

5G + Edge + AI

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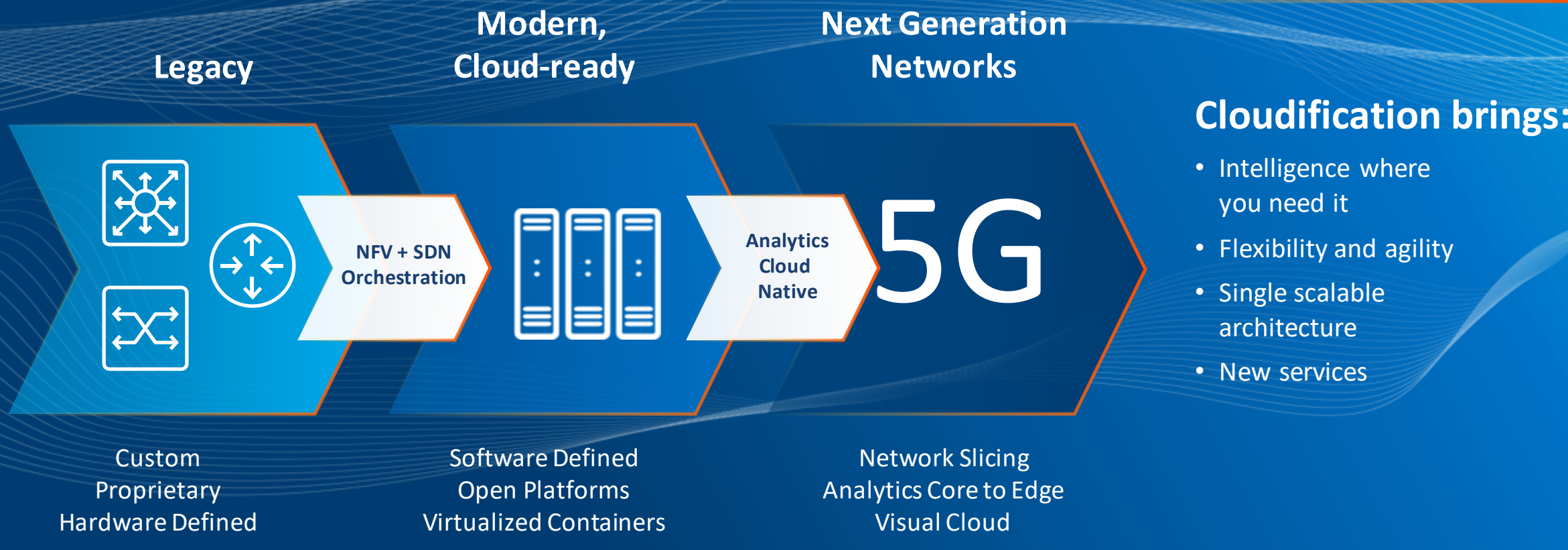
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Overview

- Brief discussion of 5G and why it's transformative
- Current 5G availability
- 5G + edge + AI

Network Transformation Foundational to 5G Infrastructure



5G: Evolutionary and Revolutionary

2019

2020

2021

2022

2023

Rel-15
Q4 '18

Rel-16
Q2 '20*

Rel-17
Q4 '21*

Standards

6-12 Months to
Product & Devices
Availability

Deployments

2020–2021

Broad rollouts of 5G networks worldwide—phone, PC's CPE primary devices deployed.

2021–2022


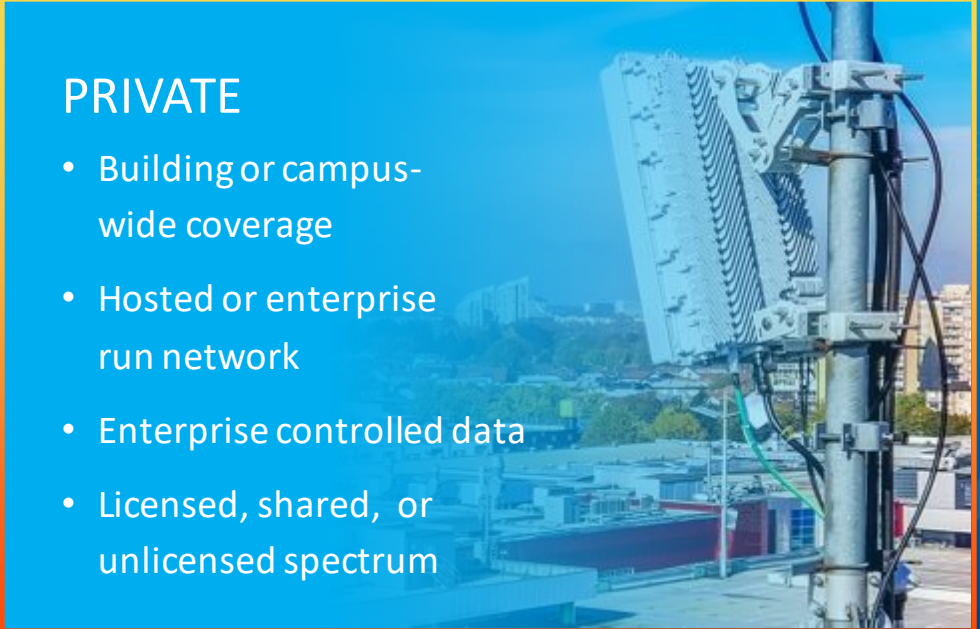
URLLC 5G usages start to deploy like smart manufacturing and smart cities.

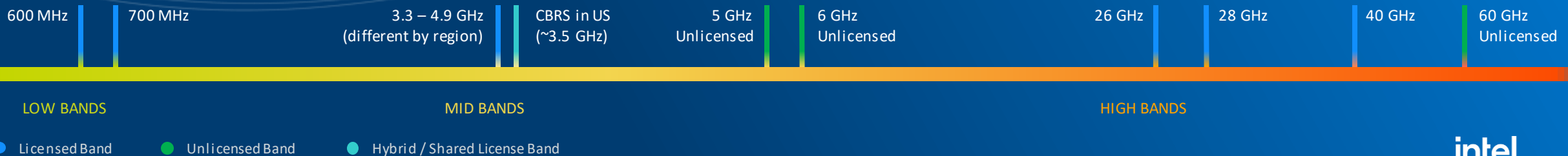
2023 and beyond

Cars, smart agriculture, and more

* Reflects delay due to COVID-19

Multiple 5G Deployment Models Deliver Flexibility

 <h2>PUBLIC</h2> <ul style="list-style-type: none">• Broad coverage• Scalable services• Service Provider runs network• Dedicated licensed spectrum including mmWave	<h2>H Y B R I D</h2>	 <h2>PRIVATE</h2> <ul style="list-style-type: none">• Building or campus-wide coverage• Hosted or enterprise run network• Enterprise controlled data• Licensed, shared, or unlicensed spectrum
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5G Spectrum & Regulation For Tomorrow's Networks

A diverse set of regulatory models & spectrum allows 5G to fulfill its promise

WIDE AREA EXCLUSIVELY LICENSED

- Exclusive to MNOs
- Verticals supported by network slicing

SHARED LICENSED

- e.g. shared between govts/incumbents and MNOs/commercial

LICENSE-Exempt

- "Unlicensed" approaches (e.g. Wi-Fi 6 scheduling)

LOCAL AREA EXCLUSIVELY LICENSED

- For enterprise & industrial on-premise applications

600 MHz

700 MHz

3.3 – 4.9 GHz
(different by region)

CBRS in US
(~3.5 GHz)

5 GHz
Unlicensed

6 GHz
Unlicensed

26 GHz

28 GHz

40 GHz

60 GHz
Unlicensed

LOW BANDS

MID BANDS

HIGH BANDS

● Licensed Band

● Unlicensed Band

● Hybrid / Shared License Band

A New Compute Paradigm Supports New Data Demands

5G Network

TRANSFORMATION



AI

REVOLUTION



EDGE

EXPLOSION



CLOUDIFICATION

OF EVERYTHING

