

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