

5G Frequency Bands

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There has been a lot of talk about the frequency spectrum that 5G technology will use. With the first 5G-NR standard officially announced, network operators all over the world are conducting trials with the objective to deploy the technology commercially sometime in the next 2-3 years. Different countries have proposed and are working on different frequency bands that range all the way from 600 MHz to 71 GHz. In this article, we have outlined the proposed 5G Bands by country.

United States: The United State is leading the way in 5G R&D. At the lower end of the frequency spectrum they are using the **600 MHz (2 x 35 MHz) band**, the **3100 - 3550 MHz** band and the **3700 - 4200 MHz** band. At the higher end of the frequency spectrum they are using the **27.5 – 28.35 GHz** band and the **37 – 40 GHz** band. Mobile operators in the US have already conducted trails in these frequency bands. The FCC has also opened up spectrum from **64 - 71 GHz** for 5G use as well, however, there has not been too much activity in this frequency band yet. [Click here to see US 5G spectrum allocations.](#)

Europe: Countries in the EU are using both low and high frequency bands for the initial 5G trails. In the lower bands they are using the **3400 - 3800 MHz** frequency band and in the higher frequency bands they are using the frequency band from **24.25 - 27.5 GHz**. [Click here to see country wise 5G spectrum allocations in Europe.](#)

China: In China there are ongoing trials in the 3300 - 3600 MHz band with the possibility of the **4400 – 4500 MHz** band and **4800 – 4990 MHz** band also being used. At higher frequencies China is considering using the **24.25 – 27.5 GHz** band and the **37 – 43.5 GHz** band.

Japan: They are looking at using the frequency spectrum from **3600 - 4200 MHz** and **4400 - 4900 MHz** in the lower bands and the **27.5 – 28.28 GHz** in the higher bands.

Korea: They were one of the first countries to start R&D on 5G Technology with the aim to launch it during the 2018 Olympic Winter Games in Feb, 2018. Though, they have not commercially launched this yet, they have made significant strides towards commercialization of the technology. They are currently conducting trials in the **26.5 – 29.5 GHz** band.

We will continue to update this article as and when more bands are announced.