

Understanding Private LTE/5G

	Mobility	Private LTE/5G	WLAN
FCC Assigned Name	600, 700, Cellular, PCS, AWS, WCS, EBRS	CBRS, 3.5 GHz Band	ISM, UNII-1, UNII-2, UNII-2e, UNII-3
Frequency Band MHz	600, 700, 850, 1900, 2100, 2300, 2600	3500	2400, 5500
Standards Organization	3GPP	CBRS Alliance, 3GPP	IEEE
Specifications	3GPP Rel 8 thru 14	3GPP Rel 13+	802.11, currently 'ax' or Wi-Fi 6
Certifications	By OEM and MNO	Private LTE certified	Wi-Fi certified
License Requirements	MNO per FCC Auctions	MNO per FCC Auction (PAL 7 @ 10 MHz each), Enterprise per FCC 'registration' (GAA 8 @ 10 MHz each)	Unlicensed
Previous Users	Relocated to other Spectrum	Remain with 'protection' from interference via SAS	Remain, All users must accept interference
Technologies	LTE, TD-LTE; Transition to 5G-NR (3GPP Rel 15+)	TD-LTE; Transition to 5G-NR (3GPP Rel 15+)	Wi-Fi, LTE-LAA, ZigBee, UWB, DECT, proprietary, microwave ovens, etc.
KPI Issues	NA: deterministic control of all OTA functions	NA: deterministic control of all OTA functions	Latency, jitter, capacity, QoS, security/privacy, roaming/handoff/mobility, device driver SW
Ownership	MNO owned WWAN	MNO owned WWAN, MNO owned WLAN, Enterprise owned WWAN, or Enterprise owned WLAN (all permutations)	Enterprise owned WLAN
Installation	Certified/professional only	Certified/professional only	Self install allowed
Administration	MNO Only	Enterprise and professional (SAS)	Typically enterprise