

September 4th, 2019

San Diego

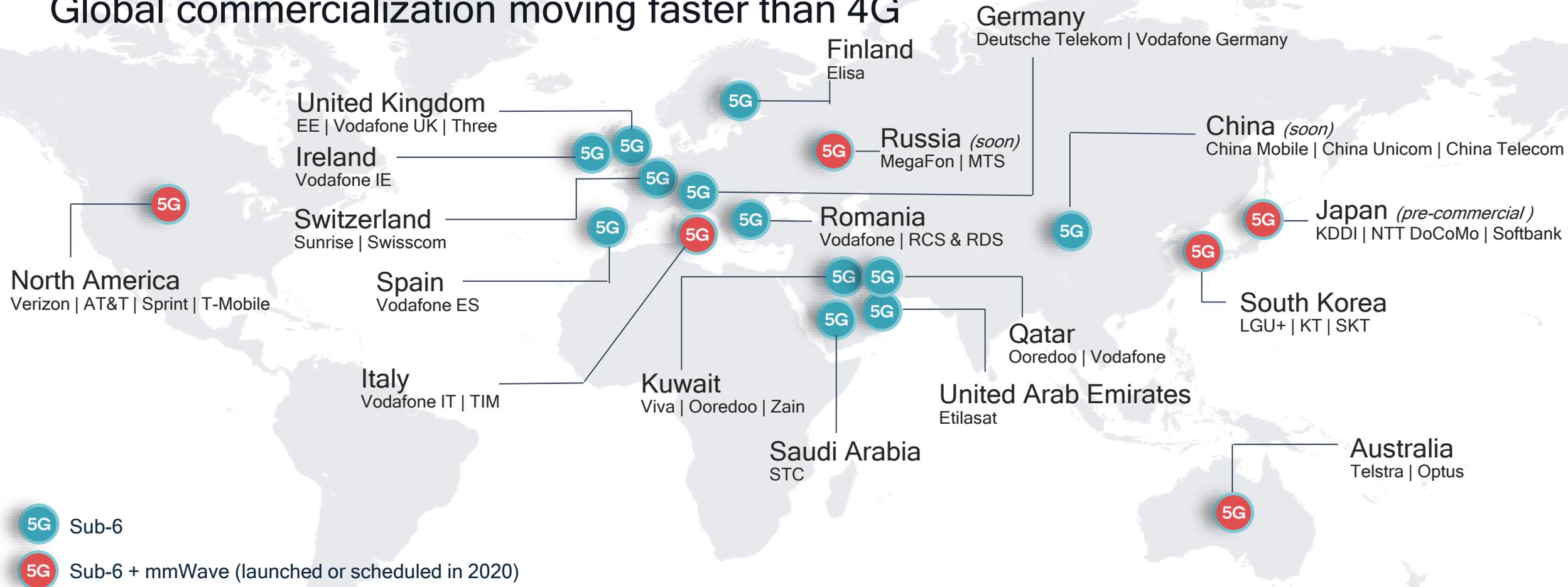


Qualcomm QTM527 mmWave Antenna Module

Briefing slides

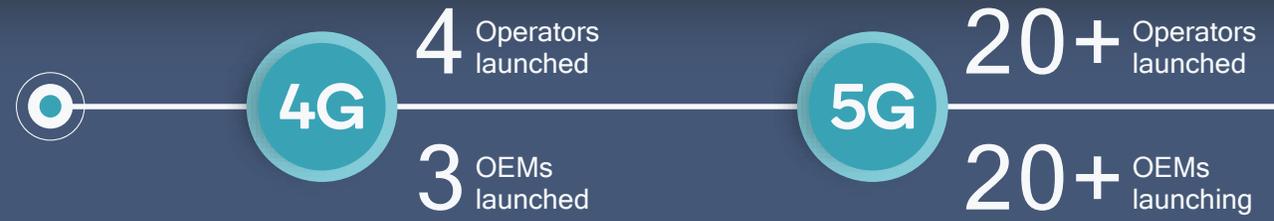
2019 is the year of 5G

Global commercialization moving faster than 4G



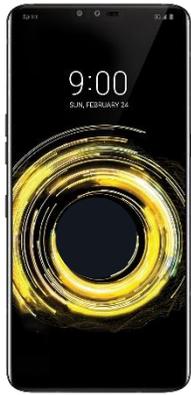
5G Sub-6
5G Sub-6 + mmWave (launched or scheduled in 2020)

Comparison of Year 1 announcements





Lenovo
Z6 Pro 5G



LG
V50 ThinQ 5G



Motorola
moto z4/z3 +
5G moto mod



Nubia
Mini 5G



OnePlus
7 Pro 5G



OPPO
Reno 5G



Samsung
Galaxy S10 5G



Samsung
Galaxy Fold



Samsung
Galaxy Note10+ 5G



Vivo
iQOO 5G
Edition



Xiaomi
Mi MIX 5G



ZTE
Axon 10 Pro 5G

Hotspots and CPEs



Askey

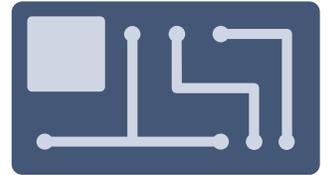
Inseego

HTC

Netgear

WNC

5G Modules



Compal

Fibocom

Longsung

Quectel

Sierra
Wireless

SIMcom

Telit



The device ecosystem is delivering 5G

150+ 5G devices launched or in development

5G is a connectivity fabric for virtually everything



Networking



Mobile
compute



XR



IoT



Automotive



Fixed
wireless

Announcing next generation...

QTM527 mmWave antenna module

The world's First Fully Integrated extended-range mmWave Solution for 5G Fixed Wireless Access consumer premises equipment (CPE)



QTM527 mmWave antenna modules



The QTM527 mmWave antenna module expands the capabilities of the Snapdragon X55 5G Modem-RF System to deliver a comprehensive modem-to-antenna platform for flexible, cost-effective, high performance 5G mmWave customer-premises equipment (CPE) designs



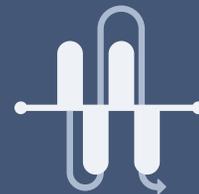
Extended Range

Expand high-speed internet access to rural, suburban and dense urban environments



Fully-integrated mmWave RF

Including transceiver, PMIC, RF front-end components, and a phased antenna array



Global Band Support

Support for up to 800 MHz of bandwidth in n257, n258, n260, and n261 5G NR mmWave bands¹

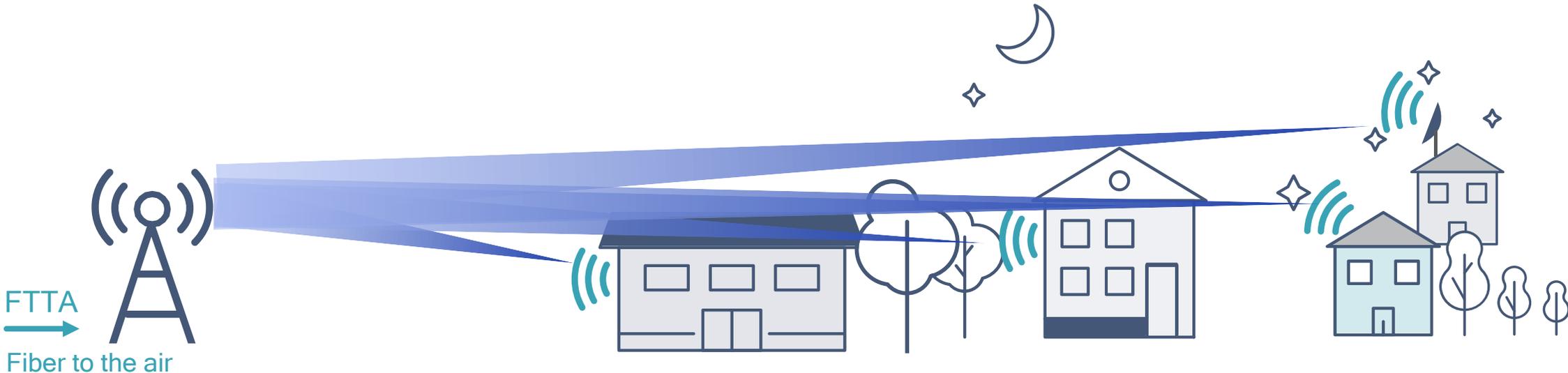


Improved consumer experience

Deliver 5G's multi-gigabit speeds and ultra-low latency to a wider customer base within a large coverage footprint

¹ 3GPP band definition are n257 (26.5-29.5 GHz), n258 (24.25-27.5 GHz), n260 (37-40 GHz), n261 (27.5-28.35 GHz)

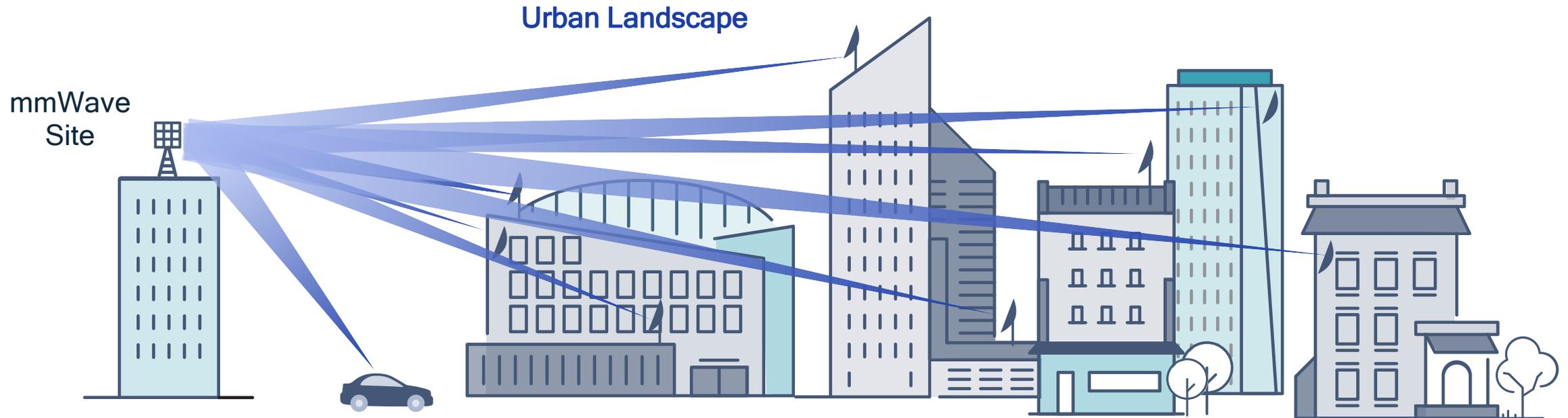
5G mmWave FWA: Rural\Suburban deployment



Based on CPE height at 6m above ground, BW:400MHz, 7:1 TDD Config, light Foliage, and on 28Ghz

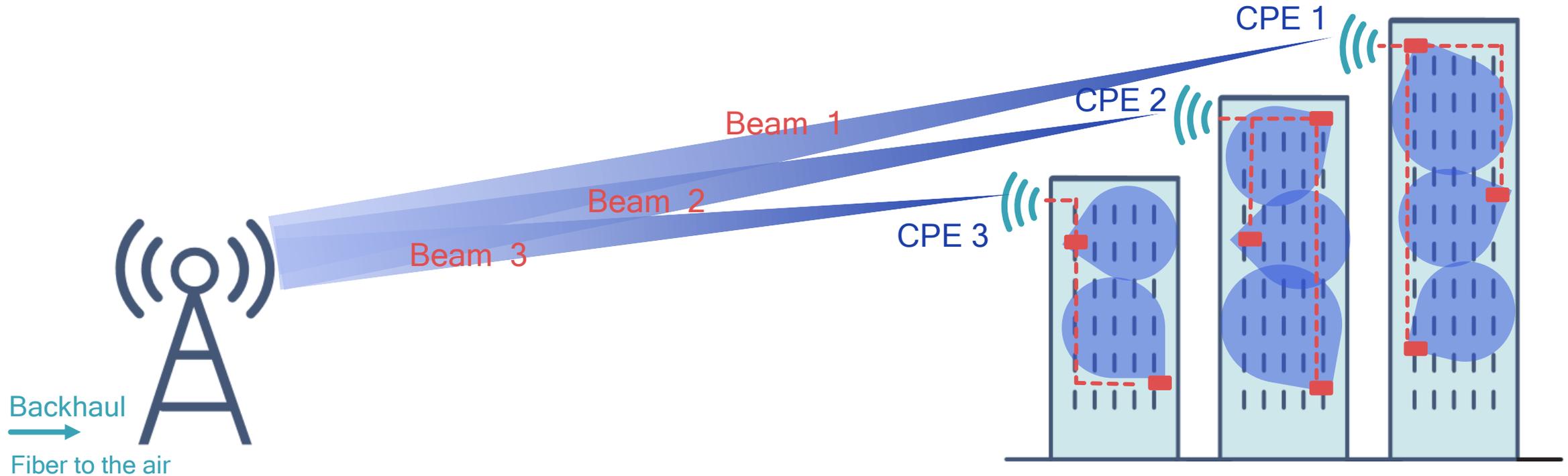
Coverage of up to 1.7 Km distance from base station in rural area

5G mmWave FWA: Urban & Dense Urban deployment



Coverage of up to 1.1 Km distance from base station in Urban area

5G mmWave FWA: Wireless Backhaul for Highrise Buildings deployment



A feasible use case for mmWave that provides expedited & low-cost deployment to replace fiber

Benefits



OEMs

- Enable OEMs to provide cost-effective 5G FWA CPE
- Accelerate time to launch and lower development effort for building 5G FWA CPEs at scale
- Increase OEM's target customer base who can enjoy mmWave benefits within large-area coverage



Operators

- Accelerate rollout and deployment of 5G in urban, rural and suburban areas as it eliminates the need to lay cables and fibers.
- Help extend their mmWave coverage to indoor environment with existing infrastructure.
- Provides a means to deliver gigabit speeds to their users using the same mobile wireless network they're deploying for phones and without the need to lay out fiber to every house.
- Provide deployment flexibility, cost-effectiveness, and Internet access performance comparable to fiber.



Consumers

- Leap into 5G, the new era of mobile devices and user experiences
- Access to faster and more reliable broadband services
- More choice as mobile operations even with a fixed infrastructure can participate in offering services.
- Quicker deployment and faster turn-on time - no need to lay out fibers and cable lines.
- A new cost-effective and flexible alternative for fixed Internet Access with the performance expected from current solutions.



Thank you

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