**Mobile phones have come a long way since the first cell phones came on the market. This essay compares the standards and supported features of mobile technology generations.**

**The first generation mobile phones, or 1G, were being used from about 1970 to about 1990. These mobile devices transmitted analog signals up to 14.4 Kbps, and as such only supported voice communications (TeqLog, 2011).**

**Second generation phones, or 2G, became the standard from about 1990 to 2000. These cell phones were capable of transmitting data at roughly the same throughput as 1G technology, but they were transmitting digital signals. This is possible because several users can exist on a single narrow band channel through multiplexing (TeqLog, 2011). This advance allowed both voice as well as data to be transmitted, permitting email and SMS transmissions on 2G phones. From 2001 to 2004, data becomes a much larger priority as users demand web browsing capability in addition to email and voice. 2.5G phones begin to support multimedia transmissions. Although most transmissions were in the 20-40 Kbps range, peak transmissions of 171.2 Kbps were possible due to transmission of data in packets (TeqLog, 2011).**

**During 2004 to 2005, there was a significant increase in the popularity of streaming multimedia on cell phones. Third generation technology, or 3G, uses Digital Broadband technology to transmit Packet data. The throughput of 3G phones is 500-700 Kbps, with peak speeds of 3.1 Mbps. 3.5G technology supports even more data throughput during 2006 to 2010. The speeds of packet transmission here average 1-3 Mbps and reach a peak of 14.4 Mbps (TeqLog, 2011).**

**Fourth generation, or 4G, mobile phones are currently underway with even more throughput. High-def streaming is supported by 4G phones. Wi-Fi and WiMax allow speeds in the 100 Mbps range with peaks up to 300 Mbps (TeqLog, 2011). This allows users to stream music and video on their mobile devices. One issue with 4G technology is that the networks are not as consistent as with 3G networks. Although roaming with 3G is possible, roaming across 4G networks is less consistent and often results in dropped connections. It may be some time before 4G networks actually provide consistent service. Meanwhile, 5G technology is also under development (TeqLog, 2011).**

**References**

**TeqLog (2011). 1g vs 2g vs 3g vs 4g vs 5g comparison differences and analysis. Retrieved from** [**http://www.teqlog.com/1g-vs-2g-vs-3g-vs-4g-vs-5g-comparison-differences-and-analysis.html**](http://www.teqlog.com/1g-vs-2g-vs-3g-vs-4g-vs-5g-comparison-differences-and-analysis.html)