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Overview of Vo802.11

An understanding of the *public switched telephone network* (PSTN) and how it is potentially going to be replaced is best grasped by understanding its three major components: access, switching, and transport. *Access* pertains to how a user accesses the network. *Switching* refers to how a call is "switched" or routed through the network, and *transport* describes how a call travels or is "transported" over the network.

Access

As mentioned, *access* refers to how the user "accesses" the telephone network. For most users, access is gained to the network via a telephone handset. Transmission is a diaphragm in the mouthpiece that converts the air pressure of voice into an analog electromagnetic wave for transmission to the switch. The earpiece performs this process in reverse.

The most sophisticated aspect of the handset is its *dual-tone multifrequency* (DTMF) function, which signals the switch by tones. The handset is usually connected to the central office, where the switch is located, via copper wire known as *twisted pair* because, in most cases, it consists of a twisted pair of copper wire. The stretch of copper wire or, in newer installations, fiber-optic cable, connects the telephone handset to the central office. Everything that runs between the subscriber and the central office is known as *outside plant.* Telephone equipment at the subscriber end is called *customer-premises equipment* (CPE).

The emergence of wireless broadband Internet technologies such as 802.11a/b potentially allows the copper wires that have traditionally tethered residential and small business markets to telephone companies to be bypassed.