

5G Innovation and Business Potential



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5G Expectations



20Gbps

Peak rate
downstream to users

1 ms

Latency

500 km/ h

Mobility

1 M/ km²

Device
connection density

10 Gbps

Peak rate
upstream from users

1 m

Position accuracy

99.999%

Availability
and Reliability

10 years

Battery life

5G Key Technologies



Ultra-Wide Band
Radio



Serviceability



Massive MIMO



Active Antenna
systems and beam
forming



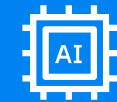
Virtualization



Infrastructure sharing



Advanced interference
& spectrum
management



Machine Learning,
Artificial Intelligence

5G use cases



Platform for
addressing industry
and society
transformations

Cost effective
delivery of increased
data traffic

Massive machine type communication

- Smart meter
- Tracking
- Fleet management

A white circle containing the text 'IoT' in black, positioned in the bottom right corner of the image.A photograph of several smart meters mounted on a wall, with a dark, slightly blurred background.

Critical machine type communication

- Industrial applications
- Traffic safety & control
- Remote manufacturing

A white icon of a factory with a sawtooth roof, positioned in the bottom right corner of the image.A photograph of industrial machinery, possibly a robotic arm or a manufacturing component, with a dark, slightly blurred background.

Enhanced mobile broadband

- VR/AR
- 4K/8K UHD
- Smartphones

A white outline of a smartphone, positioned in the bottom right corner of the image.A photograph of a person wearing a VR headset, with a dark, slightly blurred background.

Fixed wireless access

- Mobile / wireless / fixed
- Enterprise
- Home

A white outline of a house, positioned in the bottom right corner of the image.An aerial photograph of a residential neighborhood with houses and trees, with yellow lines indicating wireless connections between a central point and several houses.

5G enabled manufacturing – real-time control case study



Ericsson and Fraunhofer IPT
Research Centre

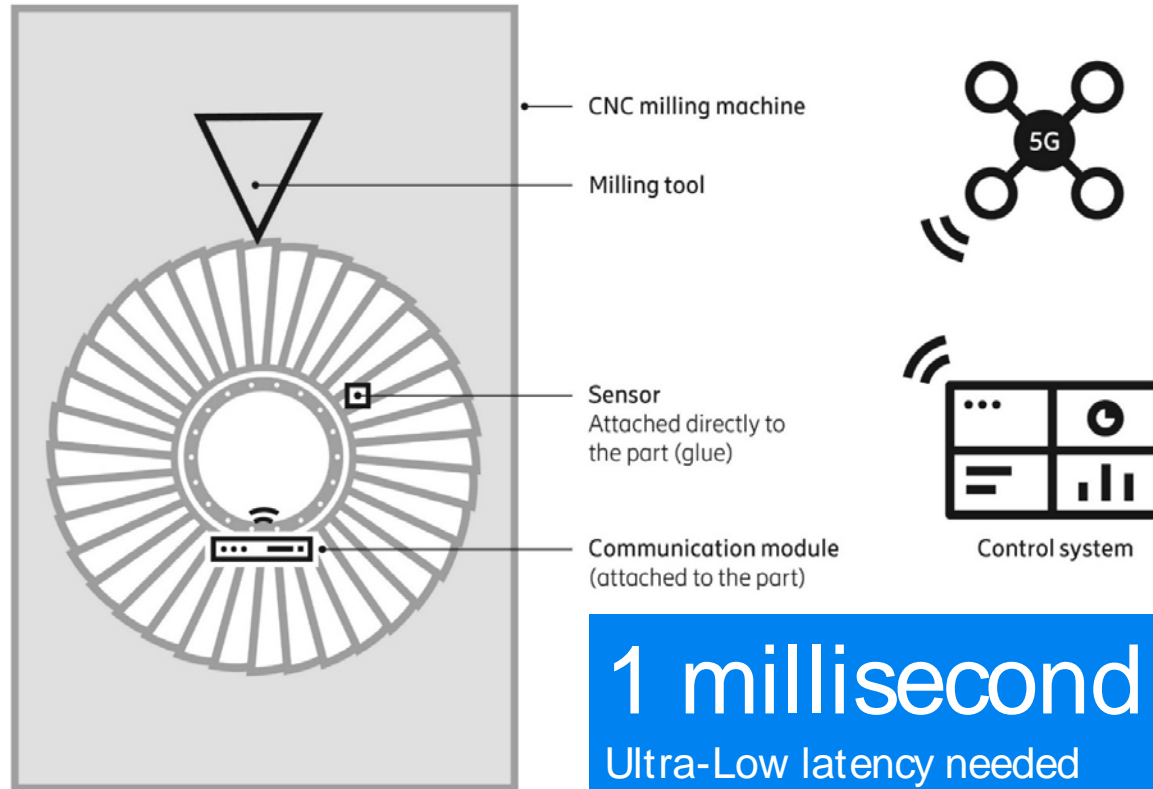


5G enabled BLISKs (BLade Integrated diSKs) manufacturing

The challenge:

25%
rework needed

The solution:



EUR 360m

annual savings through
5G-enabled real-time
monitoring & control

16 million

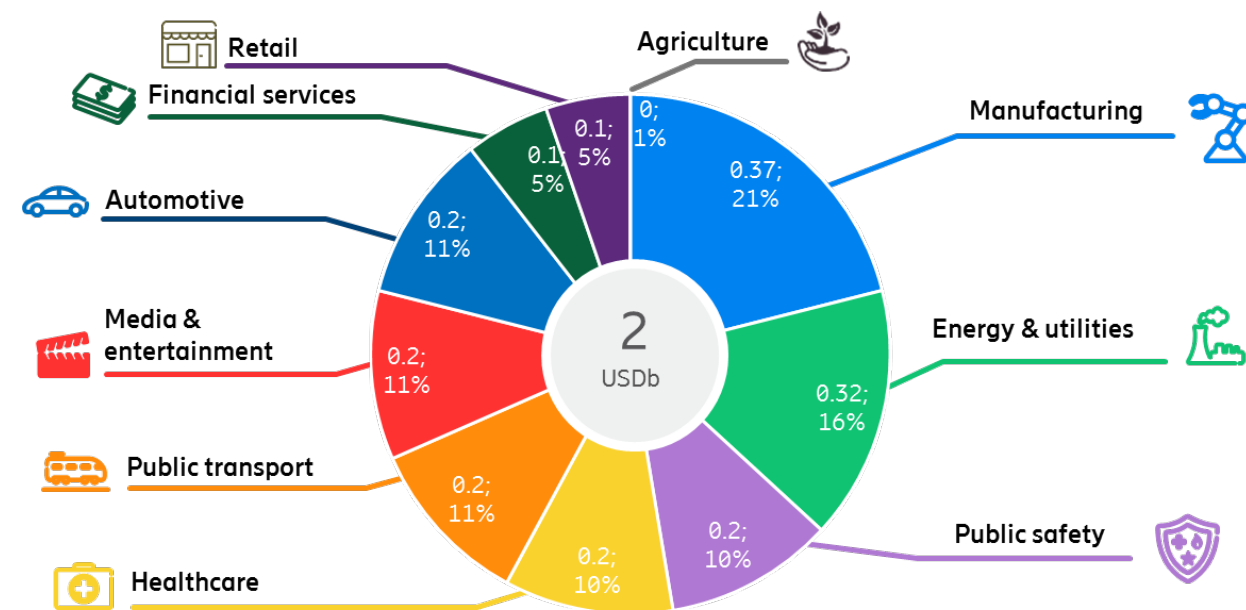
metric tons potential
reduction
of global CO₂ emissions*

1 millisecond

Ultra-Low latency needed
for real-time control of the
BLISK manufacturing process

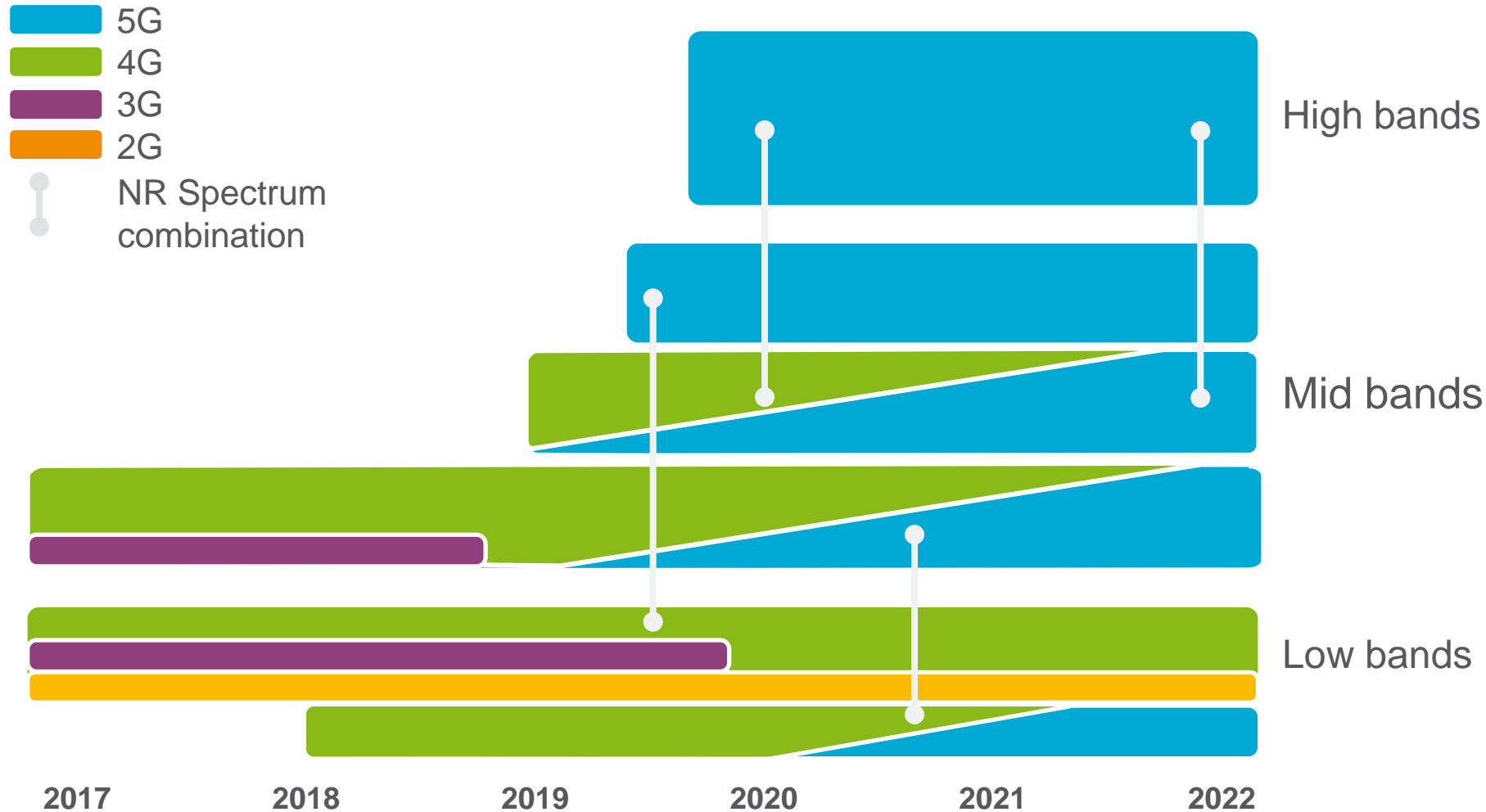
Greek Operators 5G Business Potential 2026

Use Case Cluster view



| Operator Addressable 2026 | MUSD | % of Total |
|--------------------------------|------|------------|
| Real-time Automation | 322 | 16% |
| Enhanced video services | 307 | 15% |
| Other | 247 | 12% |
| Monitoring and tracking | 232 | 12% |
| Connected vehicle | 220 | 11% |
| Hazard and maintenance sensing | 182 | 9% |
| Smart Surveillance | 149 | 8% |
| Autonomous Robotics | 129 | 7% |
| | 113 | 6% |
| | 75 | 4% |

Spectrum usage overview



Technology drivers

Deployment drivers

Beam-forming Integration

Local Area Capacity

Massive MIMO

Throughput

Wide Area capacity

Multi-Band

Coverage

Initial 5G launch focus per region



North America:

- 2018 launches on mmW
- Mobile broadband and FWA
- Low-band FDD NR early 2019

Europe:

- Initial focus on mid-band
- Focus on industry use-cases
- High-band as capacity booster



Asia:

- Australia and Korea early movers
- Initial focus on mid-band
- China and Japan driving volumes in 2020

Common Trends:

Early deployments will focus on eMBB

Low-band NR and spectrum sharing for NR coverage

Initial focus on mid-band with mmW coming in as capacity booster (USA exception)

