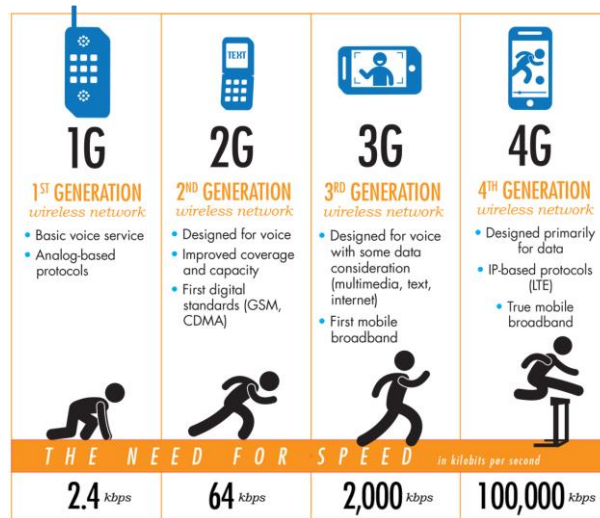


# Wireless Mobile Communication Protocols



## **GSM (Global System for Mobile Communication)**

It is one of the most widely used digital wireless telephony system. It was developed in Europe in 1980s. Now it is an international standard in Europe, Australia, Asia and Africa. Any GSM handset with a SIM card can be used in any country that uses this standard. Every SIM card has a unique identification number. GSM uses TDMA (Time Division Multiple Access) to support upto eight calls simultaneously. It also uses encryption to make the data more secure.

## **CDMA (Code Division Multiple Access)**

It stands for General Packet Radio Services. It is a packet based wireless communication technology that charges users based on the volume of data the send rather than the time duration for which they are using the service.

GPRS is the mobile communication protocol used by second (2G) and third generation(3G) of mobile telephony). Its speed upto 56kbps to 114kbps, however the actual speed may vary depending on network traffic.

### **WLL (Wireless Local Loop)**

It is wireless local telephone service that can be provided in homes or offices. The subscribers connect to their local exchange instead of the central exchange wirelessly. Data is transferred over very short range; it is more secure than wired network. WLL system consists of user handset and a base station. The base station is connected to the central exchange as well as antenna. The antenna transmits to and receives call from users through microwave links.