

What Is GPRS Internet?

General Packet Radio Service (GPRS) Internet technology employs Global System for Mobile Communications (GSM) technology to allow users to access the Internet from mobile phones with GSM capability. GPRS cell phones can transmit and receive packets, or units of data. This allows GSM network cell phone service providers to offer their users basic Internet services such as email and text messages.

GPRS Internet service also allows Wireless Application Protocol (WAP) Internet browsing with a cell phone. With an average transmission speed of about 35 kilobits per second (kbps), GPRS Internet service is considered the first level of second-generation (2G) Internet mobile technology. Many personal digital assistants (PDAs) use GPRS Internet technology.

The user's specific cell phone number is not used to connect to a GPRS Internet service. Instead, the connection is made through an Access Point Name (APN). Users are billed according to how much data is transmitted during each session, as well as the overall level of data transmission during a specific billing period. This differs from voice calls, which are billed by the minute or by overall use subtracted from an allotment of time specified in the contract between the user and the cell phone provider.

GPRS Internet service often is extremely expensive. There are other drawbacks, such as the fact that Internet browsing is often limited to a monochrome display. The slow transmission speed makes large email attachments and other data-intensive operations difficult, if not impossible, for GPRS Internet-capable devices to handle. As a result, third-generation (3G) technology replaced GPRS technology and other 2G applications, just as 2G innovations replaced analog, or first-generation, technology.

Enhanced Data GSM Environment (EDGE) networks have been developed specifically to handle 3G technology. EDGE network service allows a richer Internet experience for cell phone users, including video clips and full-color Internet browsing. EDGE transmission speeds average 75 to 135 kbps. These enhanced features are why many businesses have migrated their mobile technology to 3G and EDGE networks.

Another important distinction between GPRS Internet service and EDGE network service is that EDGE networks allow for time division multiple access (TDMA). TDMA divides a single channel into multiple slots through a process known as multiplexing. Multiplexing combines several low-speed signals for transmission over a single high-speed channel, allowing analog and digital transmission to occur simultaneously.