

Glossary of Contact Center Terms North America

A.

Abandoned Call. A call that has been offered into a communications network or telephone system, but is terminated by the person originating the call before any conversation happens.

ACS (Automatic Call Sequencer). A device for handling incoming calls. Typically it answers an incoming call, gives the caller a message and puts them on hold, signaling agents a call is waiting. It has no internal switching mechanism and does not affect the call in any way. It provides an indication of which call should be picked up next in order of arrival and keeps statistical information on the progress of calls. No agent statistics are provided.

Activity Codes. Codes entered by agents to indicate the type of call handled. Also called wrap-up codes, these codes allow reporting by call type.

ACD (Automatic Call Distributor). A specialized phone system used for handling many incoming calls. The ACD will recognize and answer an incoming call; will look in its database for call routing instructions. It will send the call to a recording or a voice response unit (VRU) or will send the call to an available agent according to the instructions for that call. An ACD will normally produce management information tracking both calls and agent performance.

ACIS (Automatic Customer/Caller Identification). Allows the capture of incoming network identification digits such as Direct Inward Dial or Direct Number Identification Service and interprets them to identify the call type or caller. With greater information, such as Automatic Number Identification, this data can identify a calling subscriber number.

Access Charges. Fees paid for the use of a line provided by the local telephone company.

ADAD (Automatic Dialing And Announcing Device). Device that automatically places calls and connects them to a recording or agent. A Canadian term for an automatic dialer.

Adherence. The term used to describe how well agents stick to their planned work schedules. May also be referred to as compliance.

After Call Work (ACW). Work immediately following an inbound call or transaction. If work must be completed before agent can handle next call, then ACW is factored into average handle time of call. Work may involve keying activity codes, updating database, filling out forms, or placing another call.

Agent. The person that handles calls in a call center. Also referred to as a telephone service representative (TSR) or customer service representative (CSR).

Agent Group, Split Or Gate. A group of agents handling a specific type or group of calls.

Agent Occupancy. Generally a percent of logged in time that an agent spends in active call handling states (i.e., on incoming calls, in wrap-up, in outbound calls).

Agent Status. The current work mode of the agent, such as Busy on Call, Available, Unavailable, After Call Work, Off-Phone Work, etc.

AHT (Average Handle Time). The amount of time an employee is occupied with an incoming call. This is the sum of talk time and wrap-up time.

AIOD (Automatic Identified Outward Dialing). The ability of the telephone system to know the specific extension that is placing a call. It's used as part of the process of recording the detail of each telephone call for bill back and cost control purposes.

All Trunks Busy (ATB). A state in which all trunks in a specific trunk group are busy. May occur when all trunks are actually occupied with calls, or when some portion of trunks are artificially blocked by system user in periods of understaffing to minimize number of calls in queue.

Analog. The representation of numerical quantities by means of a continuum of physical variables; e.g., translation, rotation, voltage or resistance. An analogue signal is a continuous signal that varies in voltage to reflect variations in some quantity, such as pitch or loudness of the human voice.

Analog Transmission A way of sending signals – voice, video, data – in which the transmitted signal is analogous to the original signal.

ANI (Automatic Number Identification). A series of digits received from one of two sources: the ANI you receive from a long distance phone company that may arrive over the D channel of an ISDN PRI circuit or on a dedicated single line before the first ring; or the signaling for Caller ID as delivered by a local phone company between the first and second rings. In Canada, caller ID for both local and long distance is delivered in the same technical way – between the first and second rings.

ANSI (American National Standards Institute). A standards-setting, non-governmental organization which develops and publishes standards for “voluntary” use in the United States. The British have their own equivalent of ANSI, the British Standards Institute (BSI). Vendors in that country accept standards set by national organizations.

ANSI/T1q1. ANSI's standard for telecommunications network performance standards – Switched exchange access network transmission performance standard exchange carrier to interchange carrier standards.

Answer Supervision. The capability of a telephone system or ACD to send a signal to the carrier that the call has been answered or accepted. Billing begins at the point of this detected answer.

API (Application Programming Interface). A set of standard software interrupts, calls, and data formats that application programs use to initiate contact with network services, mainframe communications programs, telephone equipment, or program-to-program communications. Applications use APIs to call services that transport data across a network.

Area Code. A three-digit number identifying geographic areas of the United States and Canada. It permits direct distance dialing on the telephone system. Also known as Numbering Plan Area (NPA).

ARS (Automatic Route Selection). A programmed feature that a phone system uses to automatically select among multiple circuit groups to complete an outgoing call.

ARU (Audio Response Unit). A device that provides synthesized voice responses that are translated from computer output. ARUs are used to off-load the number of information calls that could be handled automatically and to provide consistent quality in information retrieval.

ASA(Average Speed Of Answer). The average wait in queue experienced by all callers to an ACD group during a specified period. It includes both calls delayed and those answered immediately in the calculation. **Note: ASA could also be Affiliated Sales Agency. See definition.*

ASA (Affiliated Sales Agency). A term for a company that resells the service of a phone company. **Note: ASA could also be Average Speed of Answer. See definition.*

ASCII (American Standard Code For Information Interchange). Pronounced “ask-ee”. An 8-bit code (1 bit is for parity check) developed by the American National Standards Association that has been adopted as standard code for data transmission in the United States.

ASVD (Analog Simultaneous Voice And Data). The term used to describe the way multimedia modems transmit both voice and data. This method divides the analogue transmission into two frequencies, one for the voice transmission and one for the data transmission.

ATM (Asynchronous Transfer Mode). A high bandwidth, low-delay, packet-like switching and multiplexing technique. Usable capacity is segmented into 53-byte fixed-

size cells, consisting of header and information fields. ATM allocates bandwidth on demand, making it suitable for high-speed connections of voice, data, and video services. It has been selected as the basis for the future broadband network in view of its flexibility and suitability for both transmission and switching.

Attenuation. The difference between the transmitted and received power due to transmission loss through equipment, lines or other communications devices.

Automated Attendant. A device that answers callers with a recording, and allows callers to route themselves by dialing digits associated with menu choices.

Automated Greetings. The capability of an ACD or add-on system to allow an agent to record a greeting which automatically plays when call is answered. Also called voice-saver system.

Automatic Call Back. A feature of a telephone system that permits a caller to hang up and instruct the system to call back as soon as a busy station or trunk is free.

Auxiliary Work State. A work state other than actively handling calls. As an example, agents may go into an auxiliary work state to process paperwork or do research. Agents will not receive calls while in auxiliary work state.

AVD (Alternate Voice And Data). The term used to describe the way multimedia modems transmit both voice and data. This method uses the pauses in human speech to transmit data during the silences in a conversation

Average Delay Of Delayed Callers. Average wait in queue experienced only by those callers who are delayed. Does not include those calls that are answered immediately.

Average Delay To Abandon. Average time callers are held in queue before disconnecting (prior to agent answer).

B.

Backbone. A transmission facility designed to interconnect lower speed distribution channels or clusters of dispersed users or devices. Backbone may refer to the part of the communications network that carries the heaviest traffic or part of a network that joins LANs together.

Bandwidth. The width of a communications channel. In analogue communications, bandwidth is typically measured in Hertz – cycles per second. In digital communications, bandwidth is typically measured in bits per second. A voice conversation in analogue format is typically 3,000 hertz. In digital communications, encoded in PCM, it's 64,000 bits per second.

Base Staff. The minimum number of agents needed to provide service in a given period of time. Also called “bodies in seats”. Does not account for non-productive work factors such as breaks, training, meetings, etc.

Basic Rate Interface (BRI). An ISDN service offering including 2 Bearer or transmissions channels and 1 Data or control channel. (See ISDN.)

Baud. A unit of signaling speed derived from the reciprocal time of the shortest pulse width in the bit stream.

Baudot Code. A 5-bit, 32-character alphanumeric code used in asynchronous teleprinter transmission.

BCD (Binary Coded Decimal). A system of binary numbering where each decimal digit is represented by four (4) bits.

Beep Tone. A tone heard before a call arrives, also called a zip tone. Beep tones are sometimes used to announce that a call is being monitored.

Benchmarking. The process of measuring performance against some set standard. Benchmarking in the call center industry refers to comparing demographics, processes, and service with other organizations to identify strengths, weaknesses, and improvement opportunities in one’s own organization.

Binary. A number system that uses only two characters (e.g., “0” and “1”).

Bit. A contraction of Binary digit. The smallest unit of information in a code using the binary system. It represents one of two possible values, such as a *mark* or a *space*, a *1* or a *0*, or an *on* or an *off*.

Bit Rate. The speed at which bits are transmitted, usually expressed in bits per second (bps).

Block. A group of continuous characters transmitted as a unit.

Blocked Call. A call that cannot be completed because of a busy condition.

Blocking. The inability to complete a connection between two points because of a busy condition in the pathway.

Buffer. A temporary storage device used to compensate for a difference in rate of flow of data or time of occurrence of events when transmitting data from one device to another.

Busy Hour. The two consecutive half-hour periods of a day in which the largest number of calls are offered.

Bypass. The use of private communications facilities or services to go around, avoid, or bypass the local telephone company exchanges of the public switched network.

Byte. An 8-bit quantity of information, used mainly in referring to data transfer, semiconductor capacity, and data storage; also referred to in data communications as an octet or character.

C.

Call Blending. The process of combining the flow of inbound and outbound calls to a set of agents. Call blending can be accomplished manually or by means of automated dialing systems that place calls with inbound as well as outbound agents.

Call By Call Routing. The process of routing calls on an individual basis to the optimal destination.

Call Capacity. The ability of a telephone system to handle a specific number of calls to provide a specific grade of service.

Call Center. An operation with two or more persons handling incoming or outgoing calls. Call centers may be help desks, customer service centers, catalog sales centers, reservations centers, or telemarketing/collections operations.

Caller ID. A telephone network feature of the local telephone company by which the telephone number of the caller is passed to the called party.

Call Volume Forecast. A prediction of the offered call volume for specific months, days, or intra-day periods.

Calls Forcing. Inbound calls to the agent are sent to the agent's headset preceded by a beep tone. No ringing of the phone is produced and no delay is associated with the agent choosing to answer the call.

Carrier. A signal suitable for modulation by an audio or other signal. The resultant modulated signal can then be transmitted over a communication facility. May also refer to a transmission provider (e.g., long distance carrier).

CCS (Hundred Call Seconds). A measurement of telecommunication usage. One hundred seconds of usage equals one CCS.

CCITT (Consultative Committee On International Telephony And Telegraphy). A committee of the International Telecommunication Union, which serves as the medium for recommendations for international communications systems. Now known as the International Telecommunications Union, Telephony (ITU-T).

CDR (Call-Detail Recording). A feature of private branch exchanges where each telephone call is logged, typically by time and charges, and retrievable by the network operator for cost charging by department; also called station message detail recording (SMDR).

Central Office. A synonym for switching center also referred to as a telephone exchange.

Central Office Switching Equipment. The mechanical, electro-mechanical, or electronic equipment that provides interconnections among the lines and interoffice trunks connected to it.

Centrex. A service offering of a local telephone provider which can be leased as an alternative to a privately owned, on-premise switching system such as PBX. The facilities for Centrex are not located on the customer's premise, but are an integral part of a telephone company central office.

Channel. A communications path for electrical transmission

Character. A standard bit representation of a symbol, number, or punctuation marks; generally means the same as byte.

Circuit. The Complete path between two end-terminals over which one-way or two-way communication can be provided.

Circuit Switching. The process of establishing and maintaining a circuit between two or more users on demand and giving them exclusive use of the circuit until the connection is released.

Class-Of-Service Restriction. A feature that limits the use of a telephone station to certain type of calls.

Client Server Architecture. A network of computers that share common databases and files.

Coaxial Cable. A cable consisting of one or more hollow cylinders with a single wire running down the center of each cylinder. It can carry a much higher bandwidth than a wire pair.

Code. Any system of communication in which arbitrary groups of symbols represent units of plain text of various lengths.

Code Set. The complete set of representations defined by a code.

Coding. The process of converting information into a form suitable for communications.

Common Carrier. An organization in the business of providing communications services to the public, and which is subject to regulation by the appropriate state or federal agency.

Conditional Routing. The capability of the ACD to route calls on an “if...then” basis. Routing conditions can include day of week, time of day, agent availability, type of call, service needed, etc.

Conditioned Line. A private line that has been specially treated to reduce distortion and improve transmission quality.

Cost-Based Pricing. Rates for telecommunications services that are based upon the cost of providing the service.

Country Code. The second set of digits a caller dials to place an international call (following the international access code).

CPE (Customer-Premises Equipment). Terminal and/or switching equipment installed on the customer’s premises that is connected to the telephone network.

Crossbar System. A type of common-control switching system using switches that have vertical paths and horizontal paths interconnected to form a communications link.

Cross-Subsidization. Pricing methods wherein some rates are much higher than cost while others are below cost. The excess revenues from the overpriced rates are used to compensate for the revenue shortage resulting from the below cost rates.

Crosstalk. The phenomenon in which a signal transmitted on one circuit or channel of a transmission system creates an undesired effect in another circuit or channel.

CSTA (Computer Supported Telephony Application). A standard from the European Computer Manufacturers Association (ECMA) for linking computers to telephone systems.

CTI (Computer Telephony Integration). The linking of the computer in the ACD system to the computer which houses the company’s database to permit faster and more efficient handling of calls. Screen pop is a function of CTI which can direct the data screen of the calling person’s account to the terminal of the agent as the call is being routed there, saving the agent from having to identify the caller’s account number, key it in, and wait for computer response. Also permits transfer of data screens to a second agent when a call is transferred and many other capabilities impossible with only one or the other system independently.

Cutover. The activation of a newly installed telephone system that either replaces an older system or is a new installation

D

Data Communications. The movement of coded information by means of electrical transmissions systems.

Data Directed Call Routing. A capability whereby an ACD can automatically process calls based on data provided by a database of information resident in a separate data system. For example, a caller inputs an account number via touch-tone phone. The number is sent to a data system holding a database of information on customers. The number is identified, validated and the call is distributed automatically based on the specific account type.

Day Of Week Routing. The routing of calls to different destinations based on time of day. Generally used to route calls to alternate sites or automated systems on weekend days or holidays when agents may not be available at traditional destination.

DDD (Direct Distance Dialing). A long distance service that permits customers to dial their own long distance calls without assistance from an operator.

Dedicated Circuit Or Line. A point-to-point telecommunications channel used exclusively by a single subscriber. Also called private line or leased line.

Delay Or Queue Time. The time callers remain in queue waiting for an agent to become free. May include the time listening to the delay announcements, but does not include the time spent going through an automated attendant menu system selecting choices that result in direction of the call to a specific resource or agent group. This statistic is calculated by the ACD system and may vary among vendor products.

Delay Announcements. Recorded announcements played to holding callers containing information and requesting their patience in waiting for an agent.

Delivery Time. The time from the start of transmission at the transmitting terminal to the completion of the reception at the receiving terminal, when data is flowing in only one direction.

Demodulation. A function of changing the band pattern of a message on a carrier wave back into the form of the original message signal after transmission.

Desktop Application. Computer software programs used to accomplish a variety of tasks. Word processors, spreadsheets, database, contact management and graphics programs are all examples of desktop applications

Dial-Tone First Service. A coin telephone that permits customers to reach the operator and to dial certain calls, such as directory assistance or 911, without depositing a coin.

DID (Direct In Dial). Feature of some telephone switches and PBXs that allows an external caller to call an extension without going through an operator.

Divestiture. The result of the Modified Final Judgement which separated AT&T's long distance and equipment manufacturing businesses from the local exchange companies. It created seven separately owned Regional Bell Operating Companies (RBOC).

Dominant Carrier. A carrier that has such a large share of the market that it virtually controls the market.

DNIS (Dialed Number Identification Service). DNIS is a feature of 800 and 900 lines that provides the number the caller dialed to the receiving switch. Using DNIS capabilities, one trunk group can be used to serve multiple applications. The DNIS number can be provided in a number of ways, in-band or out-of-band, ISDN or via a separate data channel. Generally, a DNIS number will be used to identify to the answering telephone system the "application" the caller dialed.

DSVD (Digital Simultaneous Voice And Data). The terms used to describe the way multimedia modems transmit both voice and data. This method converts the voice and data into packets that are transmitted over digital circuits one after the other and sorted at the receiving site. The packets need to be transmitted at speeds fast enough that the speech is perceived as continuous and without delay or unnatural pauses.

DTMF (Dual-Tone Multifrequency). A method of signaling a desired telephone number by sending tones on a telephone line. Often referred to as touch-tone.

E.

EAS (Extended Area Service). A service that permits a subscriber to make calls to a designated area beyond the local exchange area and be charged local rates instead of toll rates.

Echo. A type of signal distortion; an electric wave that has been reflected back to the transmitter with sufficient magnitude and delay to be perceived.

Echo Canceler. Device that performs the same function as an echo suppressor, but unlike that device does not clip speech of the speaker and can work during two-way transmissions.

Echo Suppressor. A device installed by telephone companies to reduce echo to a negligible level.

Echo Suppressor Disabler. A device that transmits a tone that can be heard on the telephone as a high-pitched whistle. The tone disables the echo suppressor until there has been no signal on the line for approximately 50 milliseconds.

ECMA. The European Computer Manufacturers Association.

Economies Of Scale. The principle of gaining better efficiencies through larger group sizes. For example, twice as many calls does not require twice as many staff or trunks to handle because of inherent efficiencies of larger offered call loads and larger groups.

E-Mail (Electronic Mail). The transmission, electronically, of letters, memos and messages from one computer to another.

Enhanced Services. Telecommunication services that involve computer processing of the transmitted information and which are provided on a competitive basis by a number of vendors.

Equal Access. A provision of the MFJ which mandated that local telephone companies provide access from the local exchanges to any long distance company, and that the quality of the access must be equal for all long distance carriers. Thus, customers could dial carriers of their choice without having to dial extra digits.

Erlang. A measurement of telecommunication traffic usage. One Erlang equals 3600 seconds of usage in a one hour period of time.

Erlang Techniques. A set of traffic engineering techniques utilized to determine numbers of facilities required in various telecommunications scenarios. Developed by Danish mathematician A.K.Erlang in early 1900s. Erlang B is used to determine required facilities in an “all calls cleared” situation such as automatic route selection in a PBX. Extended Erlang B is a modified technique used when there is measurable retry of calls taking place when calls are blocked. Erlang C assumes blocked calls will wait in queue and is therefore the Erlang technique used to determine staffing needs in a typical “hold for the next agent” call center scenario.

Exchange. A specific geographical area served by one or more telephone offices, including the physical plant and equipment necessary to provide communications service in the area. Usually a single city or large division of a town or village.

Erlang Formula. A mathematical method of making predictions about randomly arriving workload (such as telephone calls) based on known information (such as average call duration). Although traditionally used in telephone traffic engineering (to determine the required number of trunks), Erlang formulae have applications in call center staffing as well. There are several formulae which each replicate a specific type of traffic situation.

F.

Fax / Fax On Demand. Facsimile transmission is the process through which documents are scanned, digitally encoded, transmitted, and decoded for printing on the other end. Fax on demand is a system by which callers can request documents or information

through use of a touch-tone telephone pad, and documents are faxed to numbers indicated by caller.

FCC (Federal Communications Commission). A board of commissioners appointed by the president of the United States under the Communication Act of 1934, having the power to regulate interstate and foreign electrical communication systems originating in the United States.

Federal Access Charge. A surcharge ordered by the FCC directing that an amount be added to every local line charge to compensate for the loss in revenue caused by the discontinuance of the subsidy of local service by long distance service after divestiture.

Fiber Optics. Hair-thin filaments of transparent glass or plastic that use light instead of electricity to transmit voice, video, or data signals.

First Party Control. The ability to “control” the initial transfer, conference, etc., during a call with your telephone or with a card in your PC, which emulates a telephone. First party control is discontinued when the call has been transferred. Also see TAPI.

Flat Rate Service. Service wherein the user is entitled to an unlimited number of telephone calls within a specified local service area for a fixed monthly rate.

Frequency Division Multiplexing. A multiplexing technique in which each signal is assigned to a specific frequency band.

FTE (Full-Time Equivalent). Full-time equivalent person, equal to the number of total scheduled person hours divided by the number of hours per week which constitute a full-time person (e.g., 40 hours, or 35 hours). FTE may consist of several part-time individuals whose combined work hours in a week equal the full-time person, but may not incur benefits expenses.

Fulfillment. Describes any mail-out process that is associated with the work generated in the call center. For example, may be the actual generation and mailing of the member identification cards requested in phone calls to the center.

FX (Foreign Exchange Service). A service providing a circuit connecting a subscriber’s main station or private branch with a central office of an exchange other than that which normally serves the exchange area in which the subscriber is located.

G.

Gate. An ACD routing division that allows calls arriving on specific telephone trunks or calls of certain transaction types to be answered by specific groups of employees. Also referred to as *split* or *group*.

Gateway. A network station that serves to interconnect two otherwise incompatible networks or devices; performs a protocol conversion operation across numerous communications layers.

Grade Of Service. The definition of service on telecommunications transmission facilities. Grade of service is typically defined as a “P” factor – the probability of encountering a busy signal on a trunk or group of trunks. For example, a P01 grade of service means that one percent of calls will encounter a busy signal.

GUI (Graphical User Interface). A generic name for any computer interface that substitutes graphics for characters. GUIs usually work with a mouse or trackball (i.e., Windows and Apple Macintosh).

H.

Handled Call. A call that is answered by an employee as opposed to being blocked or abandoned.

Handle Time. The combination of conversation time and after call work time.

Handshaking. An exchange of predetermined characters or signals between two stations to provide control or synchronism after a connection is established.

Hardware. The physical devices that make up, or are attached to, a computer system.

HDX (Half-Duplex). A circuit that affords communication in either direction but in only one direction at a time.

Help Desk. A call center typically set up to handle calls in support of a product or service. Used most often to describe the customer support operation of computer software or hardware suppliers.

Home Agent An agent that works from home or someplace else other than the actual call center location.

I.

Identified Ringing. A telephone service feature that provides distinctive ringing tones for different categories of calls.

Individual-Line Service. One telephone line to serve one subscriber.

Integrated Voice Response (IVR). See Voice Response.

Intercept Service. A telephone service provided by telephone companies to inform customers of the status of telephone numbers that are not in service. Typical information relates to disconnected telephone, number change, and no such number.

Interconnect Company. A company that provides telecommunications terminal equipment for connection to telephone company lines. Originally used to designate any vendor that was not AT&T during the early days of competition

Interconnect Equipment. The equipment at each end of a communication channel; also called terminal equipment and customer-premises equipment.

Interface. A link—hardware, software, or both—that allows two devices and/or programs to communicate with each other.

Interflow. Calls that flow out of the ACD to another site, a voice mail system, or telephone number that is not part of the ACD environment. When an ACD group cannot handle all the calls coming in, the call can be manually or automatically inter-flowed to another site. This feature allows calls to be rerouted to a predefined destination

International Access Code. The first set of digits a customer dials to place an international telephone call.

Intraflow/Overflow. Calls that flow between agent groups within an ACD. Typically, it is based in an effort to balance workload and minimize caller delay

Invisible Queue. A situation in which callers are waiting and have no way of knowing how long the waiting line is.

IRC (International Record Carrier). One of a group of common carriers that until a few years ago, exclusively carried data and text (record) traffic from gateway cities in the United States to locations abroad and overseas. With recent FCC rulings, there is no longer rigid IRC monopoly, and several new carriers have been allowed to service points domestically.

ISDN (Integrated Services Digital Network). A set of standards established worldwide to permit interconnection of unlike devices and service offerings. (See Basic Rate Interface and Net Primary Rate Interface.)

ISO (International Standards Organization). An organization established to promote the development of standards to facilitate the international exchange of goods and services, and to develop mutual cooperation in areas of intellectual, scientific, technological, and economic activity.

ITA (International Telegraph Alphabet). A code with the same characteristics as the Baudot code that is used in international telex transmission.

ITU (International Telecommunications Union). The telecommunications agency of the United Nations, established to promote standardized telecommunications on a worldwide basis.

IVR (Interactive Voice Response). A device which automates retrieval and processing of information by phone using touch tone signaling or voice recognition to access information residing on a server to give a response. The response may be given by a recorded human voice or a synthesized (computerized) voice. IVRs are used in applications such as “bank by phone” or “check on my order” which not only distributes information but collects transaction information as well.

IXC OR IC (Interchange Carrier). A carrier engaged in the provision of inter-exchange (long distance) telecommunications services.

J.

K.

Key Telephone Set. A telephone with buttons or keys located on or near the telephone. It is used with associated equipment to provide features such as call holding, multi-line pickup, signaling, intercommunication (intercom), and conference calling.

Key Telephone System. An arrangement of key telephone sets and associated circuitry located on a customer’s premise that permits more than one telephone line to be terminated on one telephone instrument

L.

LAN (Local Area Network). A short-distance network (usually within a single office or building) that links computers and peripheral devices under some form of standard control.

LATA. An acronym for *Local Access and Transport Area*, one of the 161 local telephone serving areas in the United States, generally encompassing the largest standard statistical metropolitan areas subdivisions. These were established as a result of the Bell divestiture that now distinguishes local from long distance service. Circuits with both ends within a LATA (*intra-LATA*) are generally the sole responsibility of the local telephone company, while circuits that cross the LATA boundaries (*inter-LATA*) are the responsibility of an inter-exchange carrier.

LDQ (Longest Delay In Queue). The longest time a caller waited in queue prior to being handled. Represents the worst case during the measurement period. Longest delay to abandon measures the worst case for a caller who was not handled

LEC (Local Exchange Carrier). A carrier that provides telecommunications services within a local exchange.

Line Capacity. The capacity of a telephone system expressed in terms of the maximum number of lines that can be physically served.

Line Conditioning. Communication channels that are specially treated to reduce distortion and improve transmission

Line Privacy. A telephone service feature that prevents a person at an extension telephone from listening in on a conversation.

Link. The communication facilities existing between adjacent nodes.

Load Balancing. The process of balancing calls between multiple sites, queues, or agent groups.

Local Exchange Service. Public telephone service to points within the designated local service area (exchange area).

Local Service Area. A geographical area that has a single, uniform set of charges for telephone service.

Lockout. A telephone service feature that prevents any interference with a call that is in progress.

Long Distance Access Code. A code used to gain access to the long distance network of a specific long distance carrier.

Look Ahead Routing/Queuing. The capability of a system to “look ahead” to evaluate the availability/condition of a trunk group or agent group before routing or overflowing a call there.

M.

Management Information System (MIS). The systems that manage the flow of information throughout an organization usually coordinated by a management information system department.

Management Reports (ACD). Management reports show detailed information on various aspects of an ACD operation. These reports offer valuable information on how well the system configuration is working, the service being provided to callers, and the performance of the resources (i.e., agents, trunks, IVR ports, etc.).

MBWA (Management By Walking Around). The common practice in call centers of supervisors/managers physically walking through the call center to observe call handling and overall performance.

Measured Local Service. Telephone service for which a charge is made in accordance with a measured amount of usage, billed as message units.

Message Switching. A method of handling message traffic through a switching center, either from local users or from other switching centers, whereby a connection is established between the calling and the called stations or the message traffic is stored and forwarded through the system.

Message Systems. Electrical transmission systems, such as TWX and Telex, that send messages (as opposed to conversation) in data form.

Message Unit. A unit of measurement used in charging for local telephone calls. Criteria used are typically the length of the call and the distance involved.

Middleware. Software which takes two or more different applications and makes them work seamlessly together

MMTA (Multi-Media Telecommunications Association). An organization comprised of manufacturers, suppliers, and service companies engaged in interconnect activities, and/or furnishing equipment for interconnect facilities, and private users.

Modem. Acronym for *Modulator/Demodulator*. An electronic device used for converting digital signals into analogue signals for transmission and reconvertng the analogue signal into digital signals.

Modular Jack. An interface device that permits easy interconnection of various telecommunications equipment and circuits.

Modulation. The process, or the result of the process, of varying certain characteristics of a signal in accordance with a message signal (e.g., amplitude, frequency, and phase). Generally used to convert digital transmissions to analogue signals for transmission on analogue transmission facilities.

Monitoring. The practice of listening to agents' telephone calls to assess the quality with which the call is handled. Also called service observation. May be silent, announced, side-by-side, or recorded for later review.

Multiplexer. A device that combines a number of low-speed channels into one higher speed channel at one end of a transmission system and divides it back into low-speed channels at the other.

MVIP (Multi Vendor Integration Protocol). MVIP is a set of standards which uses communications hardware and software to allow telephony products from different vendors to exchange information in a standard digital format

N.

Network. A series of points, nodes, or stations connected by communication channels.

Network Access. The capability of interconnection with a network.

Network Busy Condition. A condition that is encountered when the network has received a greater volume of traffic than it can process. A caller is notified of this condition by a fast-busy signal (120 IPMs) to distinguish from a station busy signal.

Next Available Agent. The practice of routing the first call in queue to the first available agent, maintaining an equitable workload among agents. If no queue exists, calls are routing the agent idle the longest.

Node. In network topology, a terminal of any branch of a network or a terminal common to two or more branches of a network.

NPA (Numbering Plan Area). A geographic division within which telephone directory numbers are sub-grouped. A three-digit code is assigned to each numbering plan area in the North American Dialing Plan.

O.

OCC. Other common carrier used to define a long-distance carrier (see IXC).

Occupancy. Generally a percent of logged in time that an agent spends in active call handling (i.e., on incoming calls, in wrap up, in outbound calls).

Off-Hook. In telephony, a condition indicating the active state of a subscriber's telephone circuit; a line state that signals a central office that a user requires service; opposite of on-hook.

Offered Call. A call that is received by the ACD. Offered calls are then either answered by a resource (handled) or abandoned.

Offline. The condition wherein devices or subsystems are not connected into, do not form part of, and are not subject to the same controls as an operational system. These devices may, however, be operated independently.

Off-Peak. Periods of time other than the call center's busiest periods. Off-peak times are used to accomplish non-phone work in most centers. Term also used to refer to discount time periods by telecommunications carriers.

ONA (Open Network Architecture). A set of provisions imposed by the FCC on the RBOCs and AT&T to ensure competitive availability of an access to unregulated enhanced network services.

On-Hook. Deactivated condition of a subscriber's telephone circuit, in which the telephone or circuit is not in use; opposite of off-hook.

Originating Restriction. A telephone service feature that restricts the telephone station from being used to place outgoing telephone calls.

Outgoing Restriction. A telephone service feature that provides the capability to restrict certain telephones from making specified types of outgoing calls, such as long distance.

Outsourcing. Contracting with an outside company to handle some or all of calls.

Overflow. Calls that route from one place to another group or site. Intraflow is the term used to describe the routing of calls to another group within the same ACD, while interflow refers to routing a call from one ACD to another site.

P.

PBX. Private branch exchange. A private telephone exchange located on the user's premises and connected to the public network via trunks. (Sometimes called PABX where the A stands for "automatic.")

Peak Traffic. The highest volume load of traffic offered to a telecommunications system.

Percent Allocation. A call routing strategy used by multi-site call center operations. Calls in the network are routed to various sites based on user-defined percentages.

Poisson Table. Traffic capability table developed by Simeon Poisson; based on the assumption that the sources of telephone traffic are infinite and that all unsuccessful call attempts are retired relatively soon. Largely replaced by Erlang Tables that more accurately represent a variety of traffic situations.

Polling. The process of calling up terminals in sequence to request the terminal to transmit a message. It is usually performed automatically by a central control unit

Predictive Dialer. A device used to automate the method of making outbound calls and directing them to an agent when a live person answers. Predictive dialing screens out other responses such as answering machines, busy signals or operator intercepts and records the results. Using mathematical algorithms, the dialer takes into account the number of available agents, the number of lines, talk time and the probability of call results to determine how many calls need to be made to increase agent productivity. Example applications of predictive dialing include collections and marketing.

Preview Dialer. A device that presents the account information and phone number on the screen to allow the agent to "preview" the information before he/she instructs the dialer to dial (or not dial) the call.

Progressive Dialer. A device that presents the account information and phone number on the screen after the number is dialed. This dialer is more automated than a preview dialer but less automated than a predictive dialer.

Primary Carrier. The long distance carrier chosen by a customer to carry long distance traffic when the customer dials “1” plus the area code and called telephone number.

(PRI) Primary Rate Interface. An ISDN service includes 23 Bearer or transmission channels and 1 Data or intra channel in North America. In Europe, PRI includes 30B + 2D.

Private Network. A configuration of private lines and related switching facilities that are provided for the exclusive use of one customer.

PSC (Public Service Commission). An agency charged with regulating communication services, as well as other public utility services, within a state. Called Public Utility Commission in some states.

PSN (Public Switched Network). The public telephone network which provides the capability of connecting any two telephones.

Q.

Queue. The “waiting line” for delayed calls. A queue holds the call until an agent is available.

R.

Random Call Arrivals. The normal way in which calls arrive in a call center. In statistical terms, the Variance to Mean Ratio equals 1.

RBOC – Regional Bell Operating Company. (See Divestiture).

Real-Time Adherence. Measurement of how closely agents stick to their planned work schedule. Real-time statistics are available from the ACD to show the current state of any agent; these states can be compared to agent’s schedule to determine adherence at any point in time.

Real-Time Processing. Processing that occurs at the same time a transaction is taking place.

Recorded Announcement. Announcements that callers hear while waiting in queue. May provide general information about products or services, remind callers what information to have ready, or provide estimate of wait time and a better time to call back.

Remote Access. Pertaining to communication with a data processing facility through a data link. It also used to describe a PBX feature permitting users to dial into the PBX from an unattached station and gain access to PBX resources (e.g., trunks)

Remote Agent. Agents that are physically located outside the call center. These agents are usually connected to the call center on an as-needed or scheduled basis to supply additional answering capability. The agent's equipment is connected to the call center using telecommunications links providing the voice and data pathways.

Remote Terminal. The source in a data communications system; a computer device with keyboard, used for entering data.

Resale Carriers (Resellers). A communications carrier engaged in selling long distance services of other carriers.

Response Time. In a data system, the elapsed time between the end of transmission of an inquiry message and the beginning of the receipt of the response message measured at the inquiry originating station.

RFP (Request For Proposal). A detailed document prepared by a buyer which is sent to vendors to solicit a product configuration or service proposal, with prices, that meets the user's requirements. A vendors response to an RFP will typically be binding to the vendor.

Ring Delay (Delay Before Answer). A setting that can be made on the ACD-PBX that adjusts the number of rings before the system automatically answers the call. When calculating trunk-holding time this delay time must be included for a true total trunk holding time.

Routing. The process of selecting the circuit path for a message or call.

Routing Code. The area code that comprises the third group of digits a customer dials to place an international call, or the first set of digits a customer dials for a long distance call within the same nation.

S.

SCAI (Switch To Computers Applications Interface). A protocol that defines how telephone switches talk to outboard computers. Using SCAI, the call and accompanying computer data can be presented to the agent at the same time

Schedule. A record that specifies when an employee is supposed be on duty to handle calls. The complete definition of a schedule is the days of week worked, start time, break times and duration's (as well as paid/unpaid status), and stop time.

Schedule Exception. Any activity not planned in an employee's work schedule, including meetings, training sessions, unscheduled breaks, absenteeism.

Screen Monitoring. A system capability that allows a supervisor/manager to simultaneously see an agent's screen activity.

Screen Pop. Any technology, including IVR, ANI, or CTI that presents corresponding data on the computer screen simultaneously with the incoming call.

SCSA (Signal Computing System Architecture). This is the common set of standards that telecommunication system manufactures and computing system manufactures use to create computer telephony systems. Signal computing systems combine three major elements for call processing; network interfaces, digital signal processors and application programs.

Service Bureau. A third-party organization that handles the calls for another organization. Also called an outsourcer.

Service Level. Goals that are often expressed as the speed of answer to be attained or as some percentage of calls to be answered within some number of seconds (e.g., 80 percent of call answered within 30 seconds).

Service Quality. A measure of how well a call is handled, including such measures as consistency and friendliness of greeting, and ability to handle call to completion.

Silent Monitoring. A process which permits a supervisor to listen to both sides of a conversation including an agent and a caller. Used for determining training needs and performance quality. Neither agent nor caller is aware that the monitoring is taking place. Legal issues must be complied with in the use of the capability.

Simplex. A circuit affording communications in only one direction.

Skill Based Routing. A method of routing calls in which the call is routed to the person best able to meet that caller's needs, rather than simply routing to the first available or longest idle agent.

Speech Recognition. The capability of a voice processing system to recognize and translate human voice signals into digital signals a computer system can understand. Includes both speaker dependent and speaker independent systems, and may work through discrete syllable recognition (most basic) or continuous speech recognition (most advanced).

Speed Calling. A telephone service feature that permits a caller to reach certain frequently called numbers by using abbreviated telephone codes in place of the conventional telephone number. Also called automatic dialing.

Split. An ACD routing division that allows calls arriving on specific trunks or calls of certain transaction types to be answered by specific groups of employees. (Also referred to as *gate* or *group*).

Station. One of the input or output points on a communications system.

Step-By-Step Switching Equipment. An automatic switching system in which a call is advanced progressively step-by-step to the desired terminal under the direct control of pulses from a customer's dial.

Store And Forward. A communication service in which messages are received at intermediate points and stored for later re-transmission to a further point or to their ultimate destination.

Stored-Program Control. Electronic switching equipment that can be programmed to perform a variety of functions in addition to the conventional call completion.

Supervisor. Usually, the person who has first-line responsibility for the management of a group of agents. Often has a special telephone or computer terminal for monitoring agents and the system performance.

Switchhook. A switch on a telephone set that signals the central office that the telephone is either idle or in use. It is operated by the removal or replacement of the receiver, or handset, on the support mechanism. (Sometimes referred to as hook-switch.)

Switching. The process of transferring a connection from one telephone circuit to another by interconnecting the two circuits.

Switching Center. An installation in which switching equipment is used to interconnect communication circuits on a message or circuit-switching basis.

System Capacity. The fullest extent to which a telecommunications system can be used.

T.

T-1 Carrier. A time-division multiplexed digital transmission system that provides 24 voice-grade digital channels on one transmission media.

Talking Paths. A network of interconnected paths forming a communication link in a switching system.

Talk Time. The elapsed time from when an ACD agent answers a call until the agent disconnects.

Tandem Office. A high-level switching center in the local exchange or serving area.

TAO (Telephony Application Object). This is a SCSSA standard framework which is a hardware independent with a open software architecture that simplifies the design of distributed computer telephony systems.

TAPI (Telephone Application Programming Interface) – Microsoft’s Windows Telephony Application Programming Interface. TAPI is a set of functions that allow Windows applications to program telephone line based devices such as single- and multi-line phones, modems and fax machines in a device independent manner. TAPI supports first-party call control for desktop PC applications.

Telco A generic abbreviation for telephone company.

Telecommunication. Any transmission, emission, or reception of signs, signals, writing, images, and sounds or information of any nature by wire, radio, visual, or the electromagnetic system.

Telecommuting. Use of a telephone and/or computer system in the home that allows an employee perform job duties and to communicate with the office without actually traveling to and from work.

Teleconferencing. A conference between persons remote from one another but linked by a telecommunications system.

Telephone Exchange. A room or building equipped so that telephone lines terminating there may be interconnected as required.

Telephone Traffic. The flow of messages through a communications system.

Telephony. The science and practice of transmitting speech or other sounds over relatively large distances, i.e., distances normally greater than earshot range, and rendering the sound audible upon receipt.

Tele-Traffic Theory. The mathematical description of message flow in a communications network; a branch of applied probability

Telex. A worldwide switched message-exchange service.

Terminal. A point in the network at which data can either enter or leave; a device, usually equipped with a keyboard, often with a display, capable of sending and receiving data over a communications link.

Terminal Equipment. Communications equipment at each end of a circuit to permit the stations involved to accomplish the mission for which the circuit was established. (Sometimes called *terminal*.)

Third Party Control. The ability to “control” the call after the initial transfer or conferencing of another party. Third Party Control is also accomplished via computer (often a server on a LAN) attached to your PBX. Also see TSAPI.

Tie Line. A dedicated or private line that connects two switches, generally two PBXs in a private network.

Time Division Multiplexing. Multiplexing technique in which the channel frequency is assigned successively to several users at different times. See also *frequency division multiplexing*.

TMAP. Software developed by Northern Telecom designed to map Windows Telephony commands to Novell Telephony Services (TSAPI) commands. TMAP runs on a workstation and translates TAPI commands into TSAPI commands that are sent through a LAN to a telephony file server to the switch, seamlessly.

Toll Free. A service that enables callers to dial a call center at without incurring a long-distance charge. Numbers include 800 and 888 dialing codes.

Touch Tone. See Dual-Tone Multi-Frequency (DTMF).

Traffic. The flow of messages through a communications system.

Traffic Capacity Tables. Tables used to determine the quantities of trunks or equipment needed for a telecommunications system. (See Erlang Tables.)

Traffic Engineering. The art and science of designing facilities and resources to meet user requirements

Traffic Queuing. See queue.

Traffic Study. A study to determine the levels of traffic that a system is presently offered and/or handling. It consists of a count of calls classified by types (incoming, outgoing, local, long distance, WATS, etc.). The data obtained is used to forecast future traffic, which, in turn, is used in determining new system requirements.

Transmission. The dispatching of a signal, message, or other form of intelligence by wire, radio, telegraphy, telephony, facsimile, or other means.

Trunk. A single transmission channel between two points, both of which are either switching centers or nodes, or both.

Trunk Group. Several trunks provided as a group by the local telephone company or other carrier. Generally, all trunks in the group will be in use before a busy signal is returned to the caller.

Trunk Hold Time. The total length of time that a trunk is occupied by a particular call, from the moment the ringing is detected by the ACD to the moment the call is disconnected.

TSAPI (Telephony Service Application Programming Interface). Developed by AT&T Novell, it is an API for call control, call monitoring and query call routing, device/system maintenance capabilities and basic directory services). TSAPI supports third-party call control from networked PCs via the data network.

TSF (Telephone Service Factor). The Telephone Service Factor is the percent of calls answered in a defined number of seconds. The calculation for TSF may vary depending on equipment manufacturer. The TSF can be compared to the desired service level to determine if goals have been met.

U.

UCD (Uniform Call Distributor). A device for distributing many incoming calls uniformly among a group of agents. Generally less intelligent and less costly than an ACD. A UCD will distribute calls following a predetermined logic, for example “top down” or “round robin.” It will not typically pay any heed to real-time traffic load, or which agent has been busiest or idle the longest. Also, a UCD’s management reports tend to be rudimentary, consisting of simple peg counts, as opposed to an ACD, which can produce reports on the productivity of the agents.

Universal Agent. An agent that can handle both inbound and outbound calls, or can handle many different types of calls.

V.

VAC (Value-Added Carrier). A specialized common carrier that provides a service over and above the transmission of voice and data. The added value is usually computer-oriented.

Versit. This is a loose association between Apple, AT&T, IBM, and Siemens Rolm. This organization’s goals is to enable diverse communications and computing devices, applications and services from competing vendors to interoperate in all environments. Currently, Versit’s members are now working on making Telephony Services Call Control more standard, Versit has joined with the Enterprise Computer Telephony Forum (ECTF) which focuses on the technical challenges of the interoperability among CTI products.

Vertical Services. A method of pricing telecommunications services that is based upon the anticipated value of the service to the users rather than on the costs of providing the service.

Virtual Call Center. The concept of having network and agent resources that are located at multiple physical sites perform as if all resources were located at a single site.

Virtual Network. A carrier-provided service in which the public switched network provides capabilities similar to those of private lines, such as minimized dialing and call handling features

Voiceband. A communications channel with a bandwidth appropriate for analogue transmission, generally with a frequency range of about 300 to 3,000 Hz.

Voice Identification. A technology used to verify the identity of a person accessing a system by comparing spoken passwords with prerecorded computerized voice patterns.

Voice Processing. The technology that allows computers to speak, store human voices, and react to human speech.

Voice Recognition System. A telephone system using speech recognition to activate equipment that dials telephone numbers automatically. May be speaker-dependent or independent.

Voice Response. The conversion of computer output into spoken words and phrases that a human being can hear and understand; it is a combination of various frequencies of electrical impulses. It is generally used to permit a caller to access computer data through a telephone with a tone dial.

(VRU) Voice Response Unit. Also referred to as IVR (Interactive Voice Response Unit). A device which automates retrieval and processing of information by phone using touch tone signaling or voice recognition to access information residing on a computer to give a response. The response may be given by a recorded human voice or a synthesized (computerized) voice. VRUs are used in applications such as “bank by phone” or “check on my order which not only distributes information but collects transaction information as well.

W.

WATS (Wide Area Telecommunications Service). A service that permits customers to make outbound calls within a defined area or receive (800) long distance voice or data calls at reduced rates.

Wideband. A communications channel offering a transmission bandwidth greater than a voice-grade channel. Data transmission speeds on wideband facilities are typically in excess of 9.6 Kbps and often at rates such as 56 Kbps and 1.544 Mbps.

Workforce Management. The art and science of having the right number of agents, at the right times, to answer an accurately forecasted volume of incoming calls at the service level standard set by the call center.

Workforce Management System. A software system that automates the tasks of forecasting calls, determining staff requirements, creating staff schedules, and tracking performance of agents and overall call center.

Workload. For agents, the combination of total conversation (talk) time and after-call work time. For trunks, the combination of ring time, delay time, and conversation time.

Wrap-Up Time. The time required by an ACD agent after a conversation is ended, to complete work that is directly associated with the calls just completed. Does not include time for any other activities such as meetings, breaks, correspondence, etc.

X.

Y.

Z.

Zip Tone. A tone heard before a call arrives, also called a zip tone. Beep tones are sometimes used to announce that a call is being monitored.

Zone Call. A call to an exchange that is contiguous to a defined local exchange area. Zones are rate areas for billing purposes.