

Comparing mobile technologies

| | Frequency | Advertised data speeds | Technology | Good for | Unsuitable for | Cost |
|------------------|----------------------------|------------------------|---|---|--|---|
| GSM | Normally 900/1800/1900 MHz | 9.6 kbs | Cellular | Talk, SMS | Data | Network setup Subscription Call costs |
| GPRS | As GSM | 30+ kbs | Upgrade to GSM to provide better data support | Small data applications, MMS messaging | Video, web surfing | As above plus data costs |
| 3G | 1900/2100 MHz | 100 – 384 kbs | Next generation cellular | Larger data applications (web, audio streaming, video), VoIP? | Rural areas | Spectrum costs Data costs |
| WiFi | 2400 MHz (public) | 11 Mbs | Local networking via 'Hotspots' | Fast data connectivity over short range, VoIP | Roaming and highly secure applications | Cheap to set up at home Access costs to public nodes (charged by time) |
| Bluetooth | 2450 MHz (public) | 11 Mbs | Very local (personal) networking | Fast data connectivity over very short range | Distance | Cheap to set up Free to use |
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| GPS | 1517 MHz | | Positioning technology | Accurate positioning | Communication, Messaging Tracking applications without involving other technologies | Cheap terminals Free to use |
| | | | | | | |
| RFID | 124/145 kHz | | Identification technology | Identification, Oystercard, Security monitoring | Communication, Large areas, most public applications | Low cost tags Fairly low costs systems for small areas |