5G Tech Talk

Delivering a differentiated customer experience

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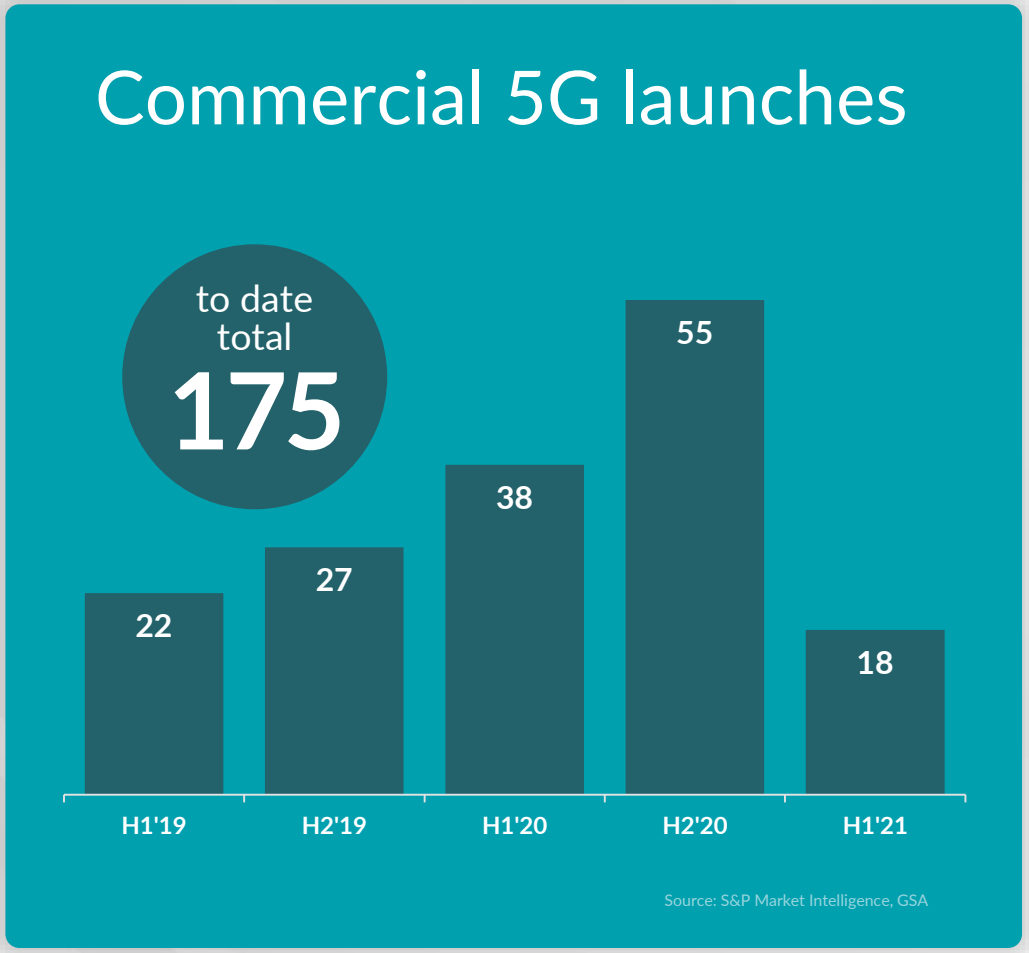
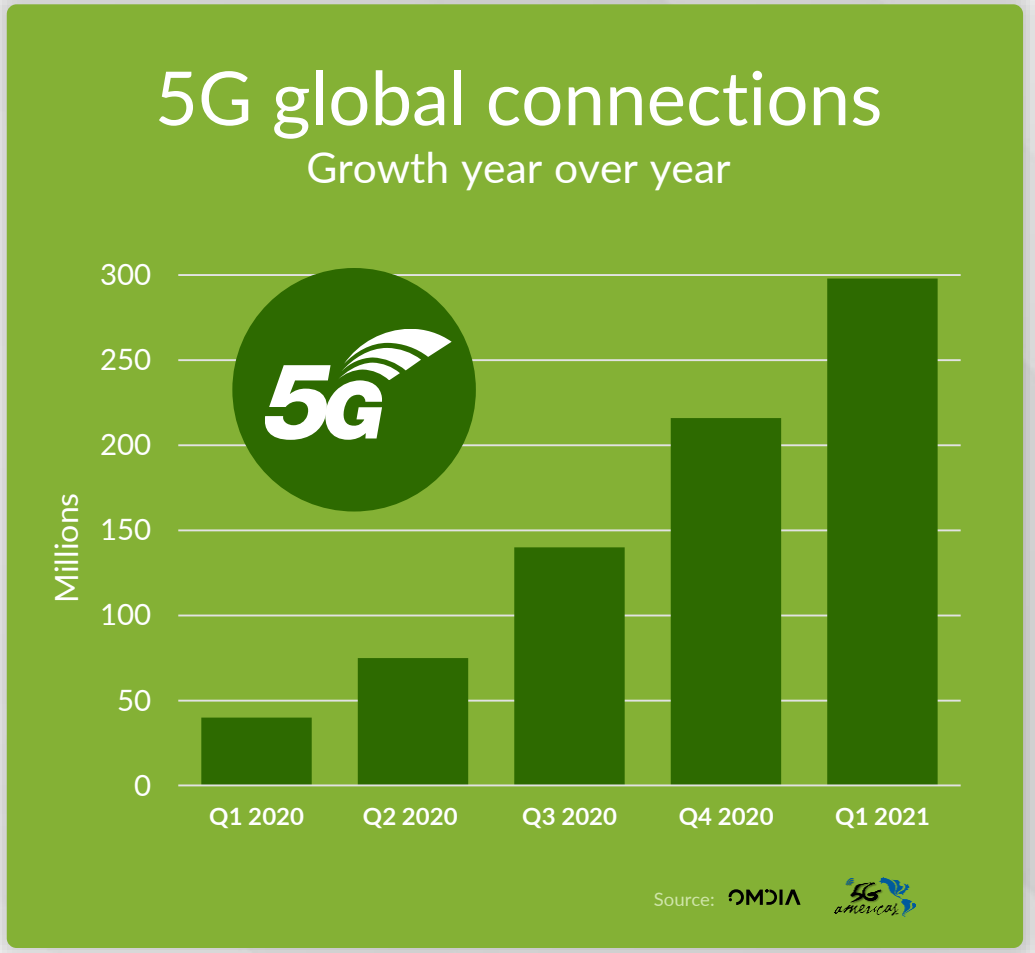
5G is gathering momentum





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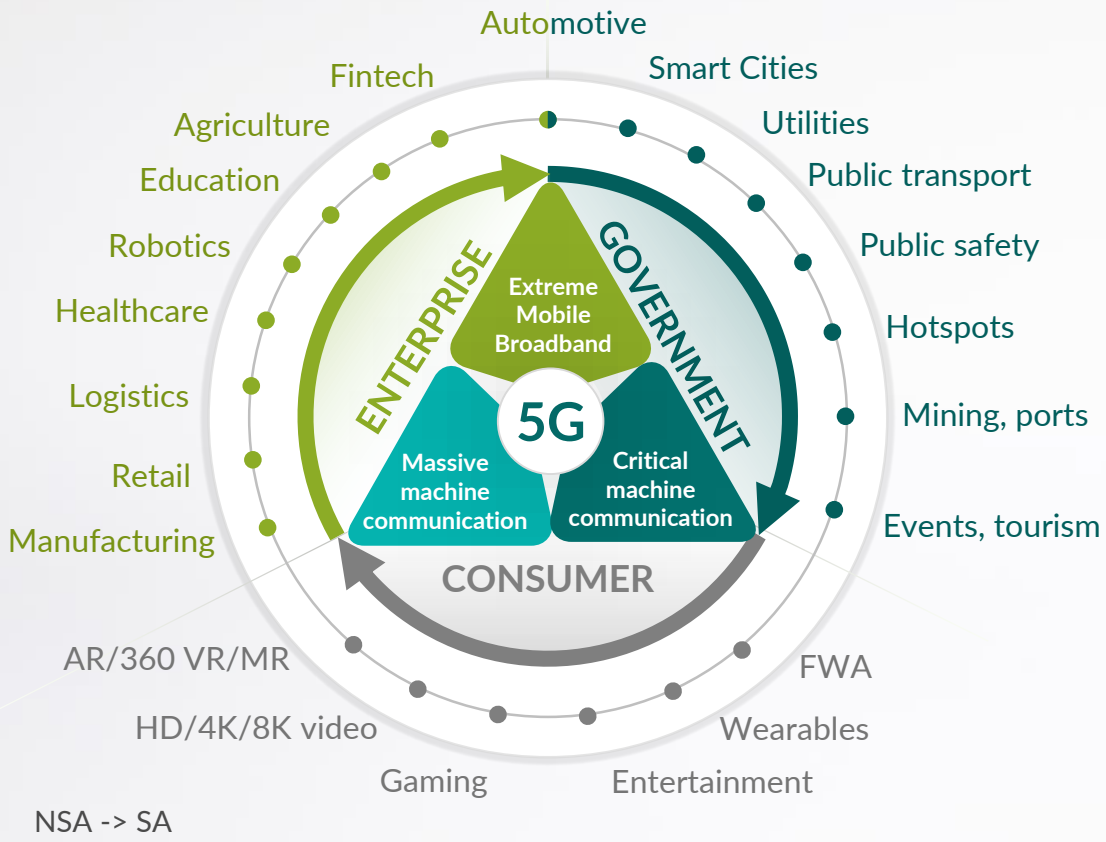
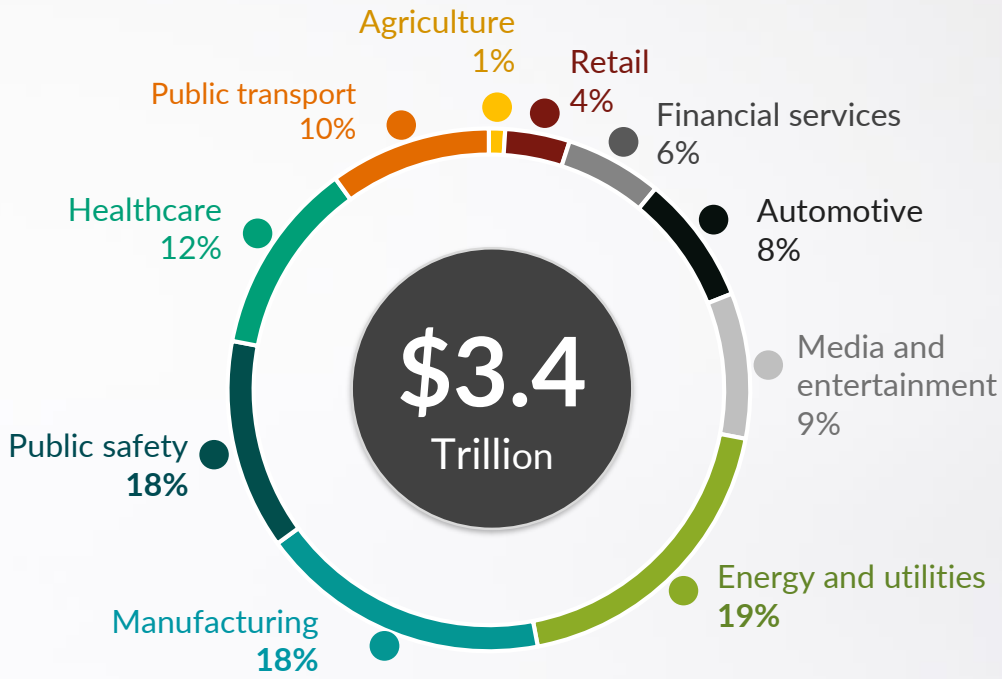
5G era opens new opportunities for Service Providers across consumers, enterprises and governments





5G enabled revenues by 2026

Source: Ericsson

Prepares the network for 'unknown' use-cases

Killer segment is 'enterprise'

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Experience-First focus areas for 5G

Cloud Metro

Private 5G

ORAN

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New applications shifting service delivery into the Metro

82% video IP traffic by 2022

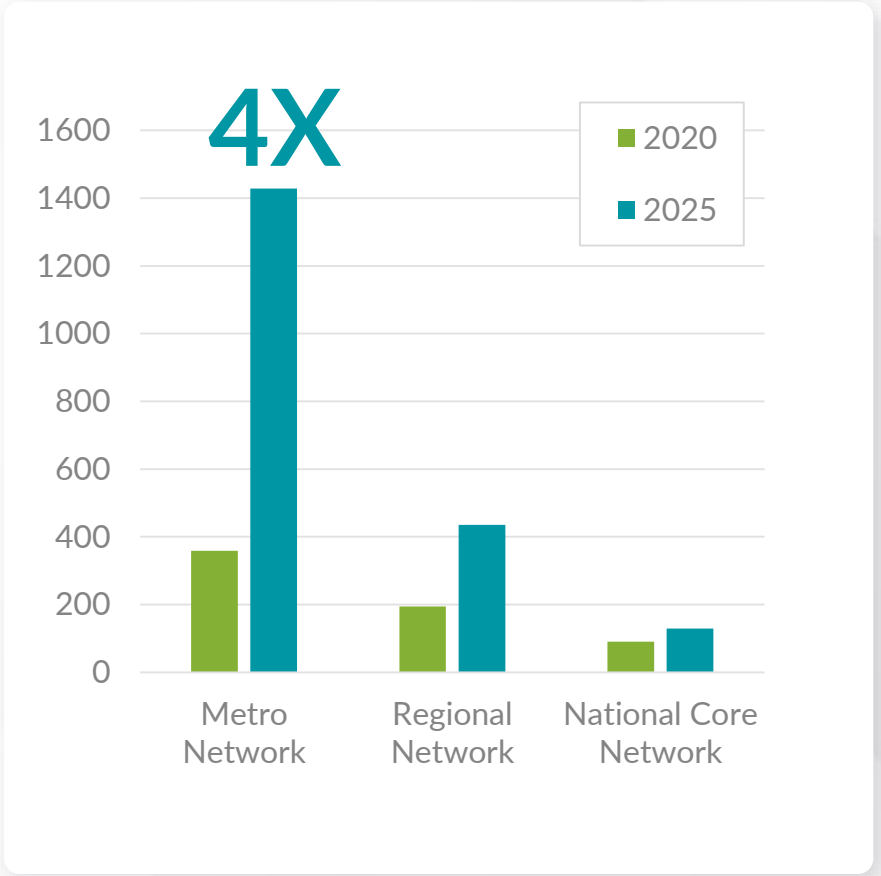
Video caching getting distributed into **Metro**

54% Mobile data traffic will be 5G by 2025

5G user planes and security gateways getting distributed into **Metro**

30% workloads reside in edge cloud by 2025

Applications moving to the edge pushing into **Metro**



Sources: Ericsson Mobility Report, GSMA

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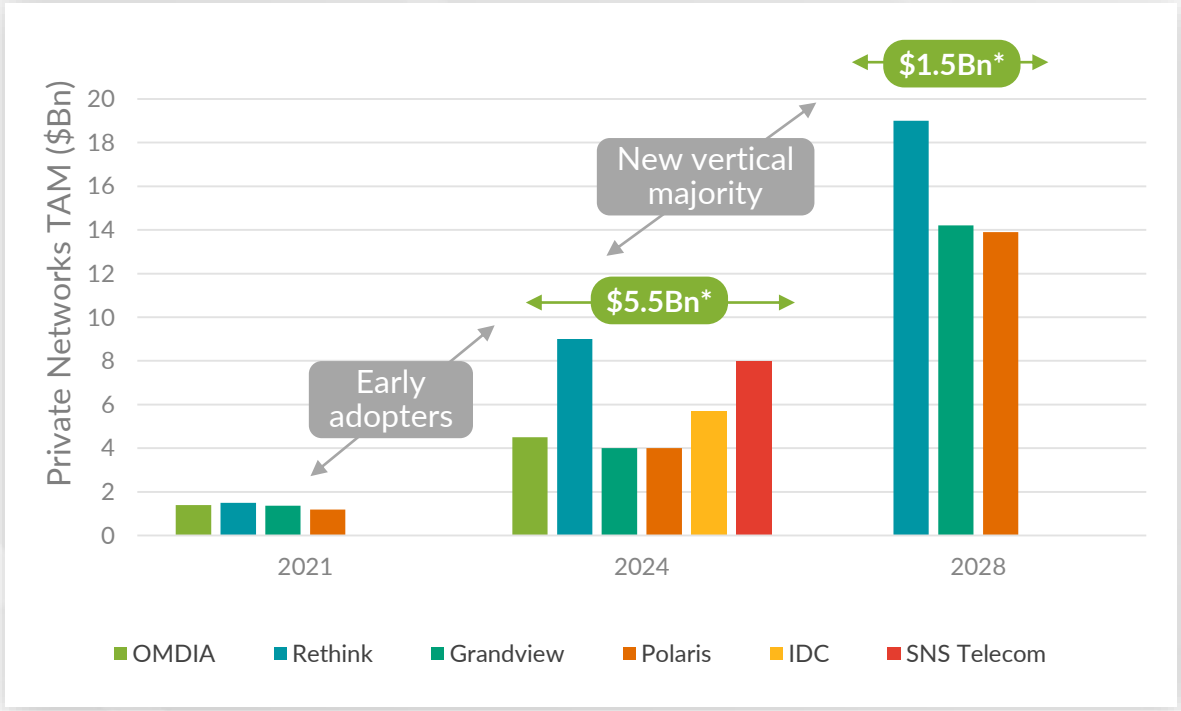
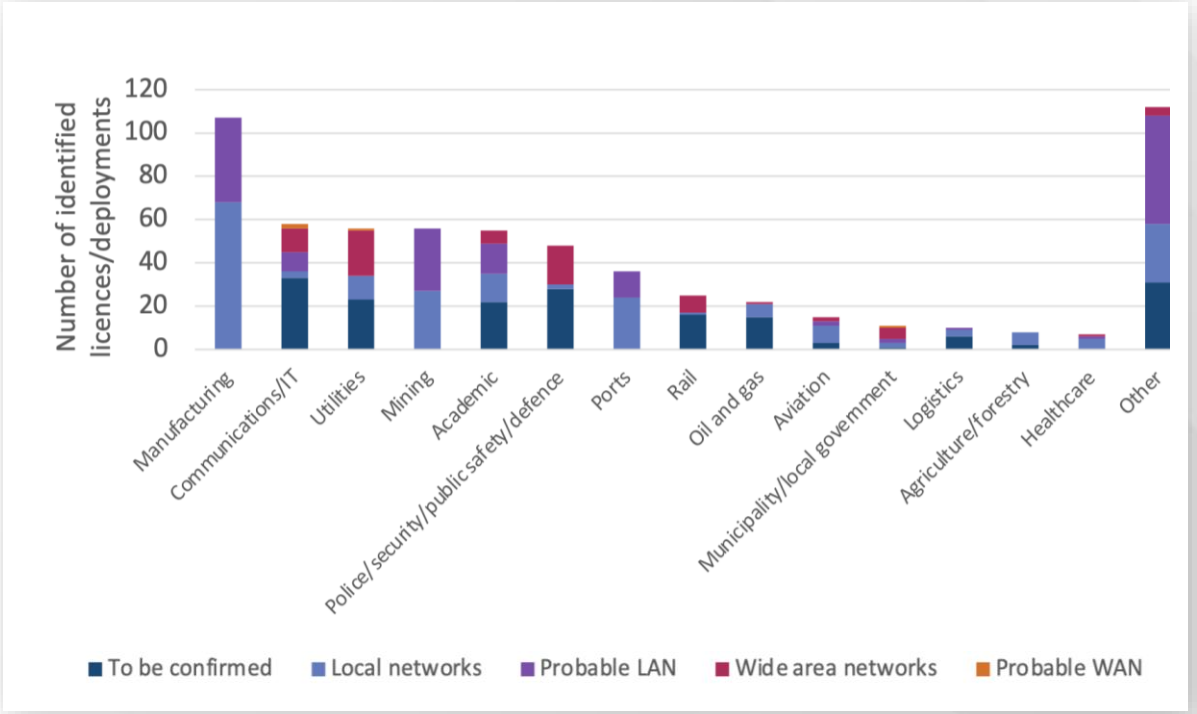
The enterprise 5G market



* Includes E2E Private Network Solution



Source: GSA (Based on Sep 2021 database of 600+ companies)

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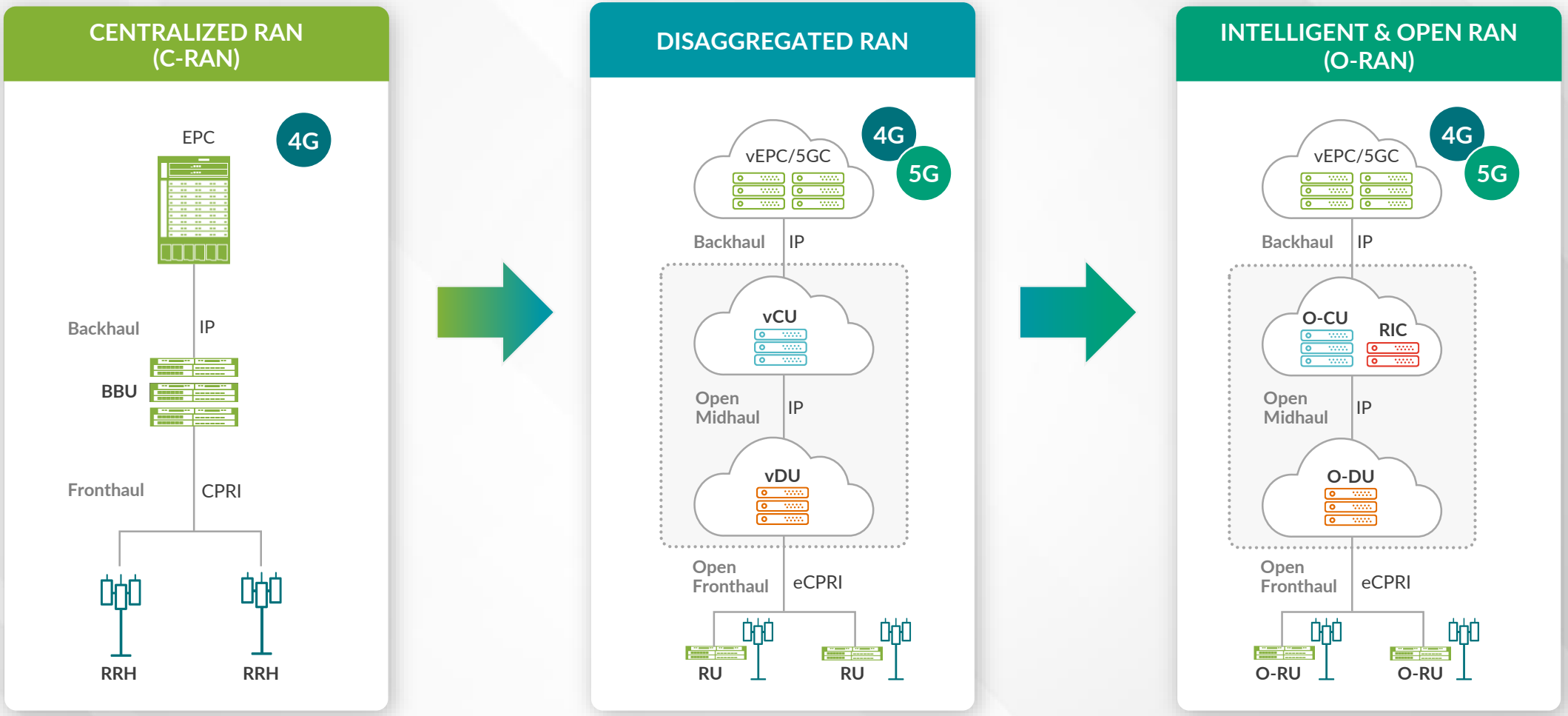
RAN evolution to disaggregation, openness and intelligence



EPC Evolved Packet Core
RRH Remote Radio Head
BBU BaseBand Unit
CPRI Common Private Radio Interface

vCU Virt. Centralized Unit
vDU Virt. Distributed Unit
RU Remote Unit
eCPRI Ethernet CPRI

RIC RAN Intelligent Controller

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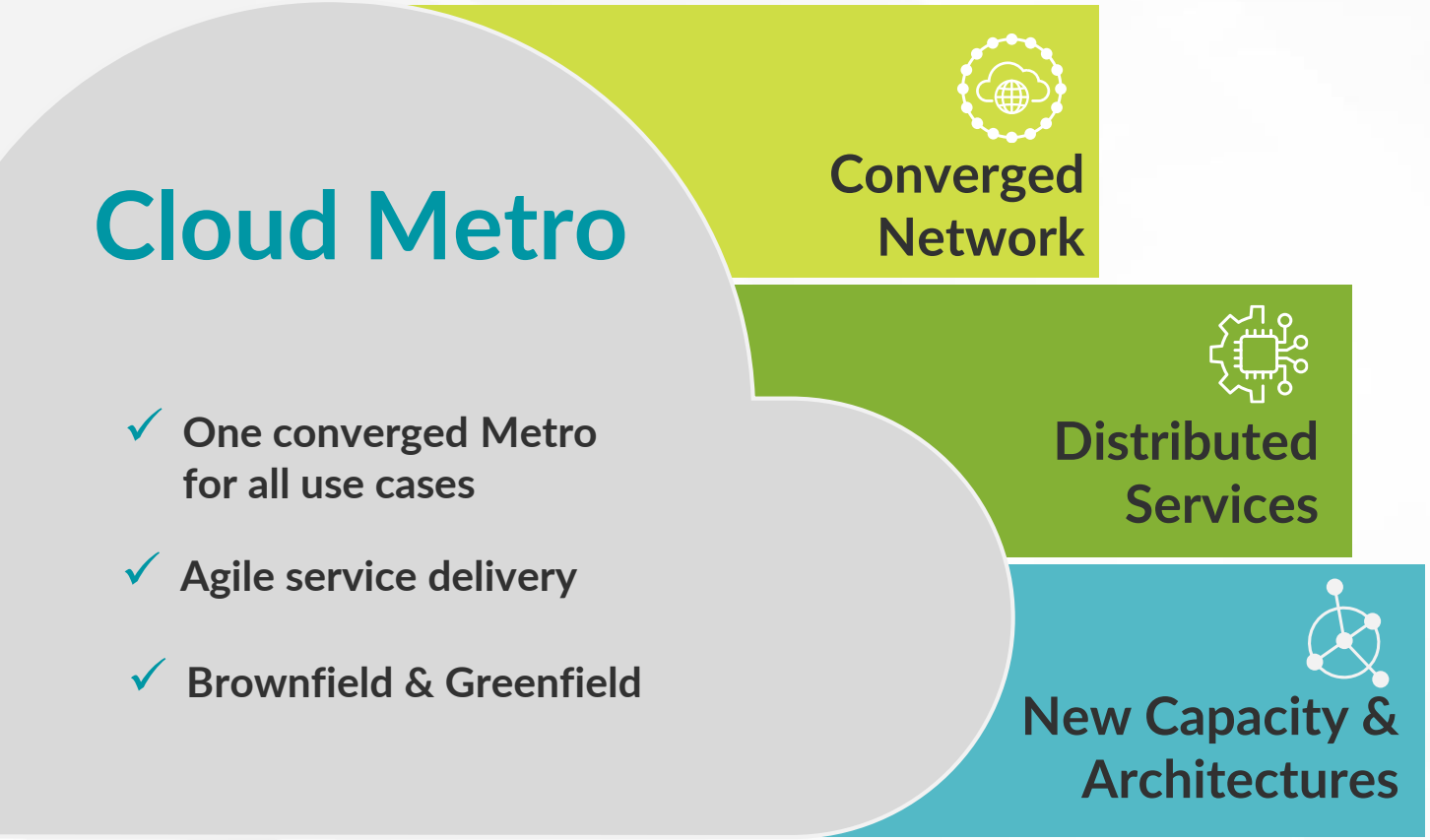
Addressing the key opportunities

Juniper Cloud Metro built for Experience-First Networking



- Cloud native architecture with disaggregation.
- Network Slicing: Granular SLA capabilities; flexible service placement.
- Automation enabled with One Junos, streaming telemetry and Open APIs.
- Experience-First networking with assured experience flywheel.

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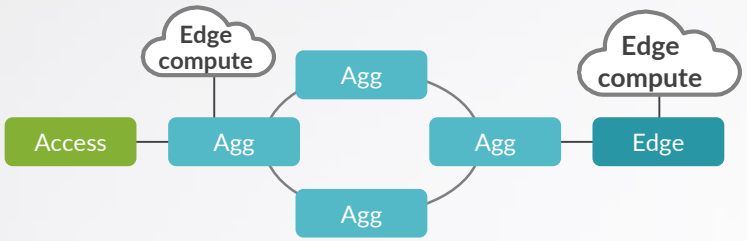
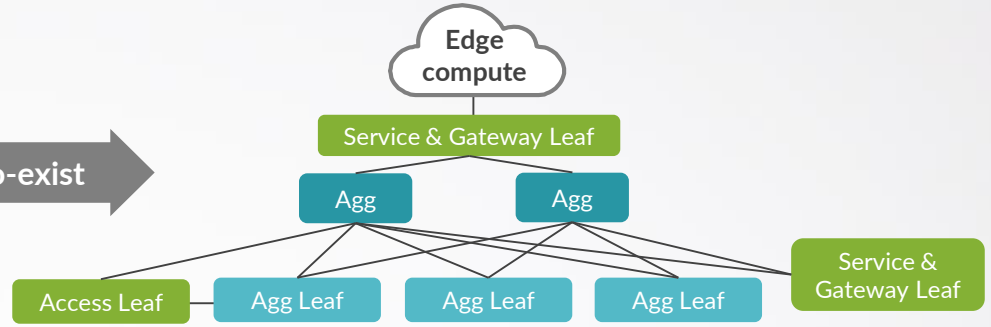
Comprehensive Cloud Metro portfolio for converged networks



METRO SCALE-UP

Scale-up & scale-out can co-exist



METRO SCALE-OUT

ACCESS

ACX5448-M

ACX710 (Hardened)

AGGREGATION

ACX5448

ACX7100-48L

ACX5448-D

ACX7100-32C

SERVICE & GATEWAY LEAFS

MX240

MX10003

MX960

MX480

MX10008

Scalable IP services fabric with One Junos experience

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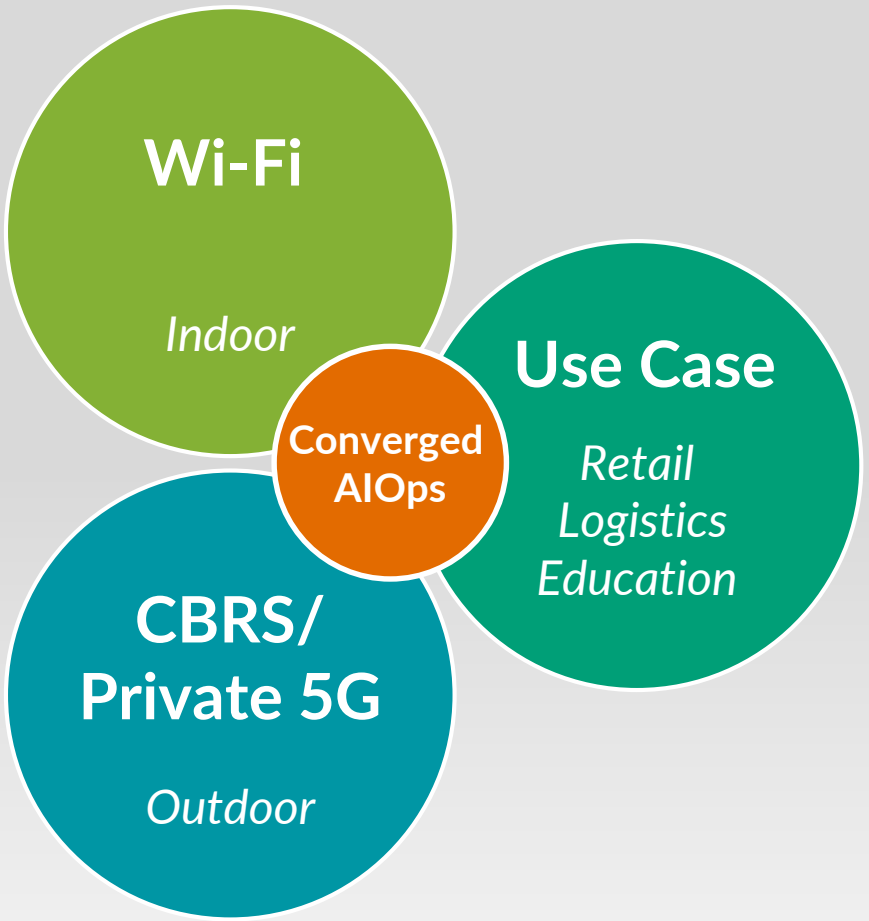
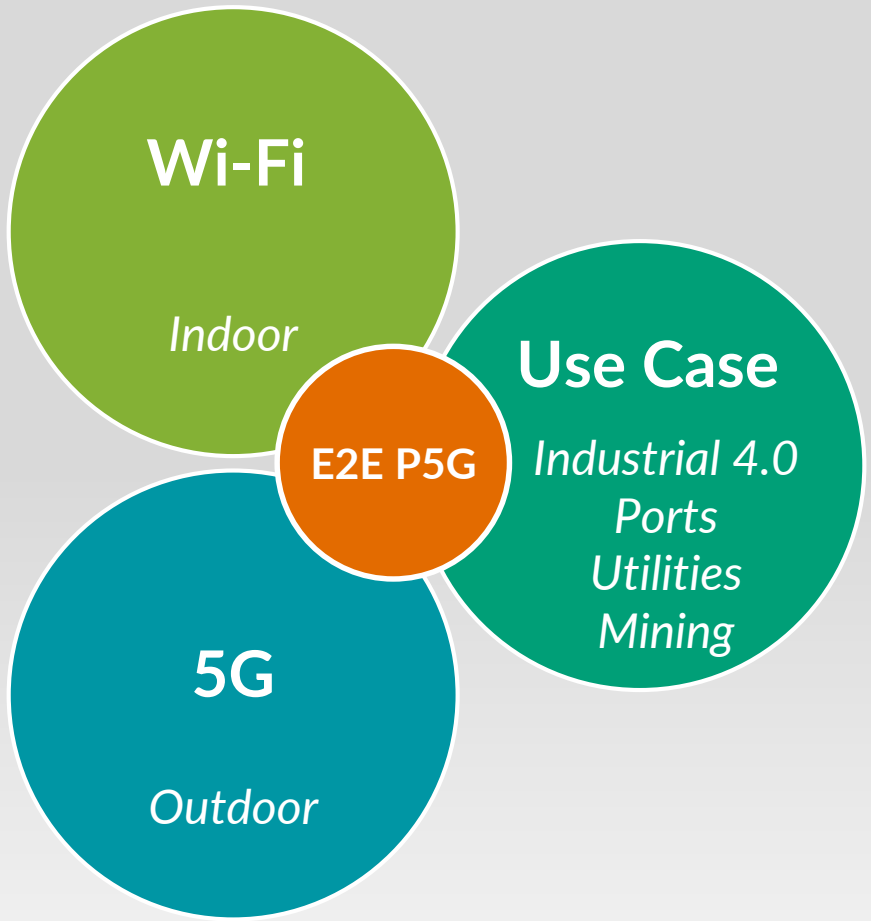
Juniper private network strategy

Phase 1- 2022



Phase 2- 2023 & beyond



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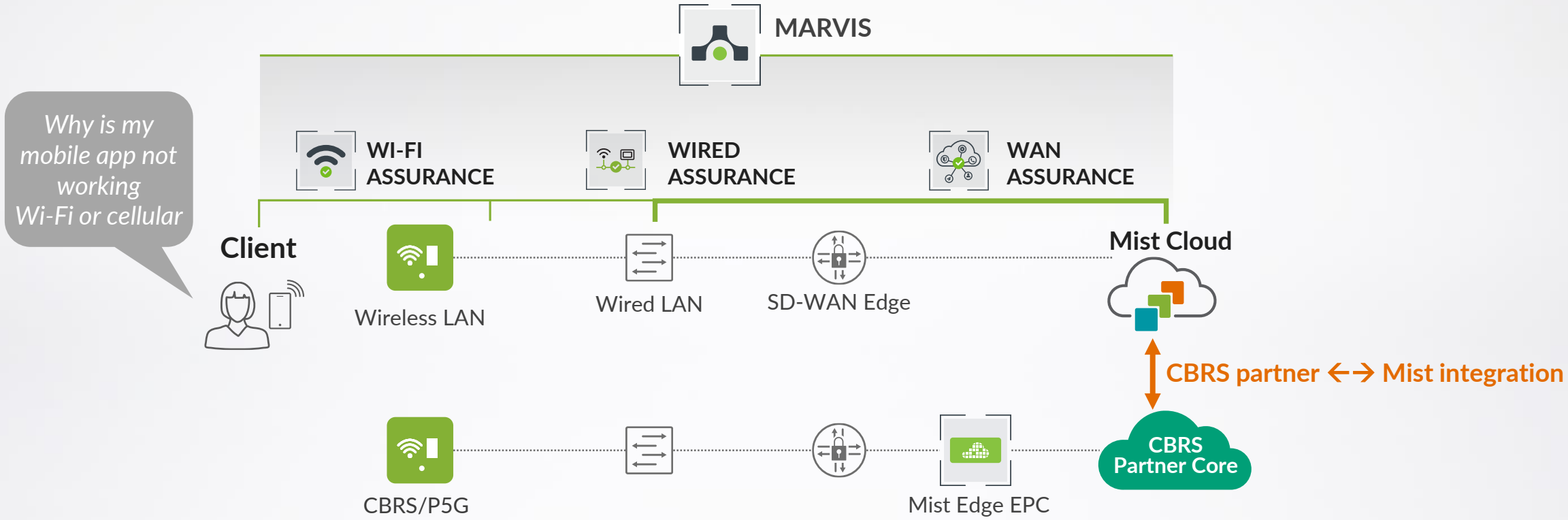
Wi-Fi + CBRS/P5G Marvis AIOPs value proposition

This is the use case where mobility is needed between a customer's Wi-Fi and CBRS network. For example, remote learning where students have both chrome books with Wi-Fi and cellular or retail associates moving between an indoor Wi-Fi and outdoor private cellular network.



Single pane of operational glass across public cellular and private cellular and Wi-Fi networks

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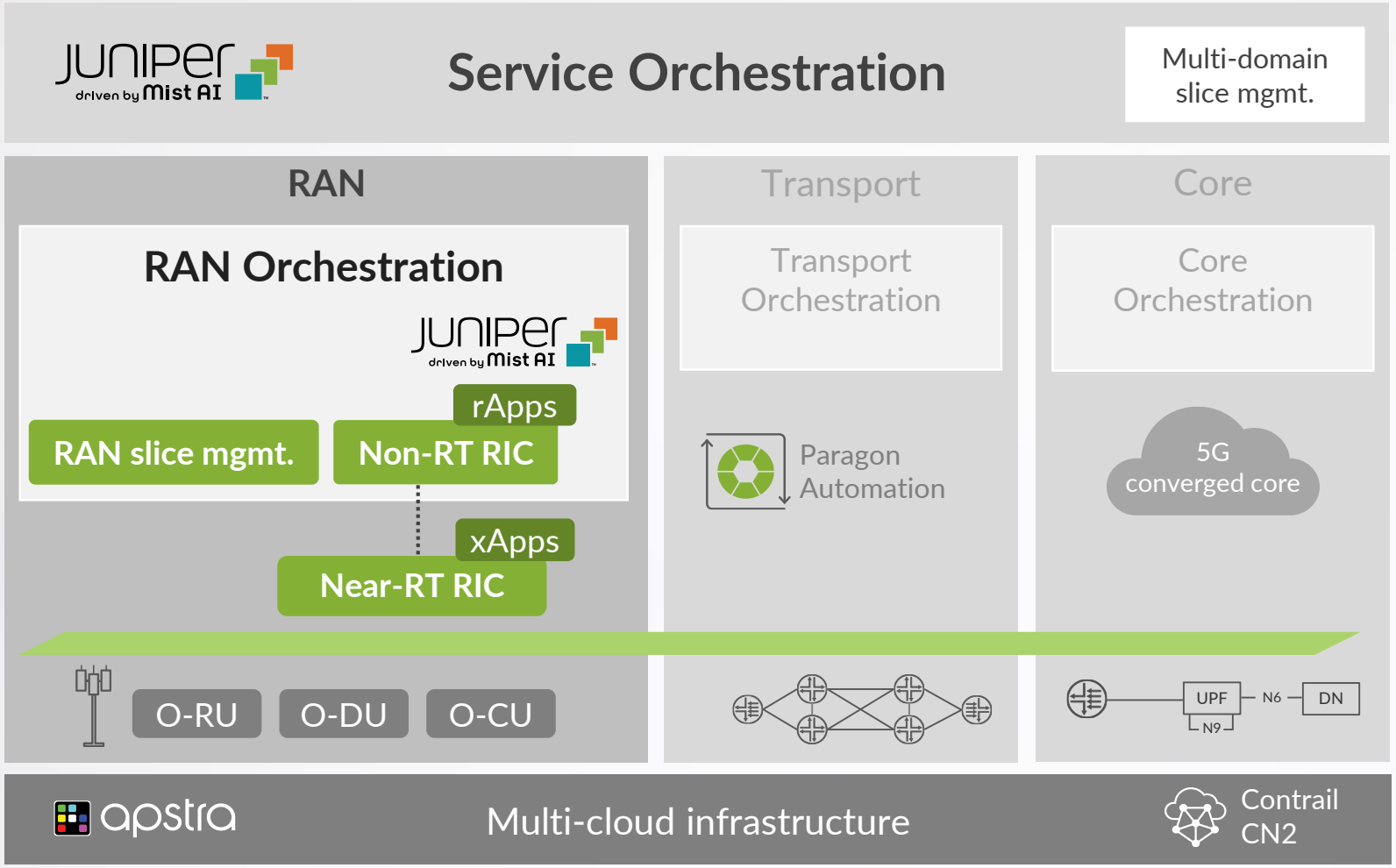
Juniper enters radio access network with ORAN



Multi-cloud, multi-domain, multi-tenant network slicing and orchestration.

Open and interoperable RIC platform.

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Leading the ORAN narrative in the industry

Old Approach

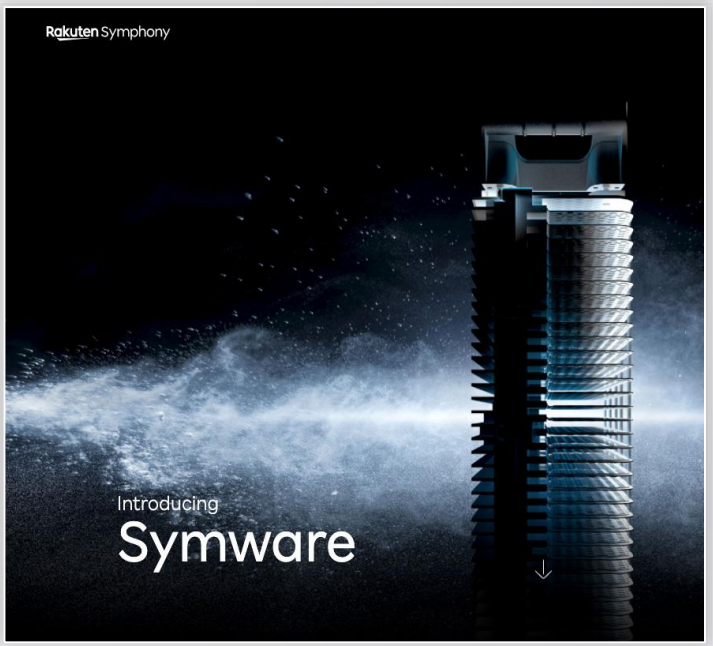
New Approach

O-RAN ALLIANCE

Open RAN POLICY COALITION

TELECOM INFRA PROJECT

Momentum



Rakuten Symphony

intel.

Parallel WIRELESS

Red Hat

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Timing and phases of 5G transformation

2022 | 2023 | 2024 | 2025

Cloud Metro

- Cloud native architecture with disaggregation
- Automation enabled with One Junos, streaming telemetry and Open APIs
- Network slicing

Wi-Fi + CBRS private 5G

- IoT and industry specific services
- Smart city and emergency services
- Smart cars

O-RAN

- Multi-Cloud, Multi-Domain, Multi-Tenant Network Slicing and Orchestration
- Open and interoperable RIC platform
- Open ecosystem and trials

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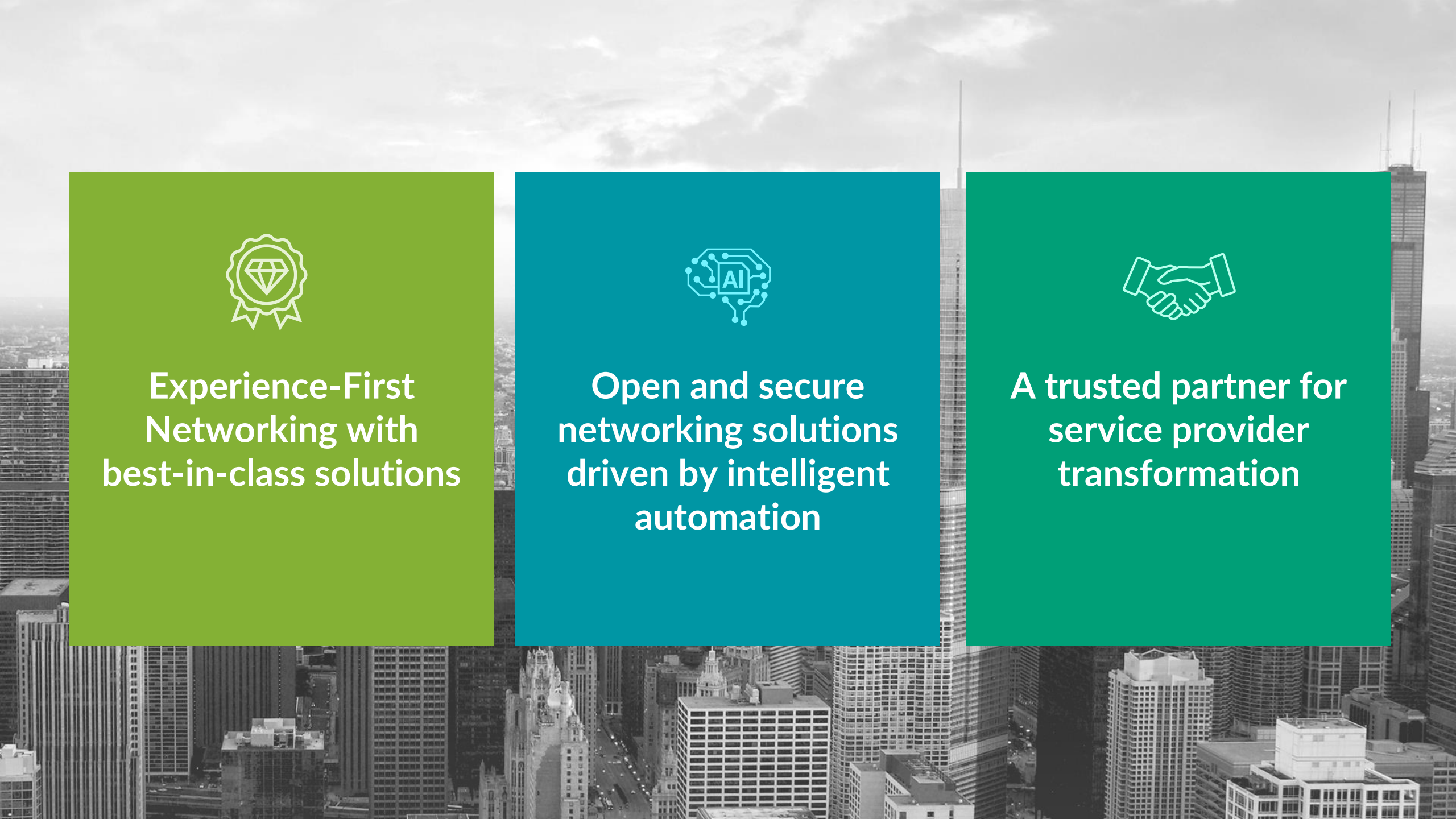
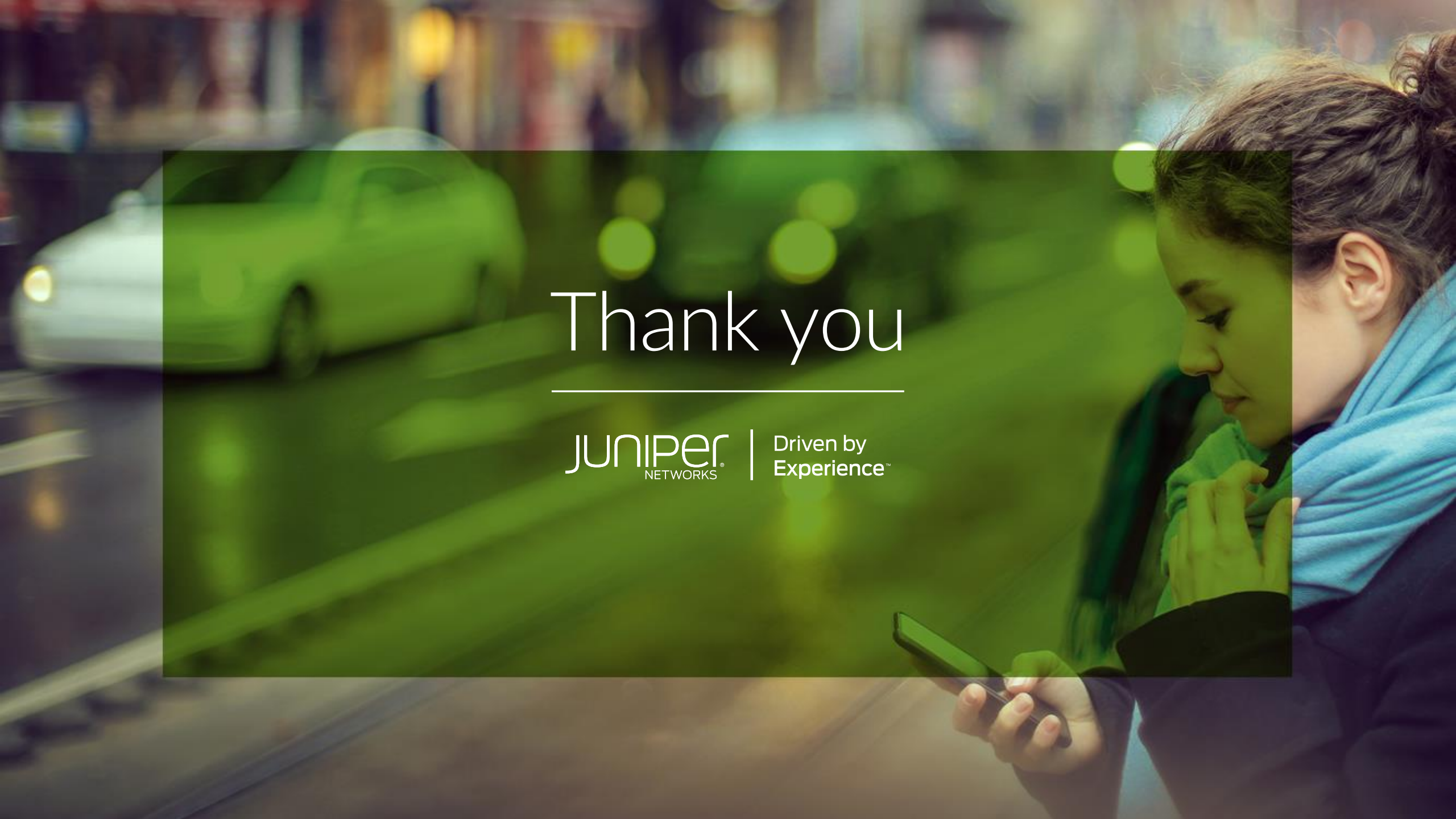


Experience-First Networking with best-in-class solutions

Open and secure networking solutions driven by intelligent automation

A trusted partner for service provider transformation


Thank you
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