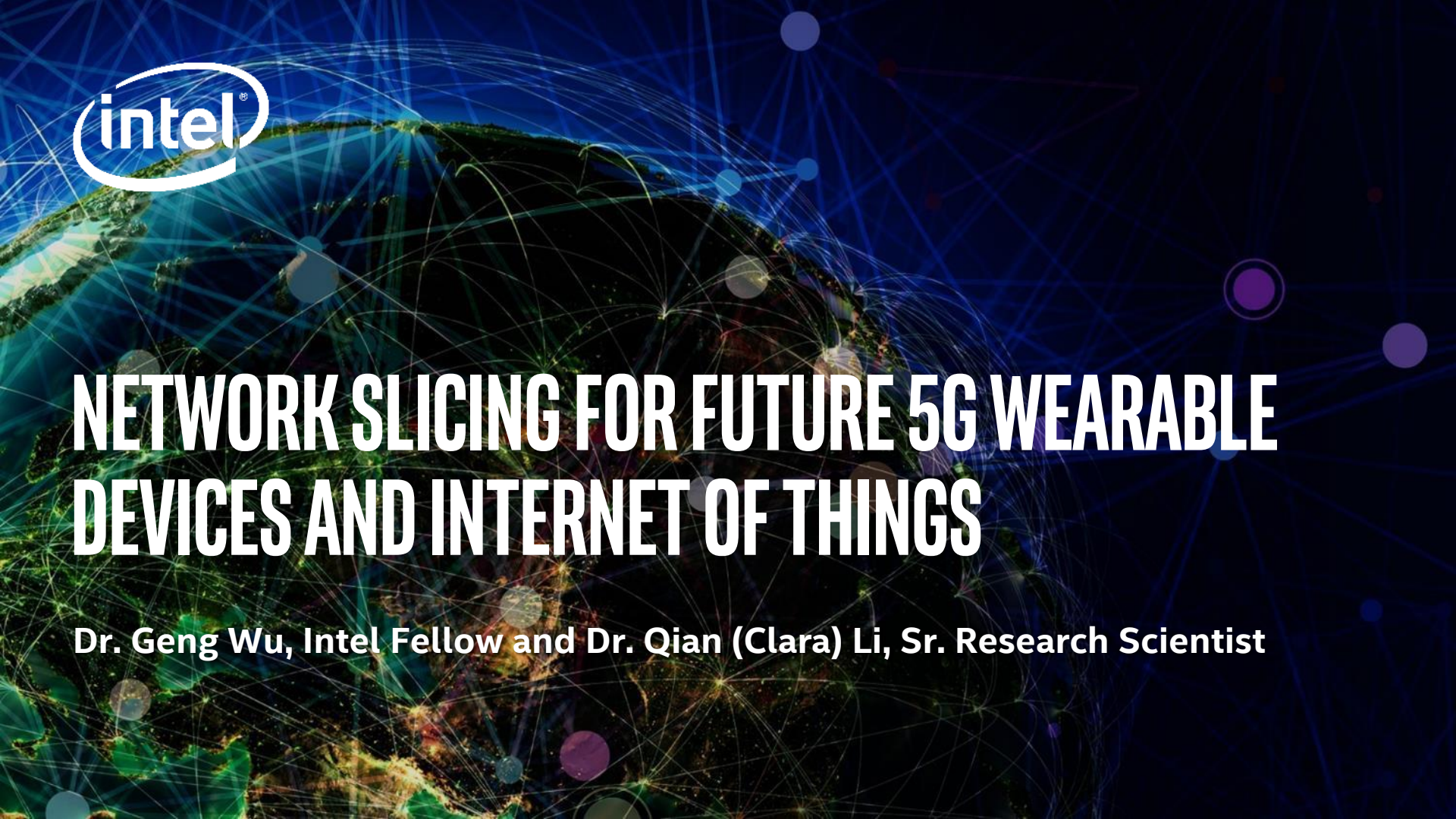
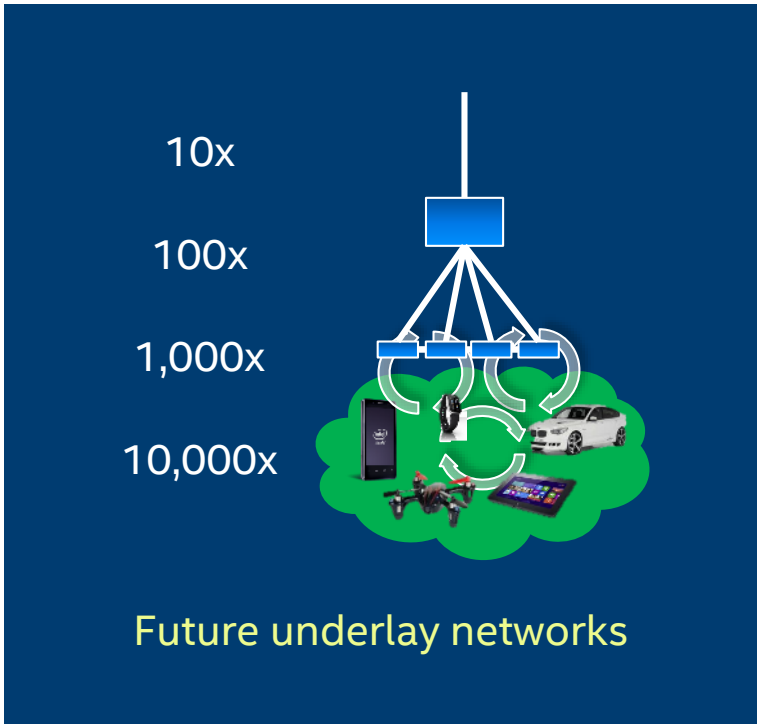
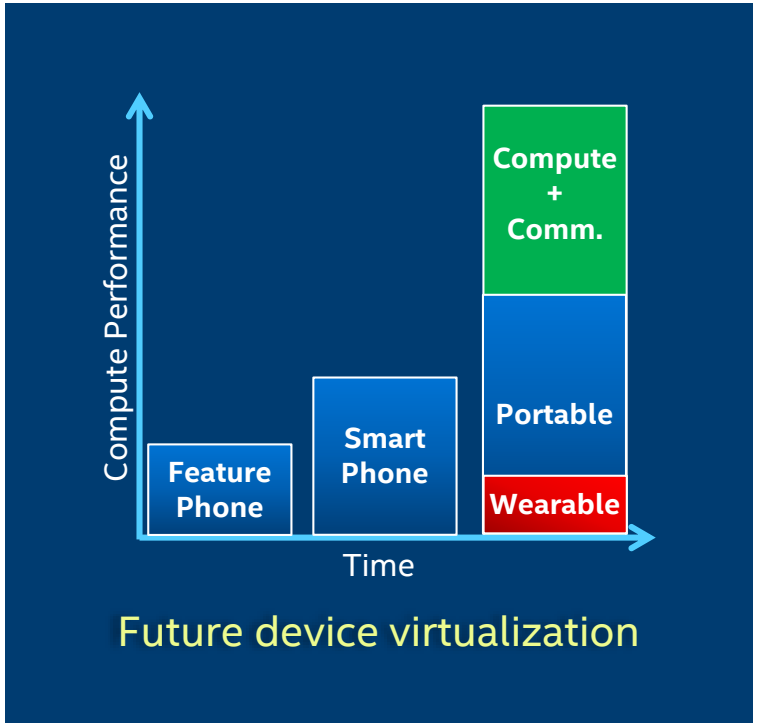


NETWORK SLICING FOR FUTURE 5G WEARABLE DEVICES AND INTERNET OF THINGS

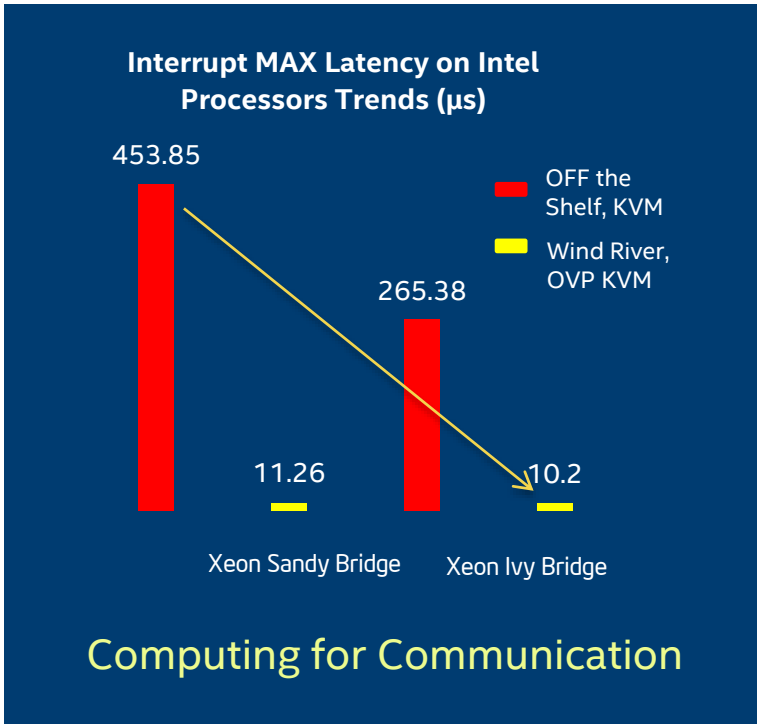
Dr. Geng Wu, Intel Fellow and Dr. Qian (Clara) Li, Sr. Research Scientist

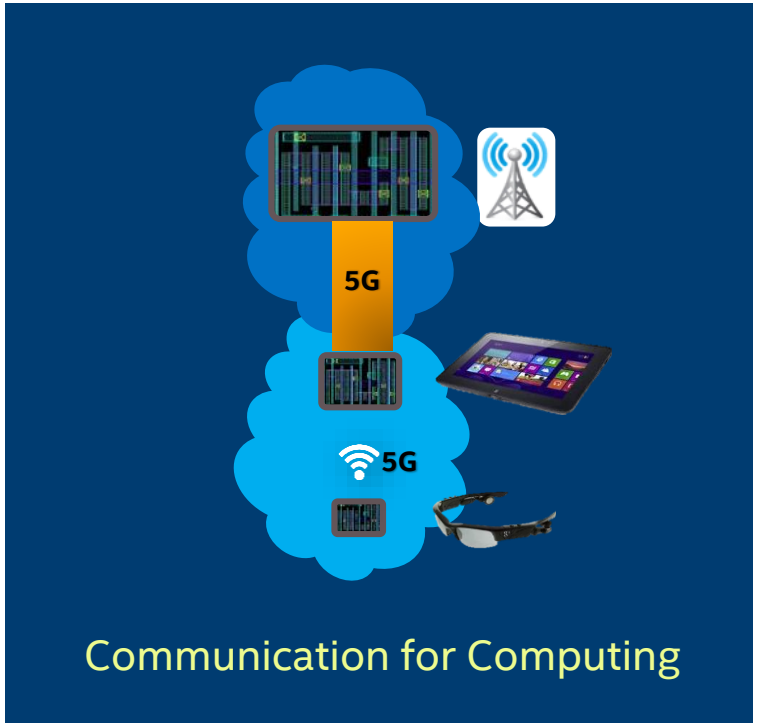
Networks and devices will take a quantum leap





Computing and communication come together

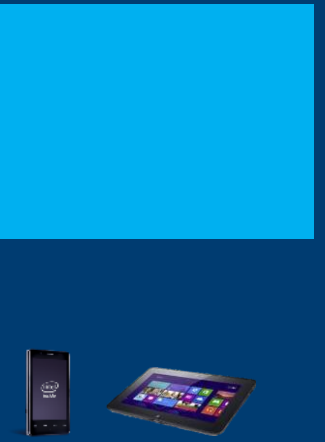




General Performance disclaimer: For more complete information about performance and benchmark results, visit Performance Test Disclosure

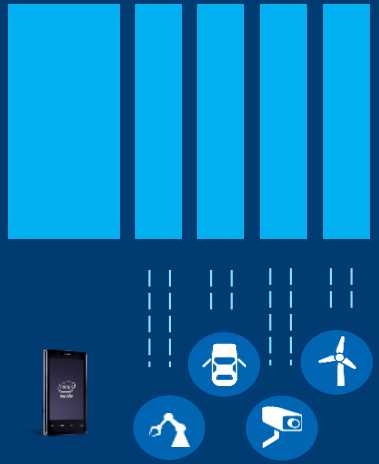
How do we evolve networks and devices?

One efficient network



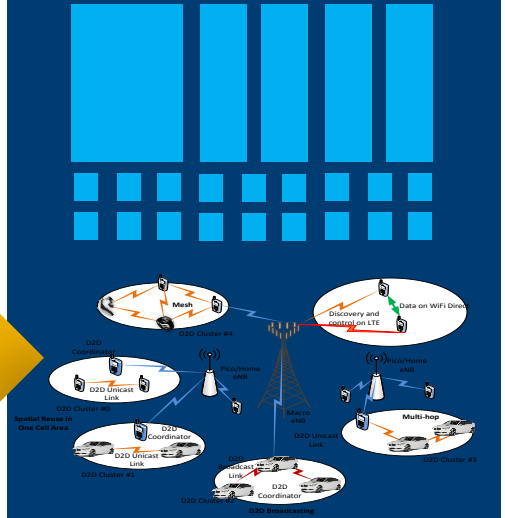
One big network
Mobile Broadband (MBB)

Many industries



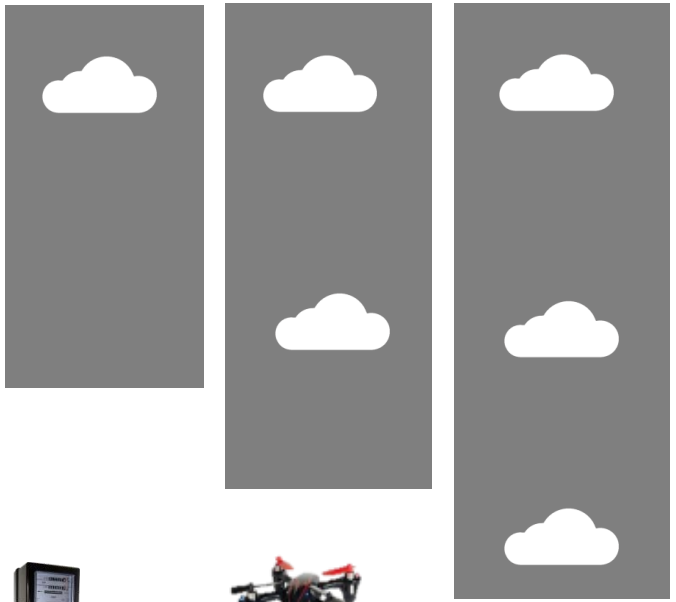
Vertical slicing
MBB + Verticals

All market segments



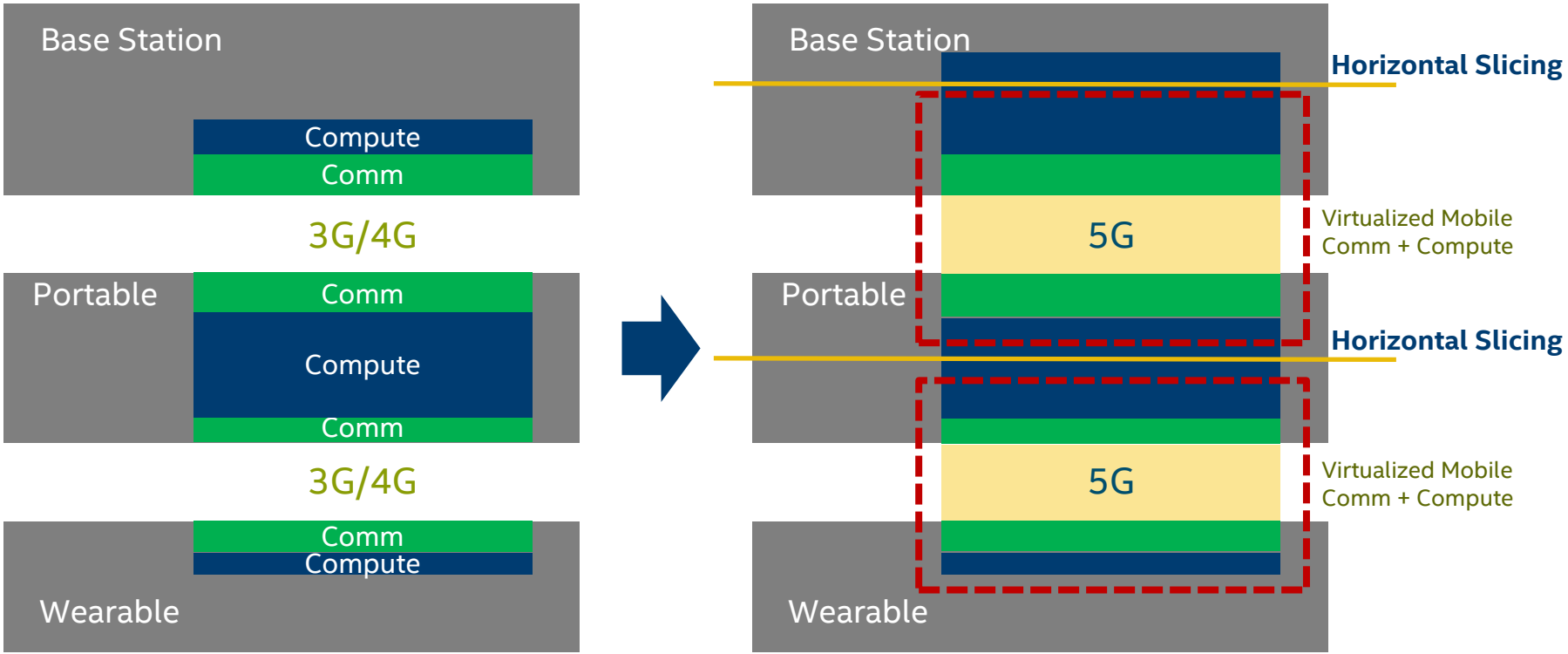
Horizontal slicing
MBB + Verticals + Consumers

Vertical slicing for many industries/use cases

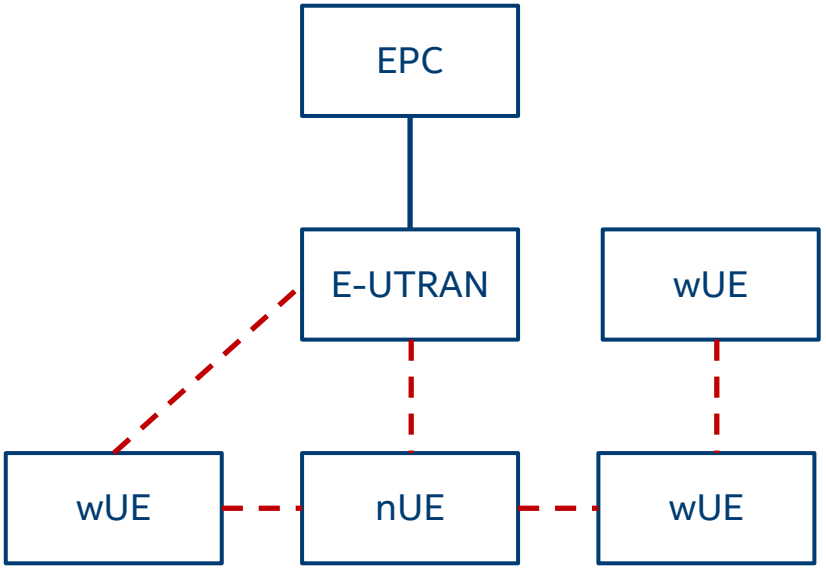


QoS

Horizontal slicing for future user experience

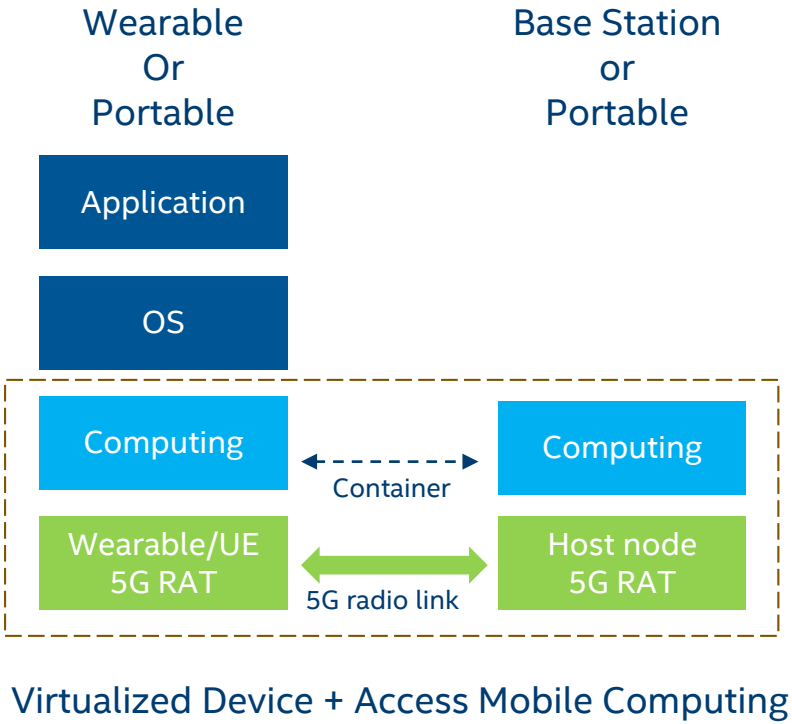


Horizontal slicing needs air interface innovations



Extreme low power	Low power when inactive	Low power sustained comm
Low data rate	High bursty data rate Low active data rate	Scalable peak data rate Energy-efficient sustained data rate
Optional D2D with other devices	Optional NW direct connect	Opportunistic NW direct connect

Tight coupling of communication and computing

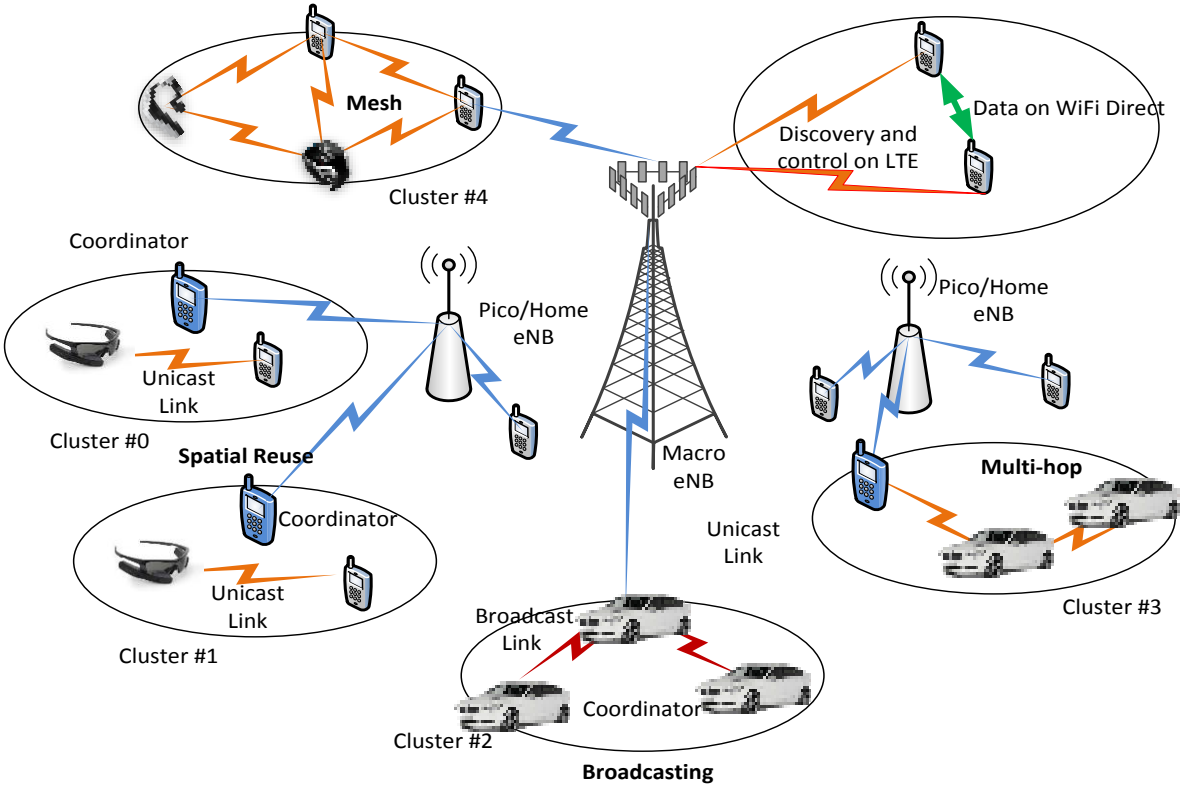


Virtualized Device + Access Mobile Computing

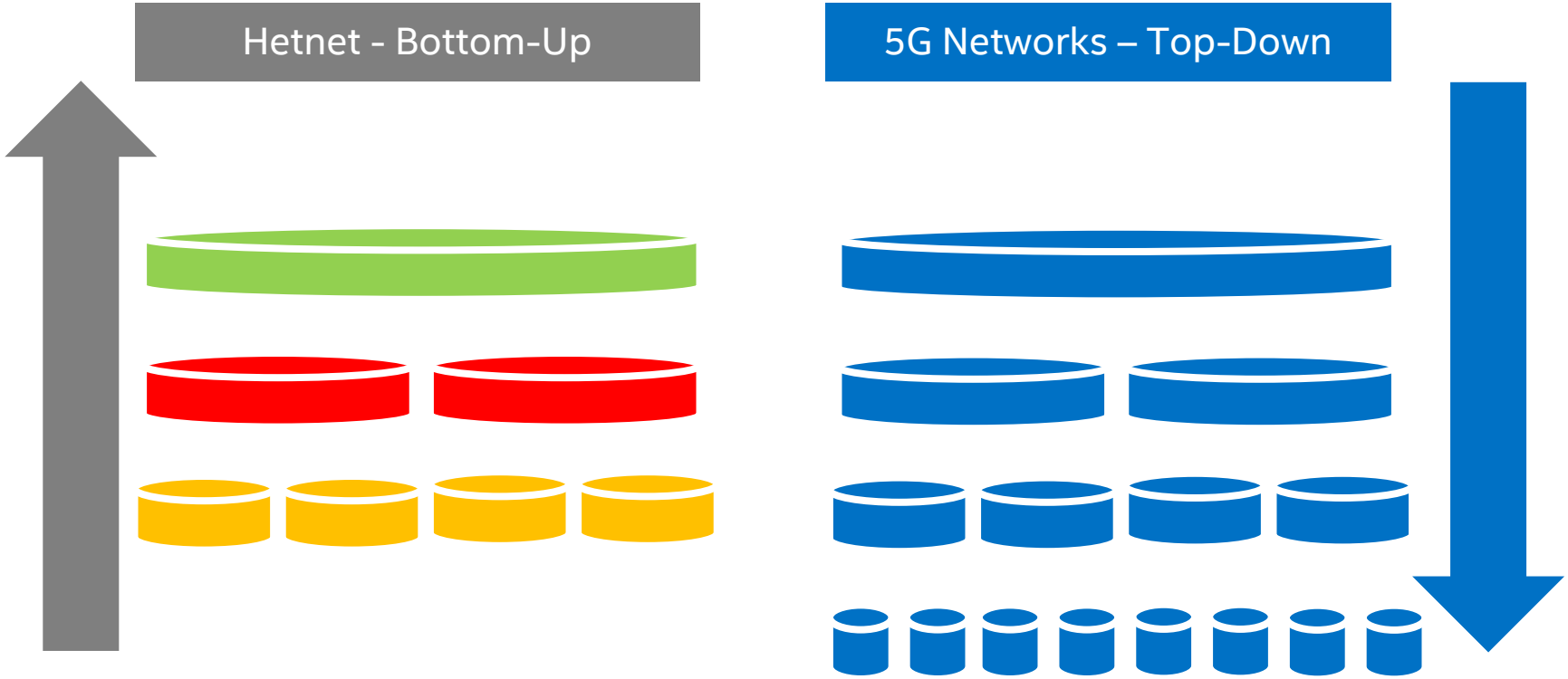
Technology objectives

- Expand mobile computing beyond native platform capabilities
- Achieve optimum compute and communication tradeoff
- Infrastructure participates in application computing
- Simplify application development and performance optimization

Densification of moving network clusters



Transform today's hetnet into 5G networks

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Thank You!