4: 5G Marketing Lingo

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SUMMARY

Here is a quick, concise summary about 5G marketing terminology at the present time (March 2022):

RF FREQUENCY BAND DESIGNATIONS

Low-Band 5G = Below 1 GigaHertz (= VHF & UHF TV bands) **Mid-Band** 5G = 1 GHz to 6 GHz(Mid-Band includes 3.7 to 3.98 GHz = "C band") **High-Band** 5G = Above 6 GHz = "millimeter wave"

T-MOBILE **"5G"**

- = "Extended Range 5G"
- = Uses low band
- = requires cell phones with both real 5G chipsets
 - and real 5G antennas

T-MOBILE (continued)

- T-MOBILE "5G UC"
- = "5G ULTRA CAPACITY"
- = 5G using both mid-band and high band (millimeter wave)
- = requires cell phones with both real 5G chipsets
 - and real 5G antennas
- = more expensive that "T-Mogbile 5G"

VERIZON

- Verizon "5G"
- ="Nationwide 5G"
- = 5G in low-band
- = requires cell phones with both real 5G chipsets
 - and real 5G antennas

VERIZON (continued) Verizon "5G UW"

= **"5G UWB"**

- = "5G Ultra Wideband"
- = 5G using both midband (C-band) and high-band (millimeterwave)
- = requires cell phones with both real 5G chipsets

and real 5G antennas

= more expensive than "Verizon 5G"

AT&T

- May 2019:
- AT&T "5GE" or "5G E"
- = "5G Evolution"
- = claimed slight enhancement to 4G/LTE
- runs fine in 4G cell phones (that do not have
 5G chipsets and do not have 5G antennas)
- = probably using both low-band and mid-band
- = actually slightly slower than the 4G/LTE cellular services from Verizon and T-Mobile

AT&T (continued)

- November 2019
- AT&T "5G"
- = using low-band
- = real 5G in "low band"
- = requires cell phones with both real 5G chipsets and real 5G antennas

10

AT&T (continued) October 2021 AT&T "5G+"

- = using both midband (C-band) and high band"("millimeter wave)
- = requires cell phones with both real 5G chipsets and real 5G antennas
- = more expensive than "AT&T 5G E" or "AT&T 5G"

REFERENCES

<u>https://www.wilsonamplifiers.com/blog</u> /frequencies-by-provider/