

# 5G/NR Architecture

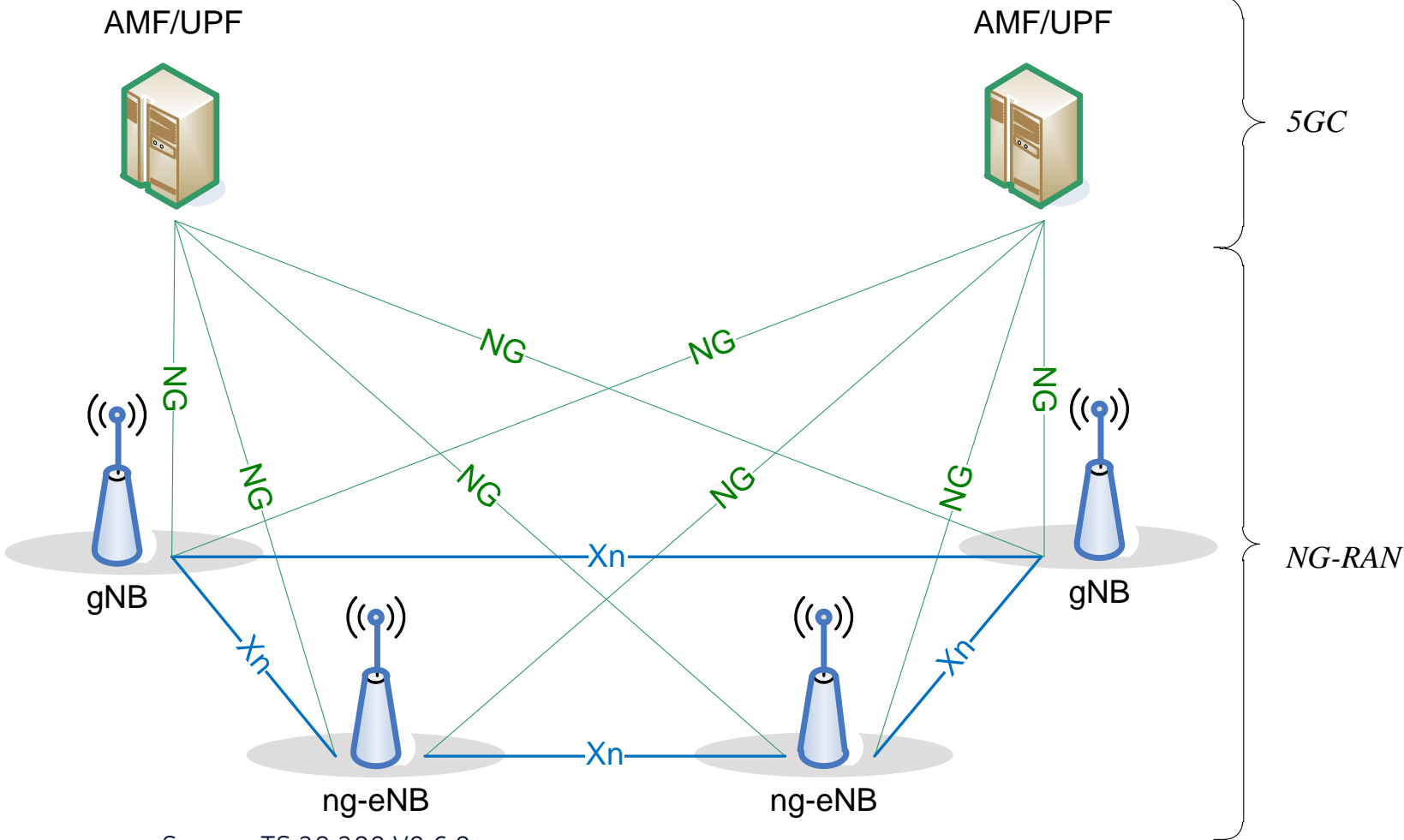
## Is it revolutionary or evolutionary?

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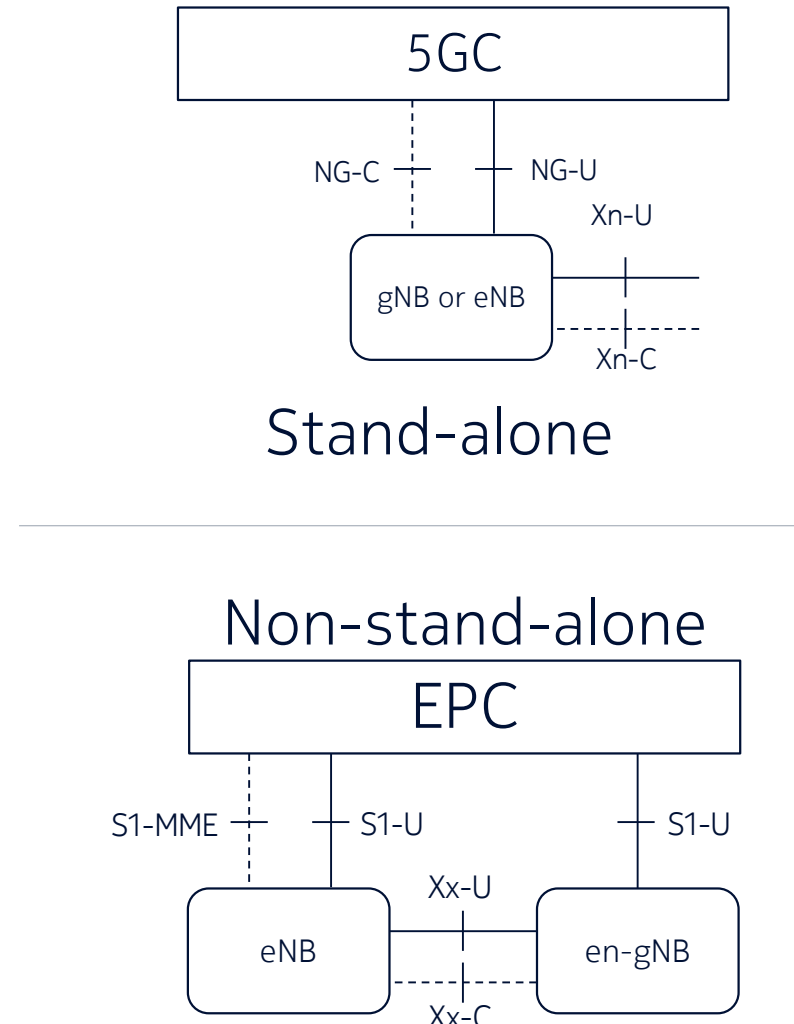


# The facts

## LTE is part of 5G RAN



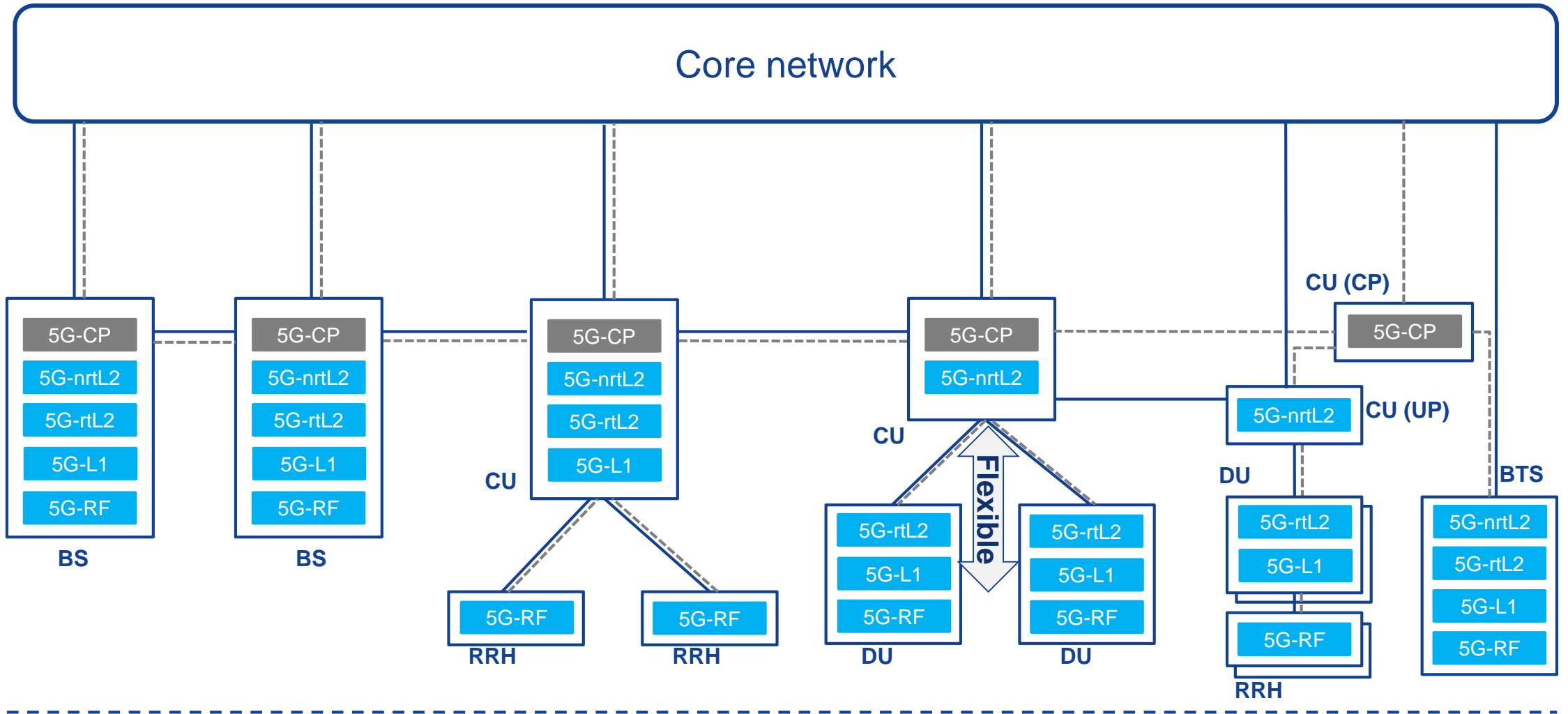
Source: TS 38.300 V0.6.0



# Flexible RAN Architecture

Key enabler for the service-oriented network

— U-Plane  
- - - C-Plane



1. Integrated base stations

2. C-RAN

3. Flexible Fronthaul Split

4. Distributed C/U-Plane

# Multi-Access Multi-Connectivity in NG-RAN

Flexibility for all use cases scenarios

## Unified multi-connectivity:

Split bearer from master and secondary node

Same concept for E-UTRAN and NR connected to 5GC

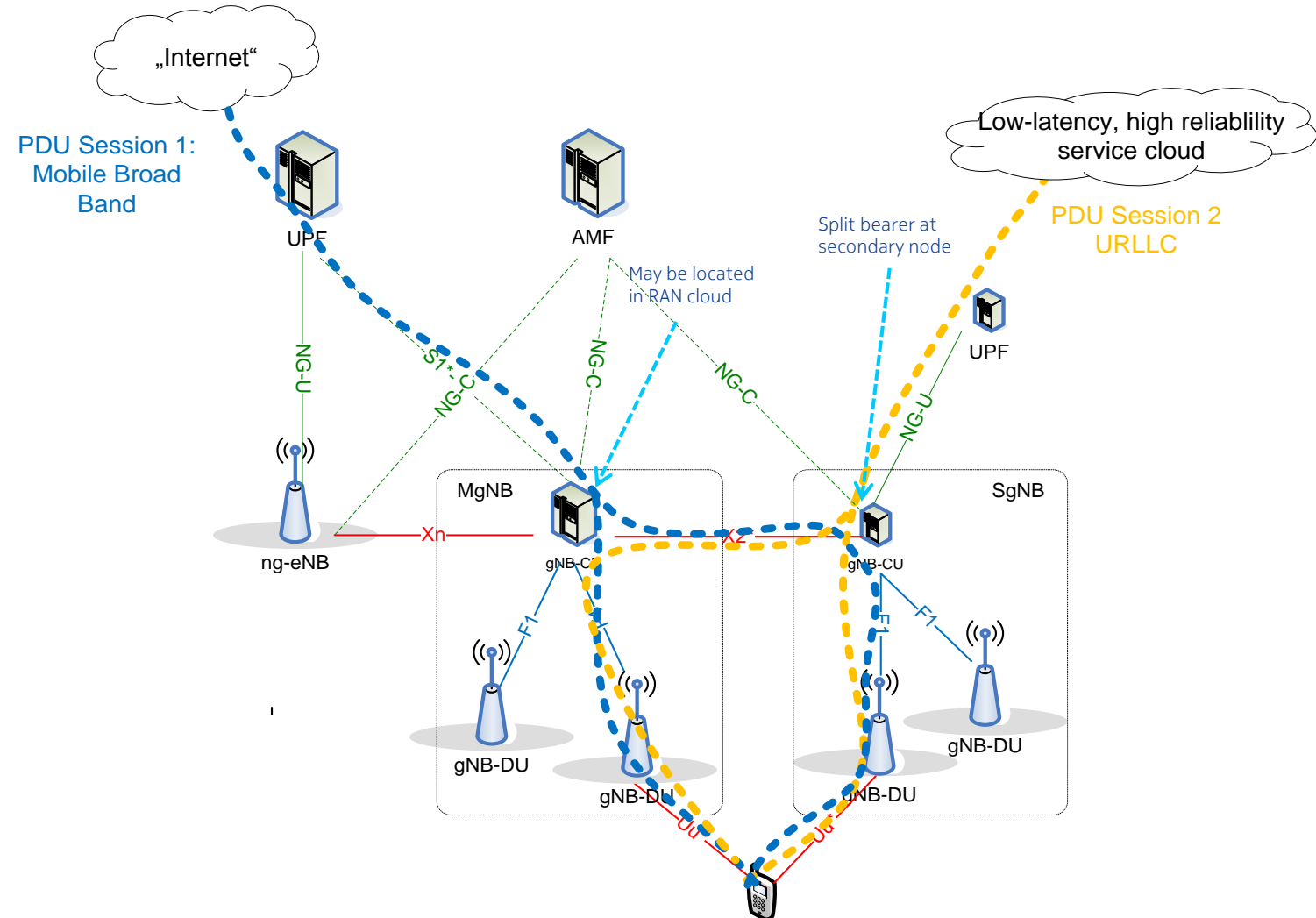
Independent measurements and cell management in SgNB

Packet routing and duplication in PDCP

## Use cases:

Link robustness and reliability  
Joint eMBB and low-latency services

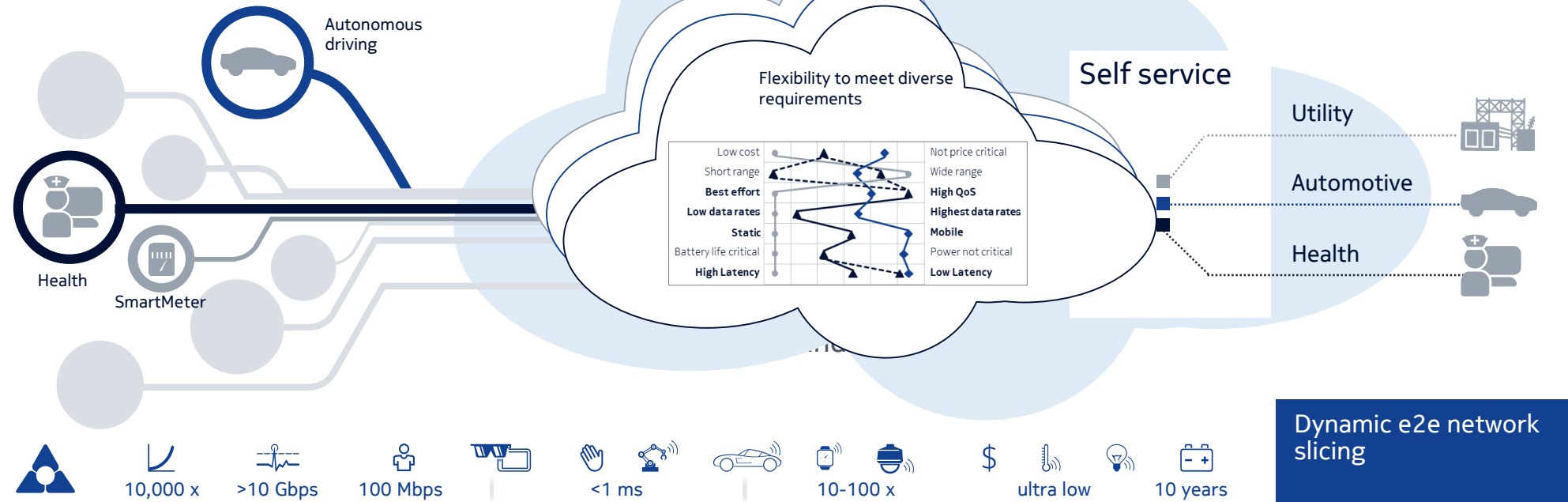
Mitigating signaling towards master node and core network



# Network Slicing

Multiple independent instances on one physical network

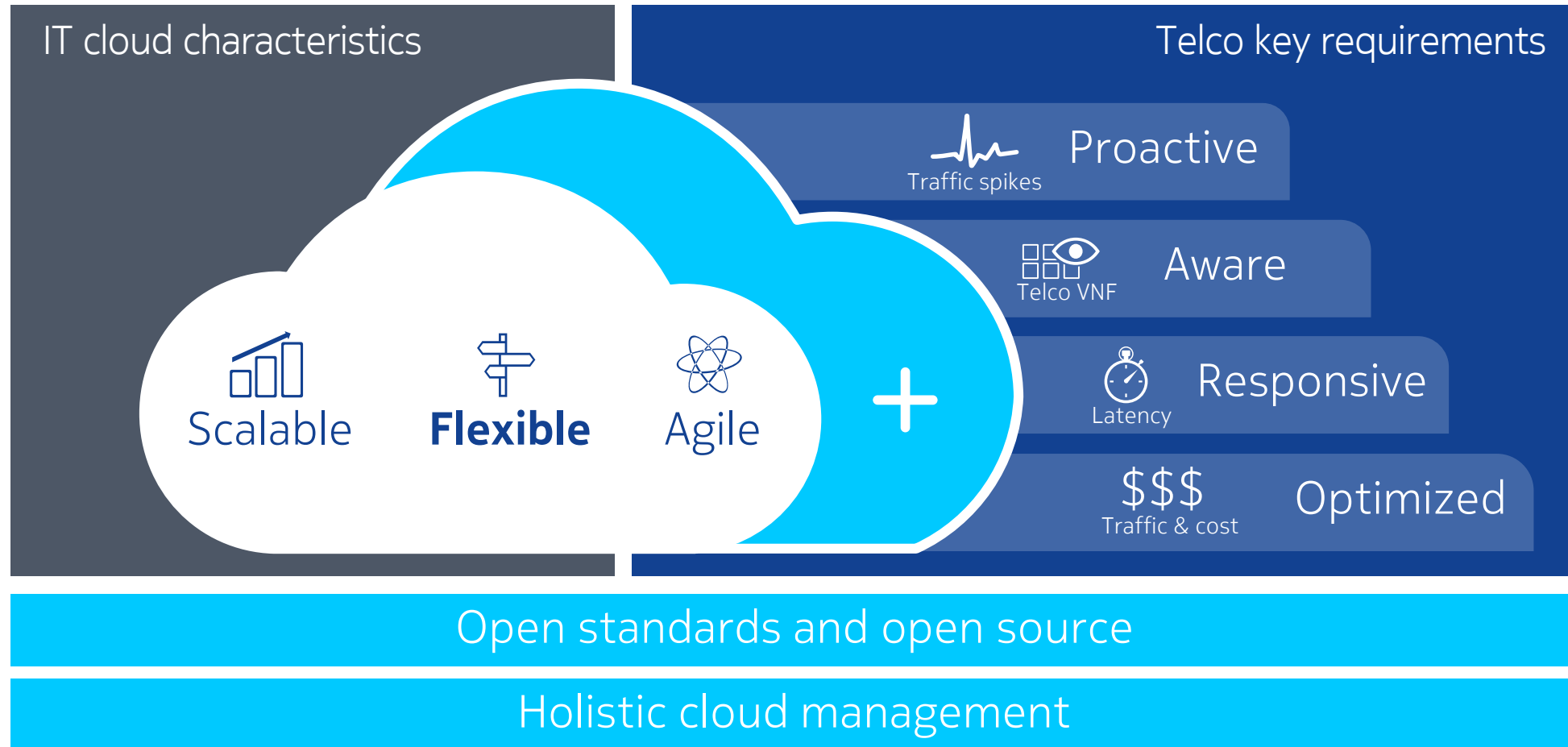
Slicing across radio, transport, core edge and central clouds



\*5G Novel Radio Multiservice adaptive network Architecture

# The IT revolution in telecoms

Advancing IT cloud to address Telco specific performance requirements



# 5G is an evolution – but enables revolutions

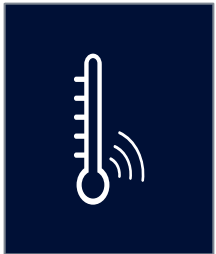
## 5G is more than one generation ahead of LTE



Devices  
1.5 GB/day



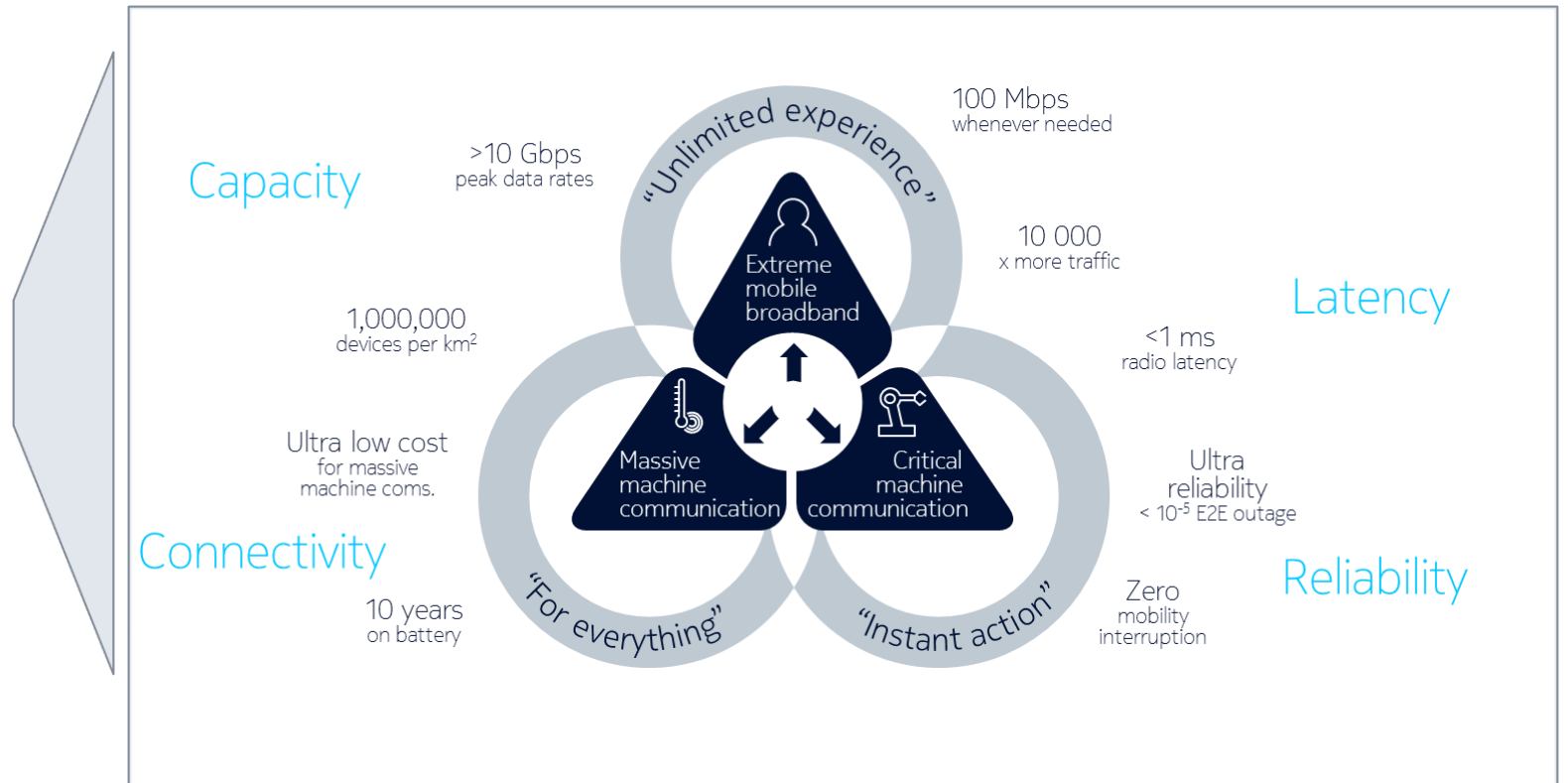
Smart Factories  
1 PB/day



Billions of sensors  
connected

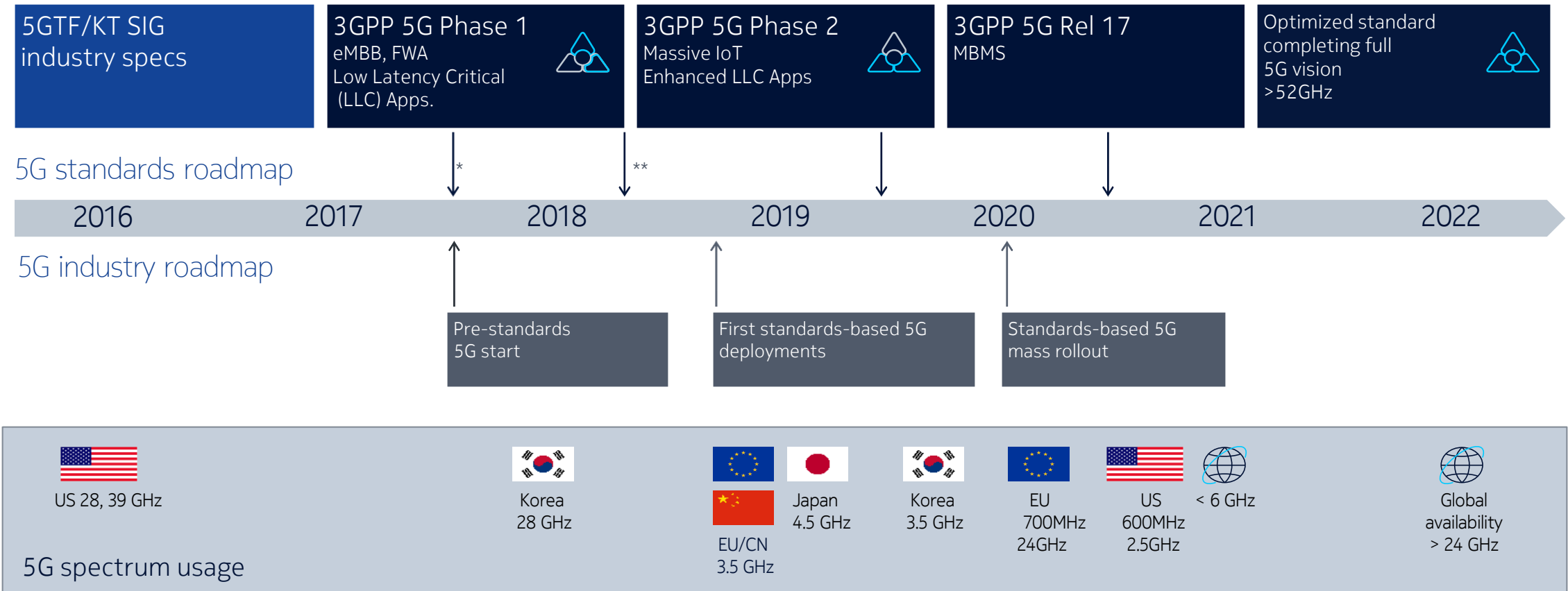


Autonomous driving  
1ms latency



## Still lot of work to do – let’s make the 5G revolution happen

# 5G time line



\*) NSA: Non standalone \*\*)SA: Standalone