

			3GPP standard technology													Non 3GPP technology		
Requirement area	Decision	Answer	Delivered in 4G/LTE network					Delivered in 5G networks			Delivered over GEO Satellite - NTN	Delivered over LEO Satellite - NTN			Delivered over LEO Satellite - NTN - NB-IoT in MSS spectrum	5G DECT 2020 NR (5G NR+)	LoRa WAN	
			NB-IoT	Cat-M	Cat-1bis	Cat-1	Cat-4	NB-IoT	Cat-M	RedCap	MSS Spectrum	MSS Spectrum	MNO Spectrum	Small Constellation	Large Constellation	5G NR+	Terrestrial	Satellite
Module location	Geographic footprint																	
	Single country - local/regional deployment		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	Single country - populated areas		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	Single country - complete coverage										X	X	X	X	X			
	Western countries + mature APAC - populated areas		X	X	X	X	X	X	X	X	X	X		X	X			
	Global coverage - populated areas				X	X	X				X	X		X	X			
	Truely Global incl non-populated areas										X	X		X	X			
	Module mobility																	
	Stationary		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	Moving at up to car speed			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	Moving at up to airplane speed					X	X			X	X	X	X					
	Module location																	
	Outdoor		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	Indoor		X	X	X	X	X	X	X	X						X	X	X
	Deep indoor or underground		X	X				X	X								X	
App Requirements	Bandwidth requirements																	
	10s of Kbit/s		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	100s of Kbit/s			X	X	X	X		X	X	X	X	X					
	1 Mbit/s			(x)	X	X	X	(x)	X	X		(x)	X					
	4 Mbit/s or higher					X			X	X			X					
	Typical Latency requirements																	
	< 2 sec		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	< 400 ms		X	X	X	X	X	X	X	X		X	X	X	X			
	< 40 ms			X	X	X	X		X	X		(x)	(x)					
	Text requirements																	
	Yes - SMS style communication required		(x)	X	X	X	X	(x)	X	X	X	X	X	(x)	(x)			
	Voice requirements																	
	Yes - Voice communication required			(x)	X	X	X		(x)	X								
	Always connected																	
	Yes - Always able to send and receive data		X	X	X	X	X	X	X	X	X	X	X		X	X	X	
Timing Requirements	Deployment date																	
	Before 2028		X	X	X	X	X	(x)	(x)	(x)	X	(x)	(x)	(x)	(x)	X	X	(x)
	2028 and beyond		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	Deployment duration																	
	Until 2035		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	Until 2045							X	X	X	X	X	X	X	X	X	X	X
Power Requirements	Power envelope																	
	Power source always available		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	Operate on battery up to 1 year		X	X				X	X	(x)				X	X	X	X	X
	Operate on battery up to 10 year		X	X				X	X							X	X	
TCO	Module cost																	
	\$		X	X				X	X							X	X	
	\$\$				X	X	X			X		X	X	X				X
	\$\$\$									X	X	X	X	X				

\$ = < \$10 \$\$ = \$10-30 \$\$\$ = > \$30

(X) = Support exist in standard but not all operators support it or it's potentially possible