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5G Open RAN Ecosystem

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5G Open RAN for Global Operators

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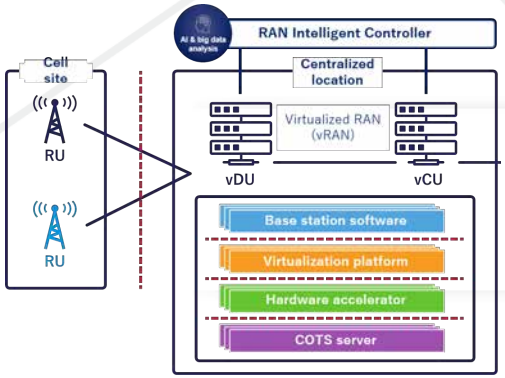
Fusion



Scalable & intelligent vRAN

Overseas expansion

Global operators

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About Open RAN

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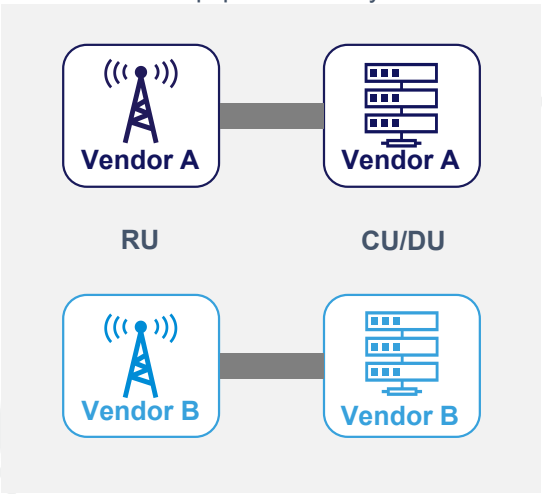
Closed network

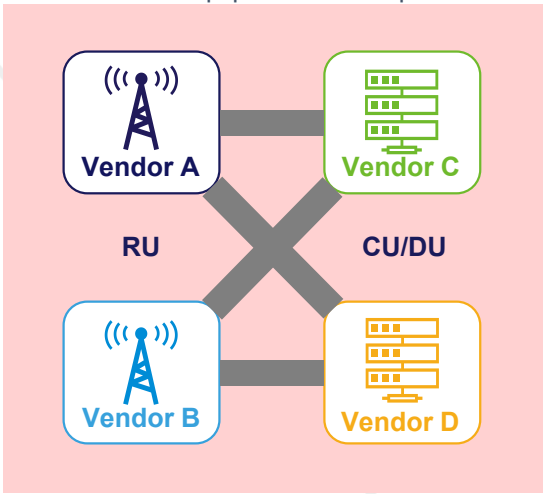
Connects to equipment of only one vendor



Open specifications

Open RAN

Interconnects equipment of multiple vendors



- Base station market is oligopolistic
- Mobile-network construction lacks flexibility

- More flexible construction of mobile networks
  New opportunities for vendors to enter the base station market
- Vendors able to focus on developing specialty devices

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Evolving 5G Open RAN Deployment

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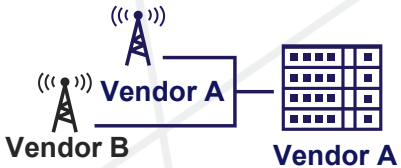
5G Open RAN Ecosystem
White Paper

5G Open RAN Ecosystem

All base stations are O-RAN Compliant!

Millimeter-band 5G service
Max. 4.1Gbps downlink

FY2021



Deployment in 574 cities

Carrier aggregation
Max. 4.2Gbps downlink

FY2020

5G service starts with open RAN

Compatible equipment: 15 devices

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OREC Global Vendors

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Truly Flexible Open RAN from OREC

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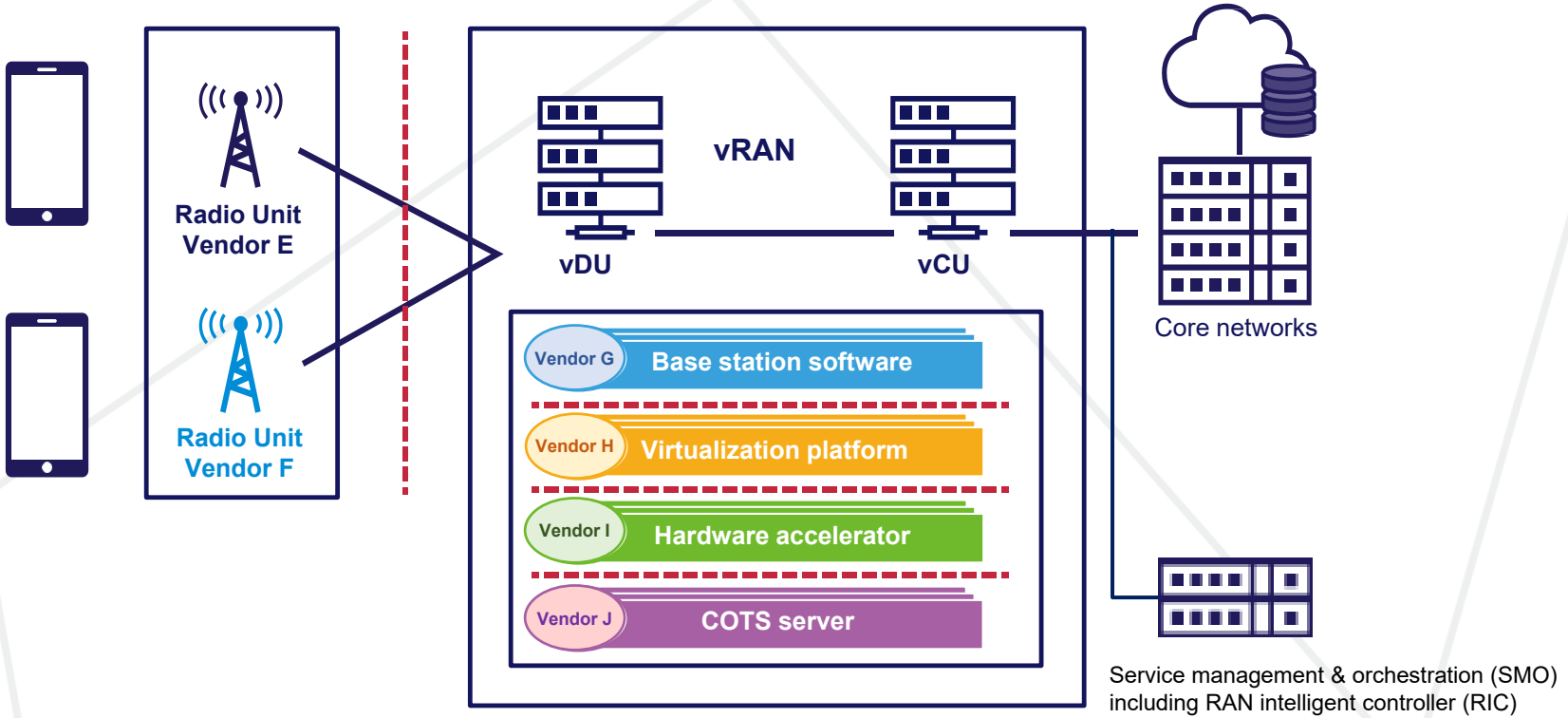

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DOCOMO Shared Open Lab

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Verifications started in October 2021

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vRAN Verification

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Core networks

vRAN

Ex. 1 of pre-packaged vRAN

Base station software (CU/DU)

FUJITSU

Virtualization platform

WNDRVR

Accelerator

NVIDIA

General-purpose server

FUJITSU

Ex. 2 of pre-packaged vRAN

Base station software (CU/DU)

Orchestrating a brighter world

NEC

Virtualization platform

Red Hat

Accelerator

AMD XILINX

General-purpose server

DELL Technologies

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vRAN Verification

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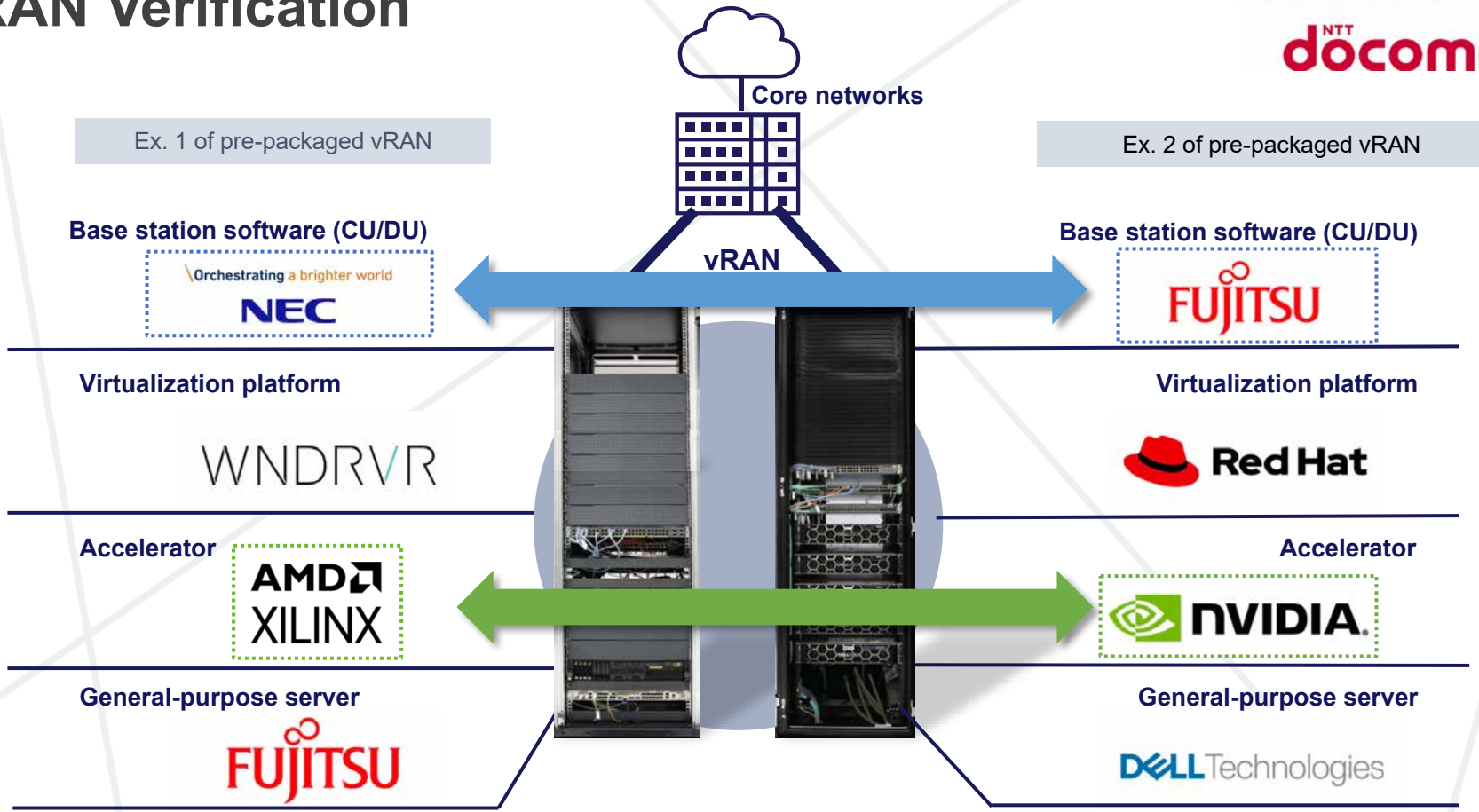

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Globally Accessible vRAN Verification Environment

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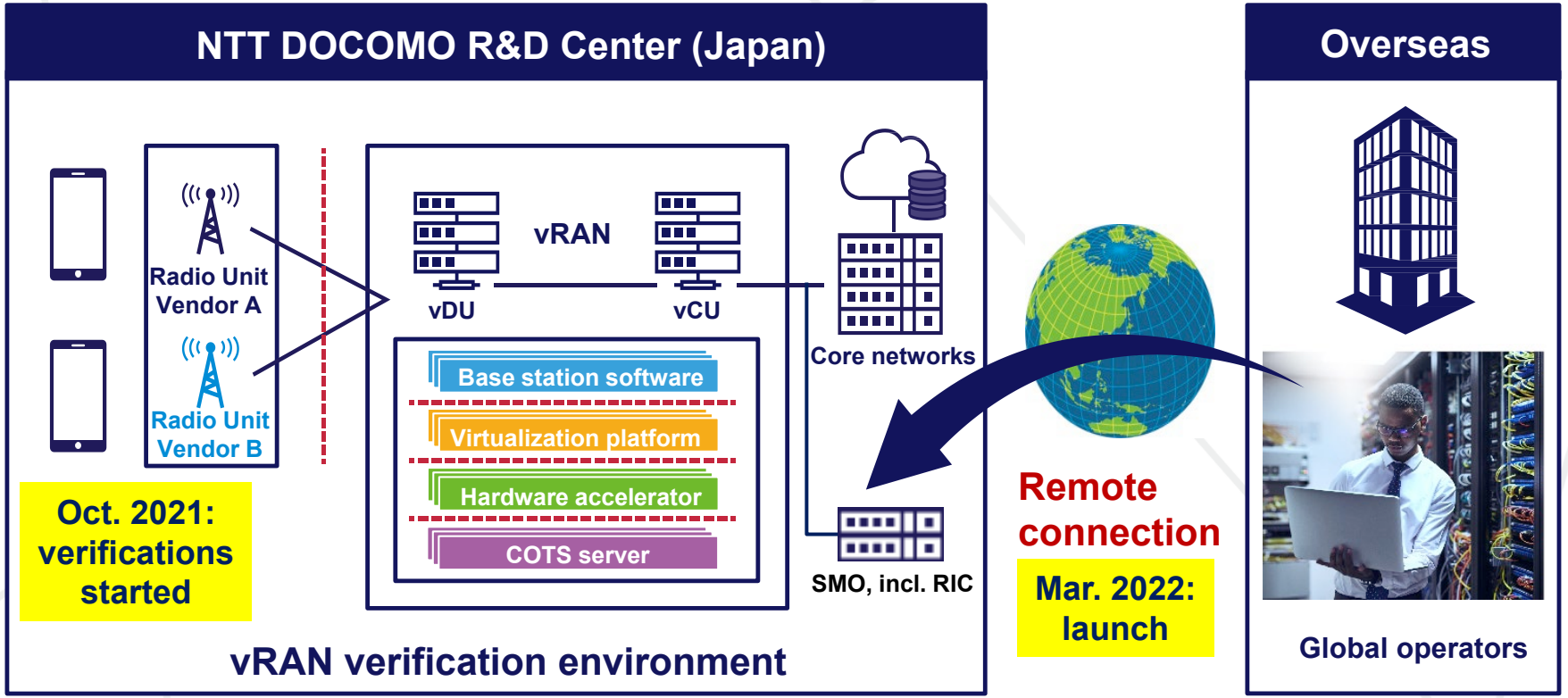

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5G Open RAN Ecosystem White Paper

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Benefits

- ☑ Best of breed
- ☑ Flexibility & extensibility
- ☑ Low cost
- ☑ Time to market

Challenges

- Total cost of ownership
- Integration & interoperability
- Operation & management

Targets

Capacity	3x or more
Throughput	3x or more
Total Power	1/2 or less

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New Possibilities with O-RAN

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Turning global connectivity into a given.

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