3: Enterprise and Public Market

Grow industrial network services business by “NEC Smart Connectivity”

*Focus businesses include maintenance and operation services, 5G and industrial network services

Strategy 1: Expansion of Maintenance and Operation Services



NEC's Strategy

Expansion of maintenance support domain

- **Reduction in maintenance and operation management man-day at customers**
 - BPO development

Automation and sophistication of operating system

- **Operation administration which speeds up management**
 - Sophistication by leveraging Netcracker
 - Automation by leveraging AI technologies

E2E Network Solution

- **Secure delivery of products/services from HW to services**
 - Use of ecosystem

Strategy 2: Expansion of 5G Business

■ NEC's Strategy

Remaining in a Top Position

Share expansion in domestic market by leveraging strengths in wireless

Market Expansion

Supporting various needs (partnership with Samsung)

Market Expansion

Promotion of cloud native (Open vRAN)

Value Enhancement

Materialization of use case in 5G businesses

■ Measures

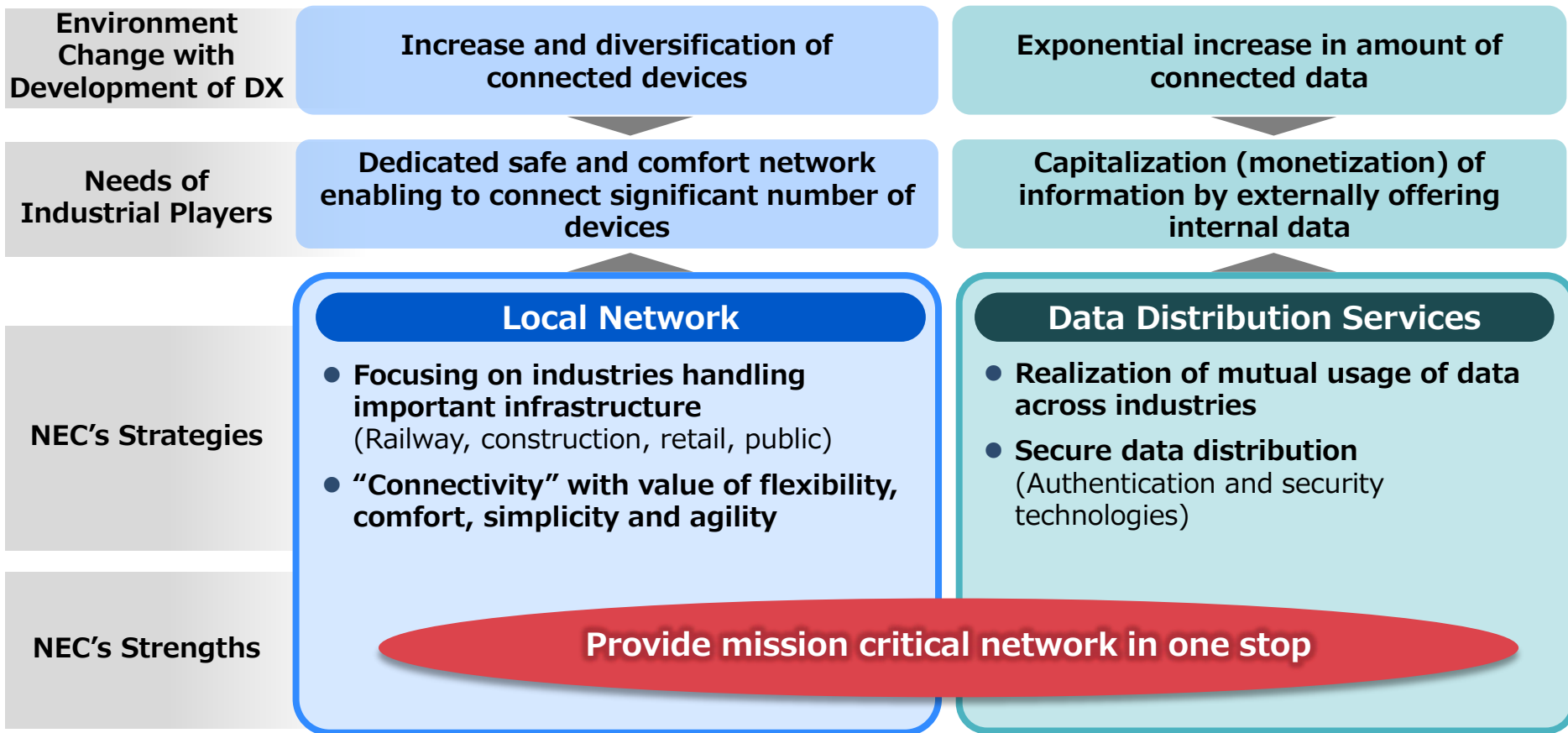
Timey supply of products which match network expansion plans by customers

Joint proposal to customers in Europe and APAC by leveraging mutual complement of product portfolio

Approach to open-oriented carriers triggered by base station orders from Rakuten

Expansion of co-creation with telecom carriers and industrial partners (Remote control of construction machines with KDDI and Obayashi)

Strategy 3: Expansion of Industrial NW Services Business by “NEC Smart Connectivity”



Summary

Remain in a top position by expanding maintenance and operation services

Establish business foundation preparing for 5G business expansion

Business growth by “NEC Smart Connectivity” across industries

Business transformation by taking advantage of 5G and DX

In FY2020: ¥450bn to ¥470bn sales, 7% margin



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

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 **Orchestrating** a brighter world

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