Common Telecom Acronyms

In order to help you understand some of the telecom industry terms, T1 Town has created the acronyms section, below. We have selected some of the most commonly used acronyms and descriptions for your information.

**ALI (Automatic Location Identification)**
A 9-1-1 Feature by which the name, address and responding agencies associated with the number of the telephone used to dial 9-1-1 is displayed at the PSAP at the time the call is answered.

**ANI (Automatic Number Identification)**
The number transmitted through the network identifying the calling party.

**ARIN (American Registry for Internet Numbers)**
A non-profit organization established for the purpose of administration and registration of Internet Protocol (IP) numbers.

**ATM (Asynchronous Transfer Mode)**
A high-speed switching technique that uses fixed size cells to transmit voice, data and video.

**BAN (Billing Account Number)**

**BELLCORE**
An organization owned jointly by the Bell regional holding companies that may in the future be owned partially or totally by other persons. The organization conducts research and development projects for its owners, including development of new telecommunications services. Bellcore also provides certain centralized technical and management services for the regional holding companies and also provides generic requirements for the telecommunications industry for products, services and technologies www.bellcore.com

**CAC (Carrier Access Code)**
A dialing sequence used by the general public to access a preferred provider of service.

**Calling Records**
The CPUC considers calling records to be the records of calls made from a subscriber's telephone no matter how recorded and regardless of whether such information appears in the subscriber's monthly telephone service bill.

**CARE (Customer Account Record Exchange)**
The process of exchanging customer account information between local and long distance carriers. Every time a local carrier signs up a new customer, or every time an existing customer changes their PIC code, thereby changing their long
distance carrier, the local carrier is responsible for notifying the long distance carrier. This applies even when the customer is keeping their current LD carrier while changing local carrier: the local carrier is still supposed to notify the LD carrier.

**Casual PICing**
This is when the customer has chosen one primary long distance carrier (the long distance carrier they are "pic'd" to), but occasionally wants to make a call using another long distance carrier. In order to route the call through the alternative long distance carrier, the customer dials the carrier's PIC code before entering the telephone number. This is exactly the process for all those "Dial 10221" commercials. Because the customer does not sign up with this alternative carrier, they are only "casually" picing them. Some long distance carriers will not accept casual picing, and will only let you use them if you have pre-registered with them (like Cable & Wireless).

**CCB (Common Carrier Bureau)**
A branch of the FCC that monitors the telephone industry.

**Central Office Switch**
A switch used to provide telecommunications services including (1) End Office Switches which are Class 5 switches from which end-user Exchange Services are directly connected and offered, and (2) Tandem Office Switches which are Class 4 switches which are used to connect and switch trunk circuits between and among central office switches. Central office switches may be employed as combination end office/tandem office switches (combination Class 5/Class 4).

**CIC (Carrier Identification Codes)**
CICs provide routing and billing information for calls from end users via trunk-side connections to inter-exchange carriers and other entities.

**CFA (Connecting Facility Assignment)**
Long Distance Carriers must give Local Access Carriers (TelePacific) "CFA", which are directions about where specifically on our interconnecting equipment to physically put the circuit.

**CLASS (Custom Local Area Signaling Services)**
Consists of number-translation services, such as call-forwarding and caller identification, available within a LATA.

**CLC (Competitive Local Carrier)**
The same thing as a CLEC.

**CLEC (Competitive Local Exchange Carrier)**
Any company or person authorized to provide local exchange services in competition with an ILEC. The CPUC's (California Public Utility Commission's)
official definition is "Competitive Local Carrier (CLC) means a common carrier that is issued a Certificate of Public Convenience and necessity (CPCN) after the effective date of July 24, 1995, to provide local exchange telecommunications service for a geographical area specified by such carrier. There are two CLEC types: Facilities-based and Non-facilities-based, see definitions.

**CLLICODE (Common Language Location Identifier)**
A code, which identifies a customer at a physical address. (All codes are of an abbreviation for the city, state, an identifier for that particular building, and an identifier for the customer on a particular floor.)

**CO (Central Office)**
A LEC (Local Exchange Carrier) office that has a switch.

**Conduit**
Pipe or tubing used to pass telephone cables through to a demarc.

**CPCN (Certificate of Public Convenience and Necessity)**
A certificate that must be filed by every CLEC with the CPUC.

**CPE (Customer Provided Equipment)**

**CSR (Customer Service Representative)**

**CSU or CSU/DSU (Channel Service Unit/Data Service Unit)**
A device to terminate a digital channel on a customer's premise. It performs certain line coding, line-conditioning and equalization functions, and responds to loop-back commands sent from the central office. A CSU sits between the digital line coming in from the central office and devices such as channel banks or data communications devices and is found in every digital link and allows the transfer of data at a range greater than 56 Kbps.

**Demarc (also Dmark or de-mark)**
Demarcation point between the wiring that comes in from the local telephone company and the wiring you install to hook up your equipment or system to the CPE.

**DID (Direct Inward Dialing)**
A service offered by telephone companies which allows the last 3 or 4 digits of a phone number to be transmitted to the destination exchange. For example, a company could have 10 incoming lines, all with the number 234 000. If a caller dials 234 697, the call is sent to 234 000 (the company's exchange), and the digits 697 are transmitted. The company's exchange then routes the call to extension 697. This gives the impression of 1000 direct dial lines, whereas in fact there are only 10. Obviously, only 10 at a time can be used.
**DS-1**
A digital transmission link with a capacity of 1.544 Mbps (1,544,00 bits per second). This link can handle 28 point-to-point DS-0s, or 24 "DS-0s" for 24 voice conversations.

**DS-3**
A digital transmission link with a capacity of 44.736 Mbps. This link can handle 28 DS-1s.

**DNCF (Directory Number Call Forwarding)**
From Pacbell. Provides TelePacific the option for the end user to retain an existing PB assigned telephone number when the end user changes local service provider from PB to TelePacific. (Service provider number portability)

**E-911 (Enhanced 9-1-1)**
A method of routing 911 calls to a Public Service Answering Point that uses a customer location database to determine the location to which a call should be routed. E-9 .1 .1 service includes the forwarding of the caller's Automatic Number Identification (ANI) to the PSAP where the ANI is used to retrieve and display the Automatic Location Identification (ALI) on a terminal screen at the answering Attendant's position displaying name, address, and telephone number. It usually includes selective routing.

**End Carrier**
The local carrier who terminates the call to the end user.

**EUCL (End User Common Line Charge)**
A FCC tariff term defined in FCC Rules 69.104 as follows: "A charge that is expressed in dollars and cents per line per month shall be assessed upon end users that subscribe to local exchange telephone service, Centrex or semi-public coin telephone service to the extent they do not pay carrier common line charges. Such charge EUCL shall be assessed for each line between the premises of an end user and a Class 5 office that is or may be used for local exchange service transmissions. Each Single Line Service is charged one CALC or EUCL. The amount varies by state."

**Exchange Area**
Geographically bounded areas that a LATA is divided into.

**Extended Demarc**
A demarcation point that is extended beyond the MPOE (Minimum Point of Entry).

**Facilities-based CLEC**
When a CLEC utilizes unbundled network elements from the LEC and/or provides facilities such as its own switch or transmission media. The CPUC’s
definition is: those CLECs who directly own, control, operate, or manage conduits, ducts, poles, wires, cables, instruments, switches, appurtenances, or appliances in connection with or to facilitate communications within the local exchange portion of the public switched network.

**FCC (Federal Communications Commission)**
The government agency that regulates telecommunications and other broadcast medium. www.fcc.gov

**FOC (Firm Order Commitment)**

**ICB (Individual Case Basis)**
Unusual products often require an ICB to determine the pricing. Marketing supports this.

**IEW (InterExchange Carrier)**
Refers to a Long Distance Carrier. IXC is another term.

**ILEC (Incumbent Local Exchange Company)**
Companies such as Pacbell and GTE.

**INC (Industry Numbering Committee)**
An industry forum sponsored by the Alliance of Telecommunications Industry Solutions (ATIS). It provides an open forum to address and resolve industry-wide issues associated with the planning, administration, allocation, assignment and use of numbering resources and related dialing considerations for public telecommunications within the North American Numbering Plan (NANP) area. INC documents are available from: www.atis.org/atis/clc/inc/incdocs.htm. (npagdlm.doc, INC Documents, http://www.atis.org/atis/clc/ic/incdocs.html)

**Independent LEC (Independent Local Exchange Carrier)**
Refers to non- "Ma" Bell Companies, such as GTE.

**Intrastate**
Communications inside one state.

**Interstate**
Communications between states.

**ISDN (Integrated Services Digital Network)**
A standard digital network that lets users send voice, data and video over one telephone line from a common network interface.

**IXC (InterExchange Carrier)**
Abbreviation for any long distance carrier. IEC is another abbreviation favored by LECs.
LAN (Local Area Network)
A data communications network that is geographically limited (typically to a 1 km radius) allowing easy interconnection of terminals, microprocessors and computers within adjacent buildings. Ethernet and FDDI are examples of standard LANs.
Because the network is known to cover only a small area, optimizations can be made in the network signal protocols that permit data rates up to 100Mb/s.

LEC (Local Exchange Company)
Refers to companies such as Pacbell or GTE.

LERG (Local Exchange Routing Guide)
The LERG contains information about the current network configuration and scheduled changes within the local exchange providers' networks. The LERG is primarily designed to be used for routing of interLATA calls by inter-exchange carriers. The LERG informs telecom companies which end office or tandem office the NNX resides in and how calls should be routed and rated so that they can properly terminate to the appropriate telephone number at the proper rate.

LNP (Local Number Portability)
LNP is the ability of end users to retain their existing telephone numbers when remaining at a location, or changing their location but staying within the same geographical exchange area served by the initial carrier's serving central office, regardless of the LEC or CLC selected. LNP is also referred to as Service Provider Portability.

LOA (Letter of Agency)
This is exchanged between telecomm companies, or between a customer and a telecomm company granting permission for the receiver to install telecomm service to the sender.

Locality
Within each rate center there may be more than one "locality" - locality usually denotes a sub-city name such as the "called-from" place appearing on a customer's bill, to a rate center, to the exchange area that the NXX is identified with in a local tariff. Localities that are associated with specific rate centers can be looked up in section 6 of the LERG.

Local Loop
The local loop is the telephone line that runs from the local Telephone Company to the end user's premise. The local loop can be made up of fiber, copper or wireless media. Same as local exchange loop facility whose formal definition is "known as a basic level network access channel, local exchange loop facility means a transmission path capable of delivering analog voice grade signals or digital signals at less than 1.544 Mbps between the network interface at a
customer's premises and the main distribution frame or any other point of interconnection to the LEC network."

**LRN (Local Routing Number)**
A 10-digit code that represents a specific carrier. This code is "attached" to each phone number to indicate which "carrier" the phone number currently is subscribed with for routing purposes. Created for the LNP process, when a customer switches carriers, the new carrier's LRN replaces the old.

**LSO (Local Serving Office)**

**LSP (Local Service Provider)**
A term intended to encompass all companies providing dial tone to end users, including but not limited to Incumbent Local Exchange Carriers (ILEC), Alternative Local Exchange Carriers (ALEC) and Private Branch Exchange (PBX) providers.

**MPOE (Minimum Point of Entry)**

**MSAG (Master Street Address Guide)**
A listing of all streets and number ranges within a 9-1-1 service area. The streets and address ranges are assigned routing codes, or emergency service numbers (ESNs), to enable proper routing of 9-1-1 calls.

**Multiplexing or Mux**
Multiplexing is a technique whereby multiple devices can share a telephone line. With multiplexing, users do not have to lease individual telephones for each computer that wishes to communicate. T-1 multiplexers enable 24 devices to share one telephone line.

**NANPA (North American Numbering Plan Administration)**

**NANP (North American Numbering Plan)**
A numbering architecture in which every station in the area served by the plan is identified by a unique ten-digit address consisting of a three-digit NPA code, a three digit central office code of the form NNX/NXX, and a four-digit line number of the form XXXX.

**NAT (Network Address Translation)**
A hardware device currently being developed and used to extend the Internet addresses already in use. NAT has been suggested as an alternative to adopting IPv6 (IPng). It allows duplicate IP addresses to be used within a corporation and unique addresses outside.

**NID (Network Interface Device)**
The point of demarcation between the end user's inside wiring and LEC's facilities. Same as a NIU (Network Interface Unit).

NIU (Network Interface Unit)
Same as a NID (Network Interface Device), it serves as the point of demarcation between the local exchange carrier network and the customer's premise. It is required to be placed at the MPOE (minimum point of entry) which is typically in the basement, first floor telco room, garage, or even outside the building. NIUs are multi-functional devices, which include a protector block to prevent high-voltage surges from affecting premise equipment and inside wiring. It also usually allows the carrier to initiate a loop-test back from the central office to test the integrity of the local loop. A local exchange carrier will never install an NIU at an extended demarc - this is in their tariffs.

Non-Facilities Based CLECs
Those CLECs which do not directly own, control, operate, or manage conduits, ducts, poles, wires, cables, instruments, switches, appurtenances or appliances in connection with or to facilitate communications within the local exchange portion of the public switched network.

Non-published Service
The CPUC considers non-published service to be when a subscriber requests that their name, address, and telephone number not be listed in any telephone directory, street address directory, or in the directory assistance records available to the general public (411).

NPA (Numbering Plan Area also called area code)
An NPA is the 3-digit code that occupies the A, B, and C positions in the 10-digit NANP format that applies throughout the area served by the NANP. NPAs are of the form NXX, where N represents the digits 2-9 and X represents any digit 0-9. In the NANP, NPAs are classified as either geographic or non-geographic.

NPAC (Number Portability Administration Center)
A center, which supports the implementation of Local Number Portability (LNP).

NPAC SMS (Number Portability Administration Center Service Management System)
NPAC's system that manages the porting of telephone numbers from one service provider to another.

NXX
N is any digit 2 through 9, X is any digit 0 through 9 (800 possible combinations). Also known as CO codes, or DRD (destination code) once entered into the RDBS records.

NXX Service Area
The geographically-bounded area designated as the area within which a LEC or CLC may provide local exchange telecommunication services bearing a particular NPA-NXX designation.

**OCN (Operating Company Number)**
Assignments must uniquely identify the applicant. Must have a CO number to get this, but prior to a CO number you can use a NECA assigned number called a Company Code by calling NECA at 201-884-8355. To get an OCN call NECA at 973-884-8355.

**PBX (Private Branch Exchange)**
PBXs are computerized on site telephone systems located at commercial premises. They route calls both within an organization, and from the outside world to people within the organization.

**Port**
When used as a noun, a port (also known as a basic level network access channel connection) is the interface between the local loop and the appropriate LEC Central Office switching equipment.

**PSAP (Public Safety Answering Point)**
The central point where the 911 call is received and responded to.

**PSTN (Public Switched Telecommunications Network)**
The PSTN is composed of all transmission and switching facilities and signal processors supplied and operated by all telecommunications common carriers for use by the public. Every station on the PSTN is capable of being accessed from every other station on the PSTN.

**Rate Center (referred to as RRD in RDBS)**
A geographically specified area used for determining mileage and/or usage dependent rates in the Public Switched Telephone Network. The geographic point is identified by a specific Vertical and Horizontal (V&H) coordinate that is used to calculate distance-sensitive end user traffic to/from the particular NPA-NXXs associated with the specific Rate Center. A rate center is not always the exact equivalent of an Exchange Area, but can be.

**RBOC (Regional Bell Operating Company)**
Refers to any of the "Ma Bell" local exchange carriers, such as Pacific Bell, Southwestern Bell, etc.

**Resp Org**
Responsible Organizations are entities designated to manage and administer a customer's Toll Free number using the SMS/800 system.

**ROE (Right of Entry)**
Router
A device, with routing intelligence, that connects parts of local and remote networks together. Because they use routing tables to look up addresses for each message, routers introduce delays into networks.

Service Provider
Any entity that is authorized, as appropriate, by local, state, federal, or other governmental authorities within the area served by the NANP to provide communications services to the public. Same as "Telecommunications Service Provider". (npagdln.doc, INC Documents, http://www.atis.org/atis/clc/ic/incdocs.html)

Service Territory
The area in which a CLC is authorized to provide service.

SONET (Synchronous Optical Network)
A standard for transmitting high-speed digital bits over fiber optic cabling. Telephone companies use SONET to transmit data from multiple customers.

SS7 (Signaling System 7)
The signaling protocol, Version 7, of the CCS network, based upon American National Standards Institute (ANSI) standards, which allows all carriers' networks to work together. Protocols are: CCS is common channel signaling, which allows signals to be sent in both directions, which results in faster speeds.

T-1
Slang, and now most common identification for a DS-1. See DS-1 for definition.

T-3
Slang, and now most common identification for a DS-3. See DS-3 for definition.

TC (Technical Consultant)
A technical consultant from the marketing department.

Toll Free
When calling a Toll Free number (area code/NPA 800, 888, 877), the dialing party incurs no toll charges.

Wire Center
A building or space within a building that serves as an aggregation point on a LEC’s network, where transmission facilities and circuits are connected or switched.
Wire Center can also denote a building in which one or more Central Offices, used for the provision of exchange services and access services, are located.
1.544 Mbps Circuit
See DS-1.

"9-1-1"
The three-digit telephone number that has been designated as the "Universal Emergency Number," for public use throughout the United States to request emergency assistance. It is intended as a nationwide telephone number giving the public direct access to a Public Safety Answering Point (PSAP) which will be responsible for taking the appropriate action.