

Cellular bands, terms and descriptions for New Zealand usage

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The following table is a summary presentation of cellular information for bands and systems used in New Zealand. There is a mixture of European and North American systems, and some have alternative band options or extensions, which can be confusing. As well, CDMA is used for several different systems, each having different RF parameters, so most care is needed to distinguish between systems that use CDMA.

In order to clarify what cellular system is being described, the table below consistently presents the system as prefix for cellular standard and suffix for frequency band. The table is presented in order of ascending frequency band.

Summary table of cellular systems currently available in New Zealand

System	Service provider	Base tx band	Mobile tx band	Comments
TDMA	Telecom			Old System
CDMA2000-850	Telecom	825 – 845 MHz	870 – 890 MHz	Named T3G in NZ, CDMA2000 has 1.2288 Mcps, FDD, compatible with IS-95 mobiles, supports 1XRTT and EVDO
GSM900	Vodafone	939 – 960 MHz	894 – 915 MHz	The Crown controls the lowest 4 MHz, otherwise GSM as per ETSI standards, 200 kHz FDD channels with 8 time slots
GSM1800	Vodafone	1805 – 1880 MHz	1710 – 1785 MHz	As per ETSI standards, like an extension band for GSM900, earlier known as DCS1800, other than Vodafone have management rights
1900PCS	US model	1850-1910	1930-1990	US Only – Not NZ or Aust
UMTS2130	Vodafone	2110 – 2170 MHz	1920 – 1980 MHz	Widely known as 3G, FDD W-CDMA with 3.84 Mcps, 5 MHz channels, other than Vodafone have management rights
3GPP2070	Woosh	2053 – 2082 MHz	2053 – 2082 MHz	3GPP TDD variant of W-CDMA, 7.68 Mcps, relatively unique usage of double chip rate and frequency band

In New Zealand, each cellular band is divided into management rights (not shown in the summary table). **There are potentially other service providers for GSM1800 and UMTS2130.**