PACIFIC TELECOMMUNICATIONS COUNCIL

@PTCouncil #PTC20

PTC'20 | VISION 2020 AND BEYOND

19-22 JANUARY 2020 | HONOLULU, HAWAII

History of Communication

1964

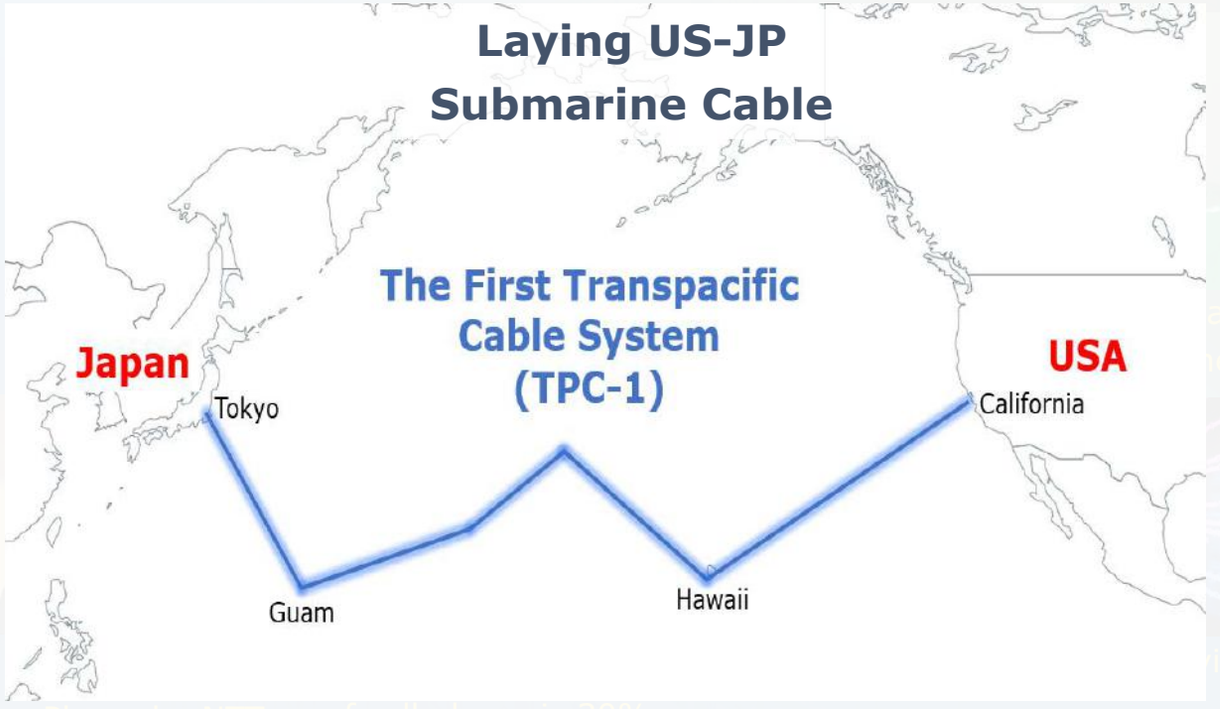
Tokyo Olympics

Start of Bullet Train

Laying US-JP Submarine Cable

Over 20 million Telephone Subscribers

Laying US-JP Submarine Cable



Phone by NTT

of cell phone is 30%

History of Communication

1964 **1972** 1998 2020

Tokyo Olympics

Sapporo Winter Olympics

Nagano Winter Olympics Paralympics

Tokyo Olympics Paralympics

Start of Bullet Train

Apollo No.17 lands on the Moon

Apollo

Over 20 million Telephone Subscribers in Japan

Universal Studio Japan Starts "Mario Zone"

Laying US-JP Submarine Cable

Telephone Subscribers

Phone by NTT

of cell phone is 30%

Start of 5G Services

History of Communication

1998

Nagano Winter Olympics Paralympics

Dawning age of the Internet

Wristwatch Phone by NTT

30% Penetration rate of cell phone

History of Communication

1964 1972 1998 2020

Tokyo Olympics

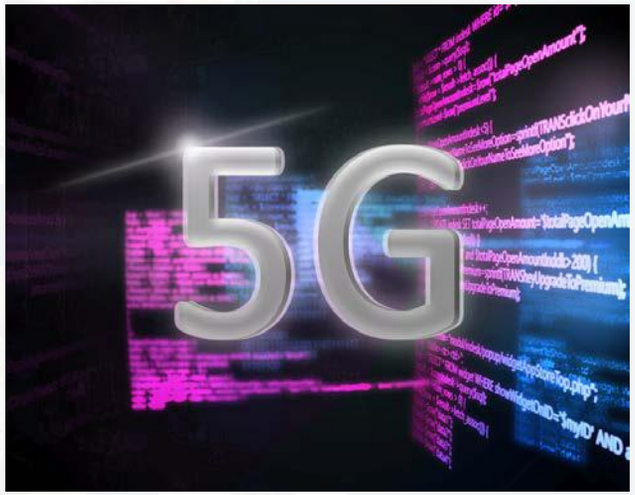
Sapporo Winter Olympics

Nagano Winter Olympics Paralympics

Tokyo Olympics Paralympics

Universal Studio Japan Starts "Mario Zone"

Start of 5G Services



Start of Bullet Train

Moon

Dawning

Universal Studio Japan Starts "Mario Zone"

Laying US-JP Submarine Cable

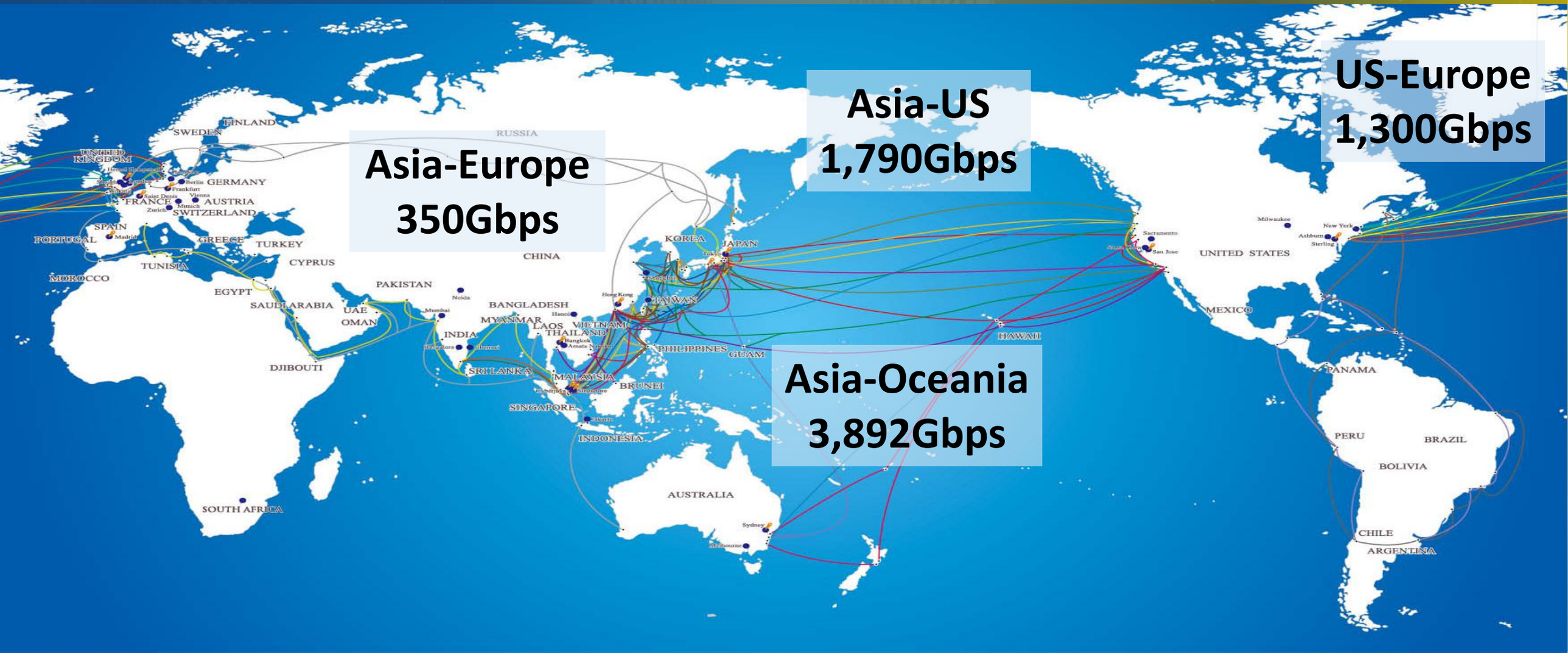
Over 20 million Telephone Subscribers

Wristwatch Phone by NTT

Penetration rate of cell phone is 30%

Start of 5G Services

NTT's Global IP Network



Realization of Sustainable Society

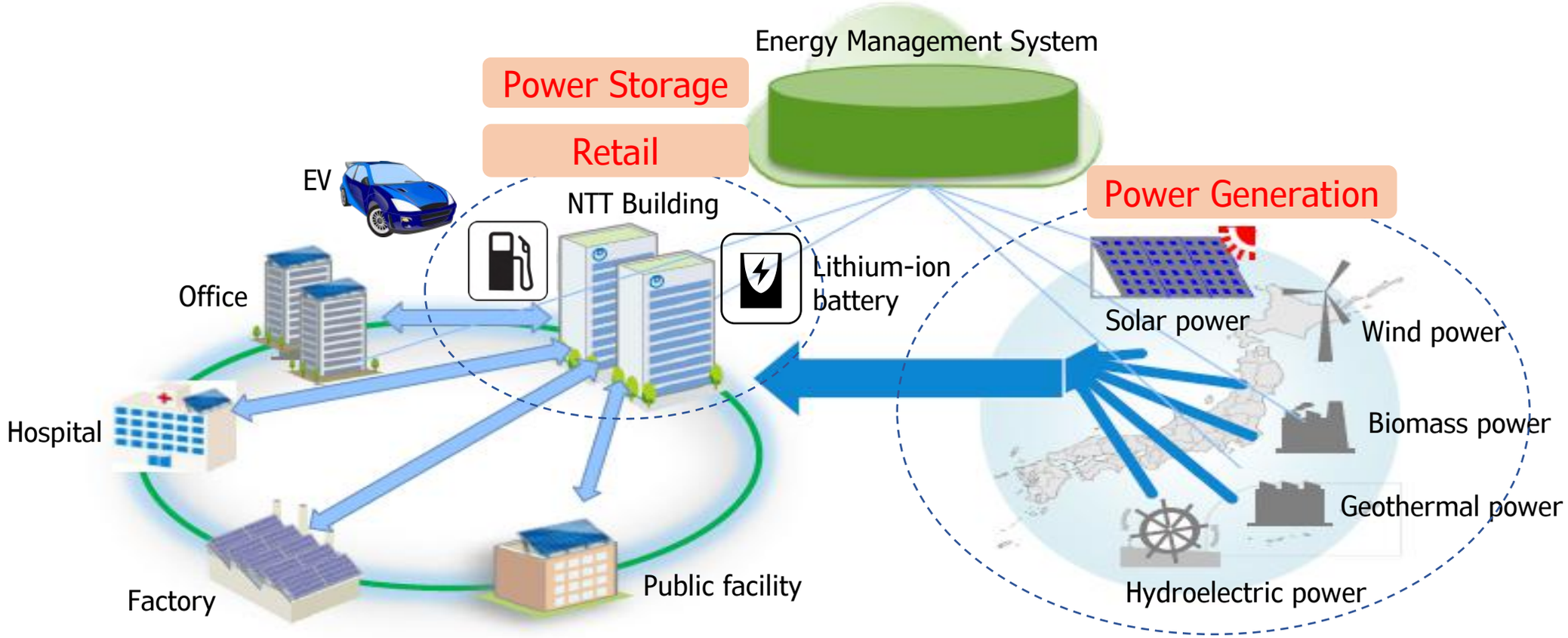
Maintenance including submarine cables

Cable-Laying Ship “Kizuna”

Unmanned Diving Robot “ROV”

Realization of Sustainable Society

Building of electric power network



Smart World

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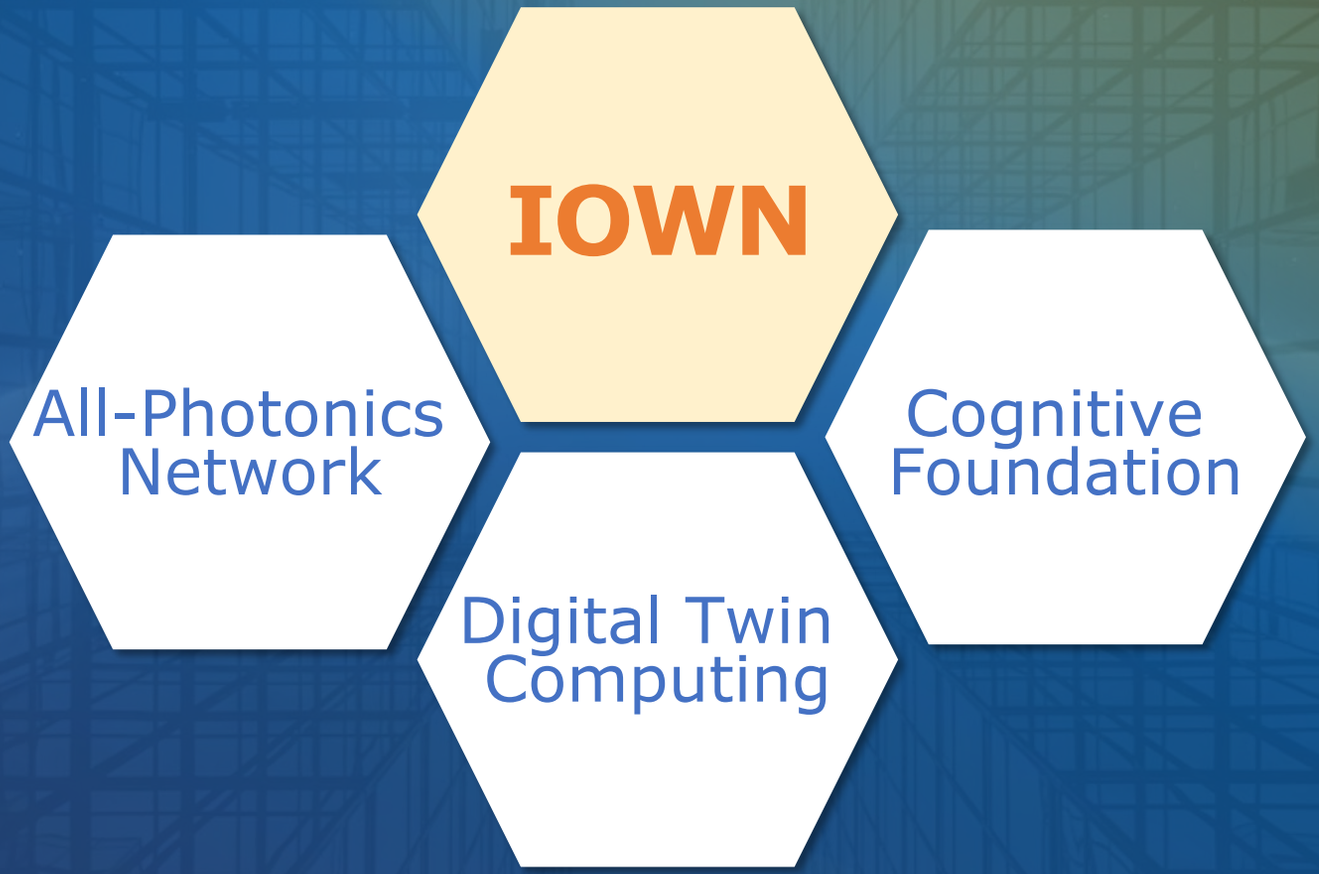
IOWN

Innovative Optical and Wireless Network

Features of IOWN



Features of IOWN

All-Photonics Network

Low Power Consumption

Power efficiency 100 times*

*Target power efficiency for the photonics part

Large Capacity

Transmission Capacity 125 times*

*Target communication capacity per fiber

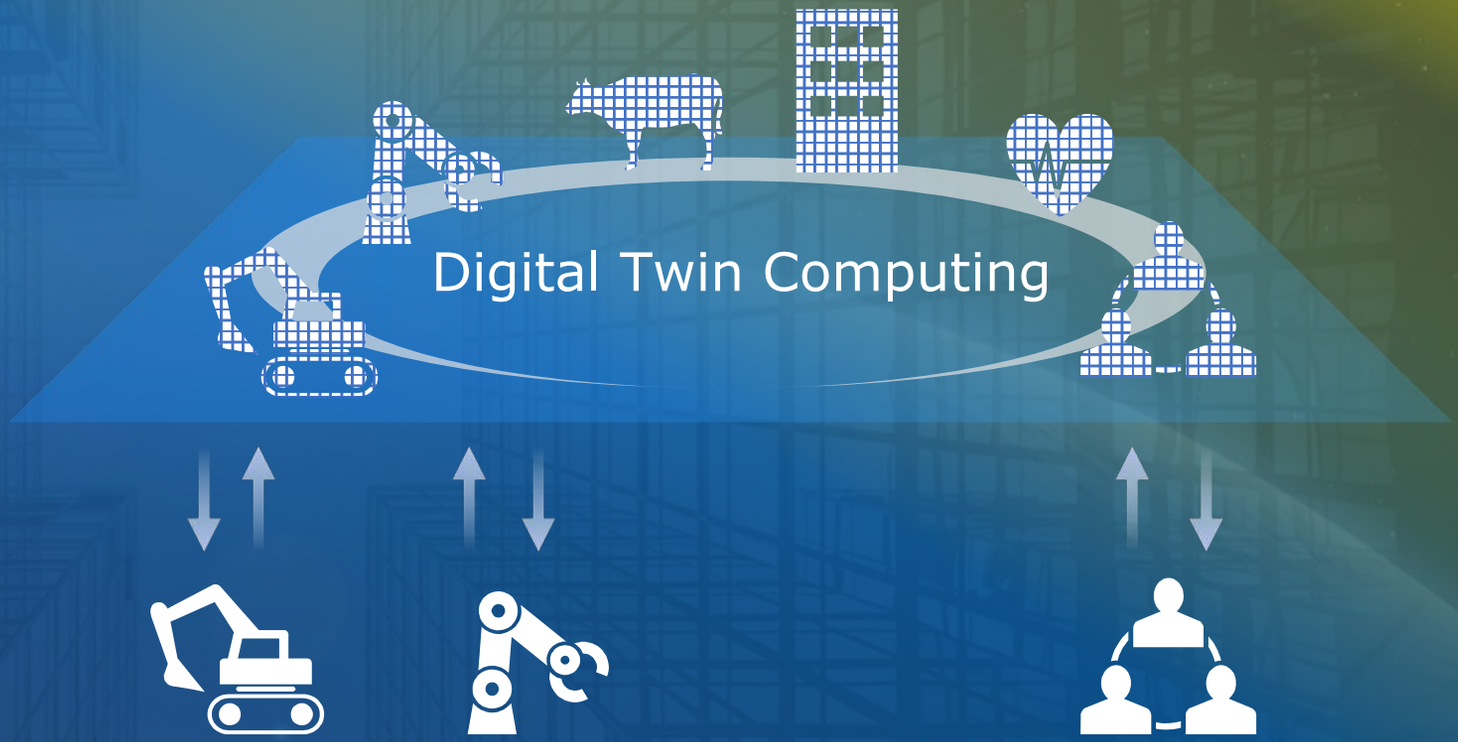
Low Latency

End-end latency 1/200*

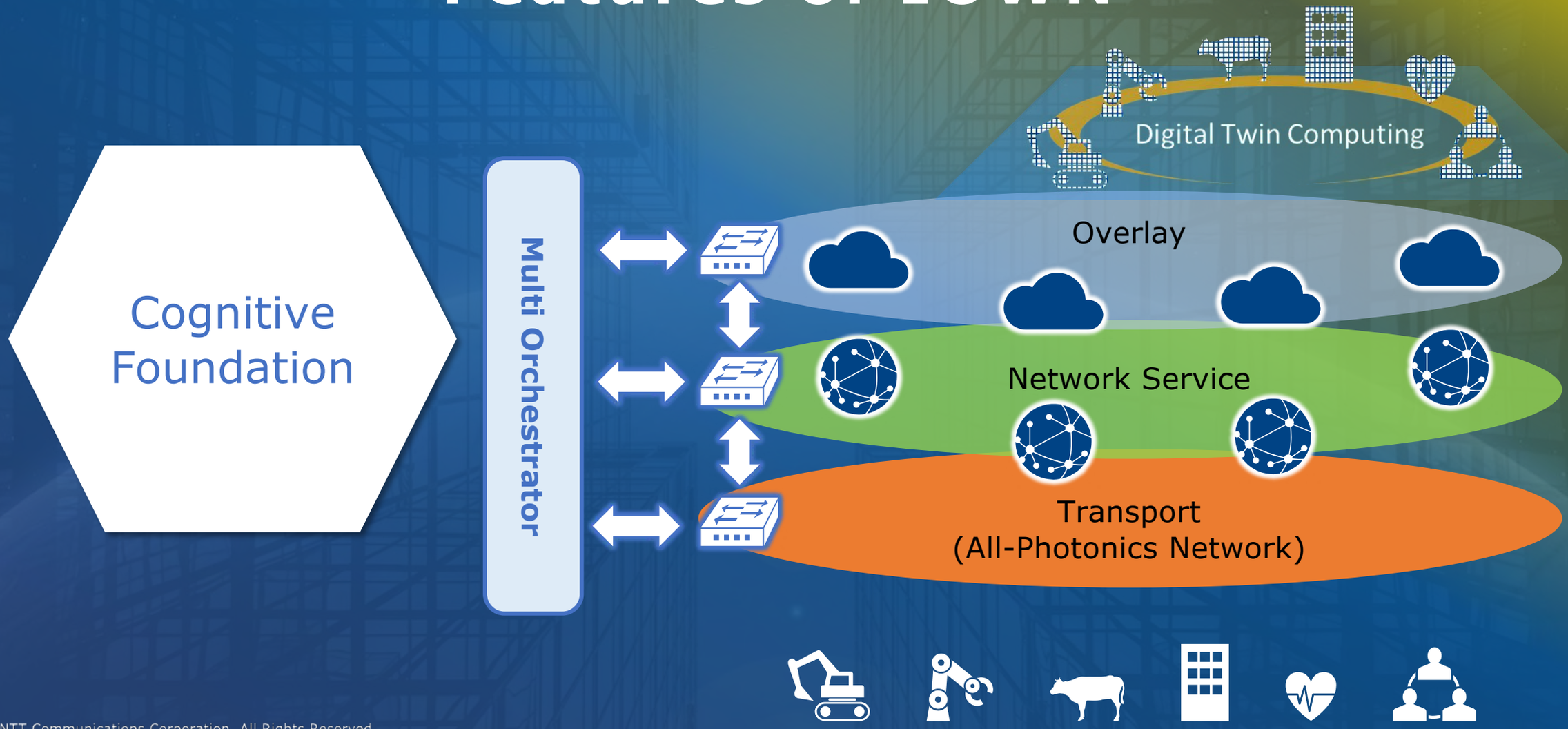
*Target delay for uncompressed video traffic within the same prefecture

Features of IOWN

Digital Twin Computing



Features of IOWN



Ultra Reality Viewing by IOWN

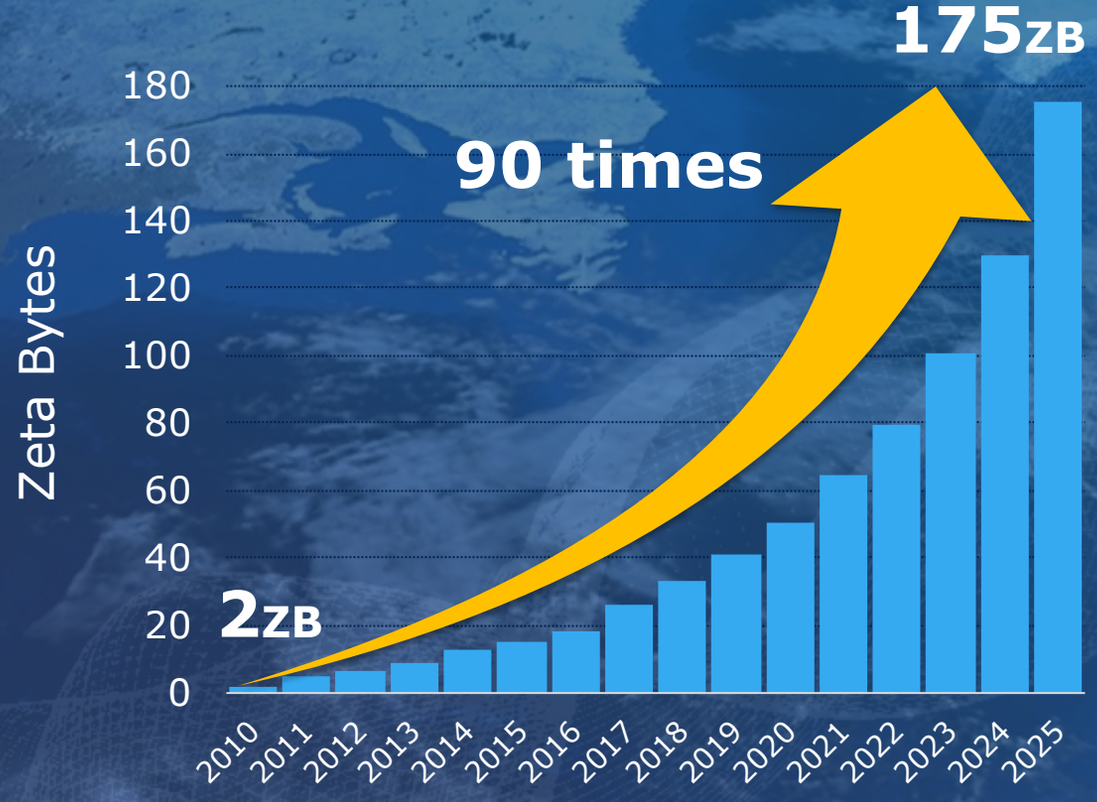
Before

After

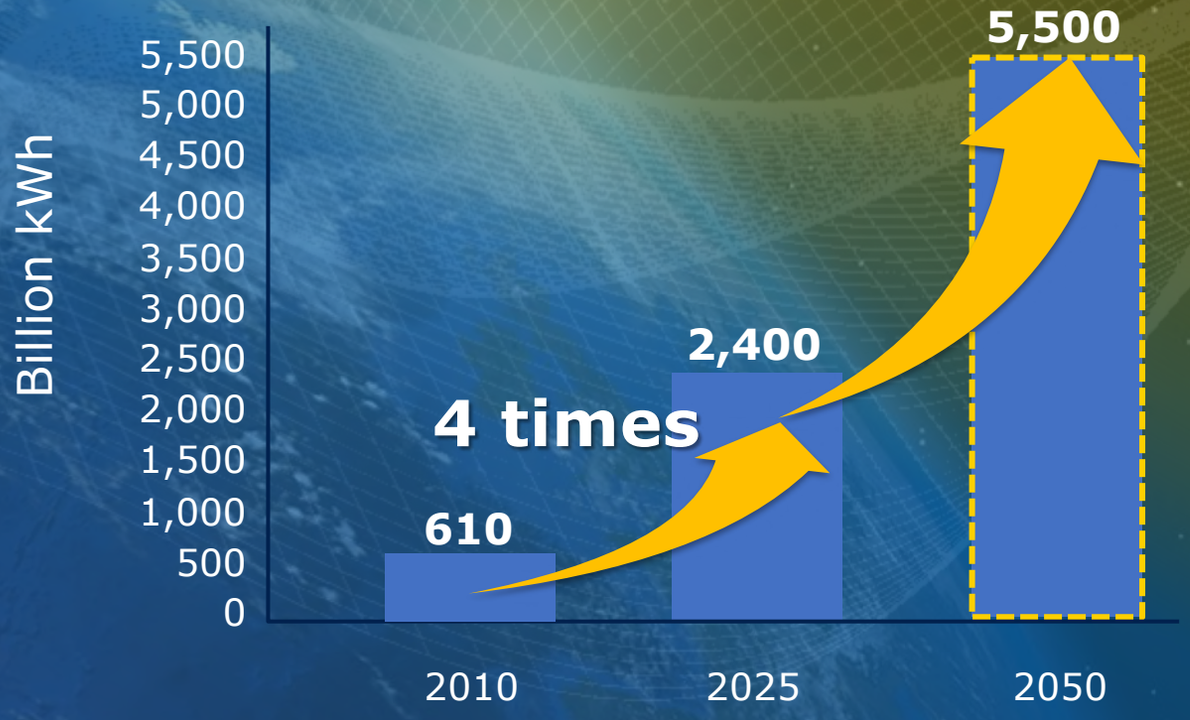
Borderless Between Real and Virtual

Optimizing Energy Distribution by IOWN

Increasing data volume



Transition of power consumption



Optimizing Energy Distribution by IOWN

Interlocking amount of information

Digital Twin Computing

Optimizing energy distribution on a global scale

Solving Social Challenges on Global Scale

Business Strategy

Organization Structure of NTT Group