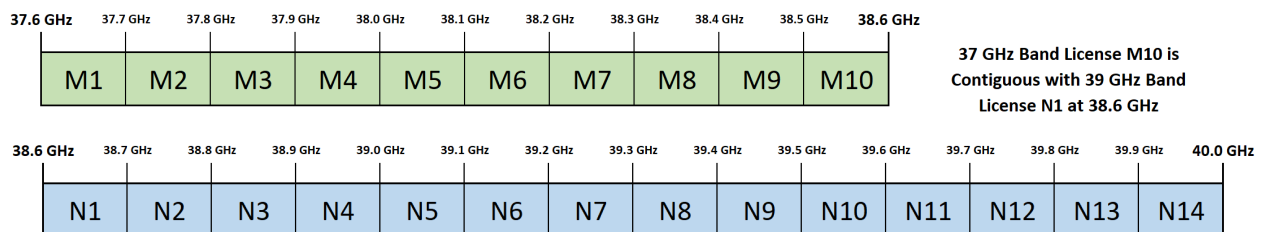


## Wireless Spectrum Licenses in the 37/39 GHz Bands Ideal for 5G mmWave Fixed/Mobile Wireless Deployments Inquire for Details Regarding Availability

The **37/39 GHz (37.60 – 40 GHz) frequency bands** were made available by the FCC via Auction 103 in 2020, which sought to re-purpose legacy 39 GHz band spectrum (50/50 MHz licenses) to instead offer 100 MHz capacity on a contiguous basis, and incorporate the 37 GHz band under the new framework as well. 37 GHz (37.6 – 38.6 GHz) licenses are numbered M1 – M10, and 39 GHz (38.6 – 40.0 GHz) licenses are numbered N1 – N14.

The 37/39 GHz bands, and other millimeter wave (“mmWave”) frequency bands, such as 24 and 28 GHz, will play a key role in 5G deployments under the new Upper Microwave Flexible Use License, “UMFUS”, designation. UMFUS bands are 3GPP standardized under the 5G New Radio (NR) guidelines, specifically in the “Frequency Range 2” (FR2) umbrella that includes mmWave frequencies.

Then 37/39 GHz band plan is shown below:



UMFUS bands are presently held and/or in use by national mobile carriers, innovative fixed wireless companies, regional telephone operators, and other organizations seeking to deploy mobile networks or provide Fixed Wireless Access (FWA) “last mile” services.

UMFUS bands are subject to Part 30 rules and regulations, which include power limitations on fixed & base stations operating in connection with mobile systems (EIRP density limit of +75dBm/100 MHz). Mobile stations must limit the average power of the sum of all antenna elements to a max EIRP of +43 dBm. Network deployments may use any duplexing scheme desired, provided compliance with other technical/operational requirements is met.

The 37/39 GHz bands are ideal to support a wide variety of applications that leverage the hundreds of Mbps / 1+ Gbps speeds (varying by channel size) that are achievable using UMFUS designated spectrum. High speed backhaul, 5G “to the home” / FWA, and other applications leverage that fixed PTP and PTMP configurations may be deployed. The 37/39 GHz bands also may be utilized for mobile applications which are currently a key pillar for 5G deployments by national carriers and other organizations.

Availability is limited, varying by geographic location. Please inquire today for more information.