

## Major Frequency Bands, Uses & Significance

Frequency Band (MHz)	Typical Use	Significance
700 MHz	Cellular services (4G/5G)	Offers good balance between coverage and capacity, crucial for expanding mobile broadband services.
800 MHz	Cellular services (4G)	Provides wider coverage compared to higher bands, important for rural areas.
900 MHz	Cellular services (2G/3G)	Established band for voice calls and basic data services.
1800 MHz	Cellular services (2G/4G)	Offers good balance between coverage and capacity, widely used for mobile services.
2100 MHz	Cellular services (3G/4G)	Provides higher capacity compared to lower bands, important for data services in urban areas.
2300 MHz	Cellular services (4G/5G)	Offers good capacity for data services.
2500 MHz	Cellular services (5G)	High-capacity band for future needs like ultra-fast broadband and advanced applications.
Below 30 MHz	Radio navigation (GPS, radars)	Supports essential navigation and positioning services.
30 MHz - 300 MHz	Broadcasting (AM radio)	Used for AM radio broadcasts.
300 MHz - 900 MHz	Various services (Radio navigation, maritime communication)	Supports diverse applications like radio navigation, aviation communication, and maritime communication.
Above 24 GHz	Satellite communication	Used for satellite-based services like VSAT and future high-throughput satellite broadband.