



# 5G spectrum - 26 GHz and 28 GHz

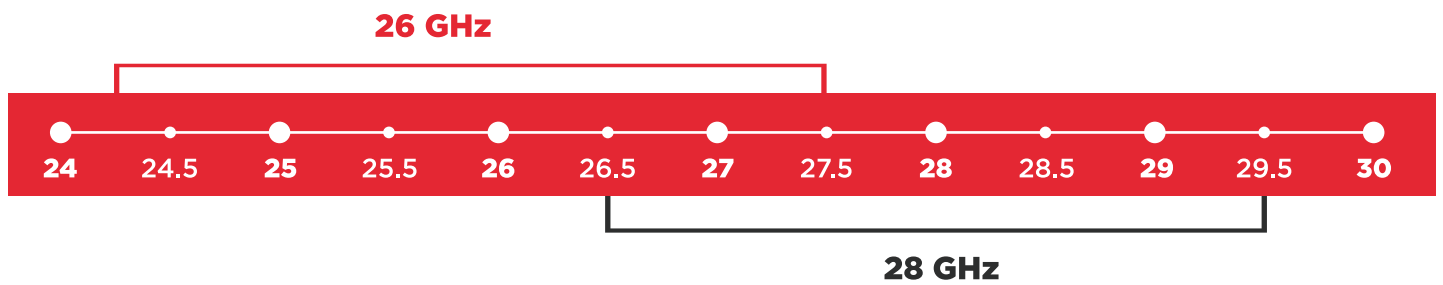
The growing momentum behind millimetre wave bands



The introduction of 5G pioneers a new level of mobile performance with ultra-high speeds and low latencies. What makes this possible is millimetre wave spectrum. In this range, 26 GHz and 28 GHz have emerged as two of the most important bands. These may offer the widest harmonisation with minimised user equipment complexity.



The availability of much larger amounts of spectrum in the millimetre wave bands will allow for ultra-high-speed mobile broadband services.



3GPP band n258 refers to the range between 24.25-27.5 GHz and is commonly called 26 GHz. And 3GPP band n257 refers to 26.5-29.5 GHz. It is commonly called 28 GHz.

The whole range between 24.25 GHz and 29.5 GHz is important. It will enable operators to meet the speed, latency, reliability and capacity requirements of 5G. The appropriate regulation, licensing and spectrum policies related to this range and other spectrum bands will encourage 5G investments and innovation. This includes usage conditions that don't hamper operators from making the most of it.

## USE CASES WITH GREAT POTENTIAL

### Where



Busy urban areas, stadiums, shopping malls and railway stations



Homes and businesses using fixed wireless access



Regular and autonomous trains, buses and cars

### What



Data transmission at tens of gigabits



IoT



Augmented and Virtual Reality



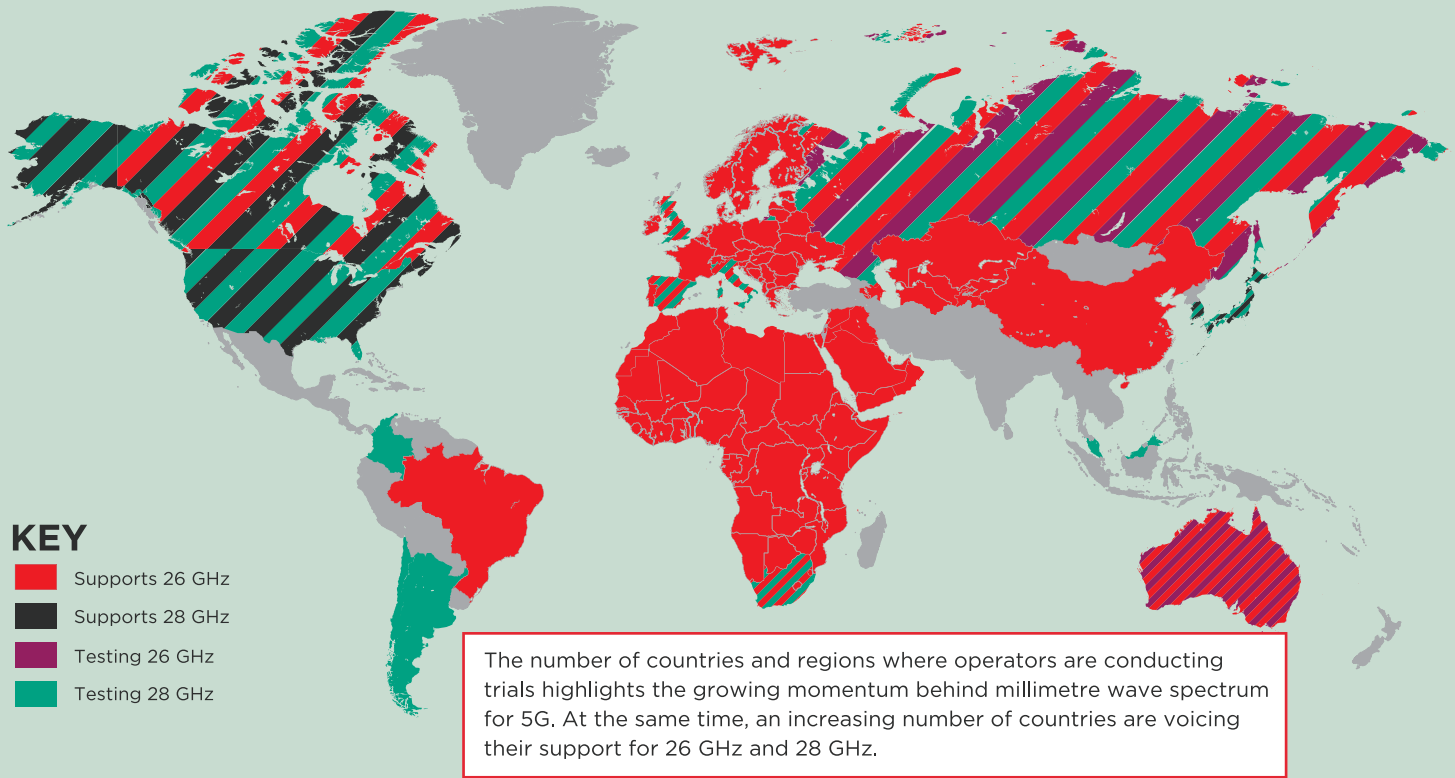
Video Streaming with low latencies: 4K without compression and 8K



Industrial Automation with low latencies and high reliability

And more...

## MOMENTUM IS PICKING UP



### COUNTRIES SCHEDULE

2018	USA	27.5-28.35 GHz trials underway and commercial deployments in 2018
2019	Korea	26.5-29.5 GHz trials in 2018 and commercial deployments in 2019
2020	EU	Use parts of the 24.25-27.5 GHz range for trials in 2017 and commercial deployments from 2020
	Japan	Use parts of the 27.5-29.5 GHz band for trials in 2017 and commercial deployments in 2020.



### Global Millimetre Wave Standardisation Activity: 3GPP

3GPP is developing band plans and other technical specifications for both the 26 GHz and 28 GHz bands. The plans for both bands are expected to be completed by June 2018 as part of Release 15.

### WHAT IS THE ROLE OF THE ITU?

As a result of the ITU's 2015 World Radiocommunication Conference (WRC-15) 11 distinct millimetre wave frequency bands are under consideration for 5G at WRC-19. At this point in the process, the 26 GHz band has the highest priority and support from the mobile industry.

At the same time, the global marketplace is driving the need for additional frequencies to meet the demands for 5G, such as the 28 GHz band. The GSMA recognises and supports actions by governments and operators in many countries to test and allocate the 28 GHz band for 5G under an existing mobile allocation in the ITU's Radio Regulations.

### Read More

The GSMA's spectrum team's policy position on 5G spectrum is available at: <https://www.gsma.com/spectrum/5g-spectrum-policy-position/>

The team's policy position on WRC-19 Agenda Item 1.13 and more about the importance of the related bands are available at: <https://www.gsma.com/spectrum/wrc-series/>

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