

# WEBSTER'S NEW WORLD™

## Telecom Dictionary

Ray Horak



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**dial around** In the United States, a caller can dial a seven-digit Carrier Access Code (CAC) in the format 101 XXXX to dial around the presubscribed interexchange carrier (IXC) for that line or trunk to reach another IXC. The first three digits (101) of the CAC signal the network of the caller's intent. The last four digits (XXXX) of the CAC are the Carrier Identification Code (CIC), which is used for call routing purposes. The full dialing sequence is 101 XXXX + 1 + NXX (area code) + NXX (central office prefix) XXXX (line number). See also *area code*, *CAC*, *CO prefix*, *CIC*, and *IXC*, and *line number*.

**dialed number identification service (DNIS)** See *DNIS*.

**dial tone** 1. An audible signal indicating that a telephone set is connected to a telephone switching system that is available to process an outgoing call. 2. Central office (CO) dial tone, sometimes referred to as hard dial tone, is provided by the CO switch to a terminal device. When the dial tone is seized, the user is free to dial a telephone number. See also *CO*. 3. PBX dial tone, sometimes referred to as internal dial tone or soft dial tone, is provided to a PBX station indicating that the PBX switch is available. The user is then free to dial an internal PBX station number. If the target telephone number is an external number, the user must dial an access code in order to gain access to an external trunk connected to the public switched telephone network (PSTN). See also *PBX* and *PSTN*. The conventional access code is nine (9) in the United States and Canada, and zero (0) in most other countries. 4. Stutter, or stuttered, dial tone is dial tone interrupted by short, regular periods of silence, and is used by some centrex and PBX systems as a message indicator, typically indicating that a voice message has been deposited in a voice mailbox either integrated with or interfaced directly to the system. Stuttered dial tone also is often used to confirm that a feature, such as call forwarding, has been activated or deactivated. See also *call forwarding*, *centrex*, and *PBX*. 5. Video dial tone, or visual dial tone, refers to the notion of a broadband network that provides videoconferencing capability on demand. See also *broadband*.

**dial-up circuit** Referring to a circuit established by dialing the number of the remote telephone or other device over a public switched telephone network (PSTN), rather than over a dedicated circuit. There also are switched data services (e.g., Switched 56), many of which operate over the PSTN, as well. See also *circuit*, *dedicated circuit*, *dial*, *PSTN*, and *Switched 56*.

**dibit** Referring to a modulation technique that impresses two bits on a baud, so that the bit rate is double the baud rate. Such a technique employs four signal states. Quadrature phase-shift keying (QPSK) is a dibit technique achieved by defining four phase shifts separated by 90 degrees. Quadrature amplitude modulation (QAM) is an amplitude modulation (AM) scheme in ISDN BRI that yields the same result. There are similar frequency modulation (FM) schemes, as well. See also *AM*, *baud*, *baud rate*, *bit*, *bit rate*, *BRI*, *FM*, *QAM*, *QPSK*, *quadbit*, *signal*, *tribit*, and *unibit*.

**DID (Direct Inward Dial)** A PBX feature that allows incoming calls to connect directly to the station, without operator assistance. To accomplish this, each station is assigned a DID telephone number drawn from a bank of such numbers so designated by the local exchange carrier (LEC). (The last three or four digits of the DID number correspond to the internal station number, so the PBX dialing plan must be flexible enough to accommodate the DID numbering scheme.) When an outside caller dials that number, the terminating CO recognizes that fact and connects the call over a special DID trunk. The CO passes the DID number to the PBX in advance of the call, thereby enabling the PBX to automatically route the call directly to the station, without the intervention of an attendant. The service provider rents DID numbers to user organizations in groups or blocks of 50, 100, or 250, typically.

**dielectric** A substance that is not a conductor of direct electric current, a dielectric is an insulator, rather than a conductor. A dielectric permits the passage of the lines of force associated with an electromagnetic field, but does not conduct the current. As dielectrics, however, can sustain an electromagnetic field, they are commonly used in capacitors and between wires in a cable. Dielectrics include rubber, gutta percha, wood pulp, polyethylene, polyvinyl chloride, flouropolymer resin, and Teflon®, all of which have been used at various times as insulation in telecommunications cable and wire applications. The dielectric properties of plastic and glass make them ideal optical conductors in fiber optic cables, which are immune from