

# **Next Generation Interconnection Interoperability Forum (NGIIF) Reference Document: Part XIII, Terms and Definitions**

**Alliance for Telecommunications Industry Solutions**

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## **Abstract**

This document provides definitions for many of the uncommon terms and abbreviations as used in the NIIF Reference Documents.

## Foreword

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The Alliance for Telecommunications Industry Solutions (ATIS) serves the public through improved understanding between carriers, customers, and manufacturers. The Next Generation Interconnection Interoperability Forum (NGIIF) addresses next-generation network interconnection and interoperability issues associated with emerging technologies. Specifically, it develops operational procedures which involve the network aspects of architecture, disaster preparedness, installation, maintenance, management, reliability, routing, security, and testing between network operators. In addition, the NGIIF addresses issues which impact the interconnection of existing and next generation networks and facilitate the transition to emerging technologies.

The mandatory requirements are designated by the word *shall* and recommendations by the word *should*. Where both a mandatory requirement and a recommendation are specified for the same criterion, the recommendation represents a goal currently identifiable as having distinct compatibility or performance advantages. The word *may* denotes a optional capability that could augment the standard. The standard is fully functional without the incorporation of this optional capability.

Suggestions for improvement of this document are welcome. They should be sent to the Alliance for Telecommunications Industry Solutions, NGIIF, 1200 G Street NW, Suite 500, Washington, DC 20005.

At the time of consensus on this document, NGIIF, which was responsible for its development, had the following leadership:

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## Trademark Acknowledgements

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# Next Generation Interconnection Interoperability Forum (NGIIF) Reference Document: Part XIII, Terms and Definitions

## TERMS AND DEFINITIONS

The following are definitions of terms used in Next Generation Interconnection Interoperability (NGIIF) documents.

**3-Tone Slope:** The difference in loss between 1004 Hz and 404 Hz and 2804 Hz (also see “Attenuation Distortion”).

**555 Assignee/Number Holder:** The entity to whom a 555 number has been assigned.

**Access Code:** A uniform seven-digit code assigned by the Access Service Provider to an individual customer. The seven-digit code for Feature Group D has the form 101XXXX, and the seven-digit code for Feature Group B has the form 950-XXXX.

**Access Gateway:** An access interface between multiple types of line side services and devices and the packet network. Examples of these services and devices are Plain Old Telephone Service (POTS) telephones, Basic Rate Interface (BRI) sets, Coin telephones, as well as some Digital Subscriber Line (DSL) and private lines/special services on 2 and 4 wire DS0, DS1 interfaces, etc. The Access Gateway may also support an interface for line-based GR-303/TR-08 remote terminals. The Access Gateway may also provide functions such as audible ringing, power ringing, miscellaneous tones, etc. The Access Gateway may be connected to the network via various bit-rate and physical layer interfaces, and may be installed in controlled or outdoor environments. A Call Agent provides the specific call control, call processing and other management functions for the services and devices terminated on the Access Gateway.

**Access Service Customer (ASC) or Interexchange Customer:** 1) Any individual, partnership, association, joint-stock company, trust, governmental entity or corporation engaged for hire in interstate or foreign communication by wire or radio, between two or more exchanges. 2) In an evolving telecommunications environment, the term can also be used to denote wireless, internet protocol or other Next Generation Network (NGN) elements used between two or more networks.

**Access Service Provider (ASP):** 1) A company engaged in the business of furnishing access service in a franchised territory. 2) The term Access Service Provider (ASP) could also denote a company engaged in the business of supplying services such as wireless, internet protocol, or other Next Generation Network (NGN) elements.

**Access Service Request (ASR):** The ordering form used to request Access Services, both Special and Switched.

**Access Tandem:** 1) A telephone company or centralized equal access provider switching system that provides a concentration and distribution function for originating or terminating traffic between end offices and a customer-designated premises. [NECA/ FCC-5] 2) An exchange carrier switching system that provides a traffic concentration and distribution function for inter- Local Access & Transport Area (LATA) traffic originating/terminating within a Local Access & Transport Area (LATA). [T1.506-1989]

**Active Code:** An NPA-NXX code assigned to a Service Provider (SP) by the Central Office (CO) Code Administrator and implemented in the Public Switched Telephone Network (PSTN) for specific routing and rating requirements as of the LERG™ Routing Guide effective date.

**Additional Cooperative Acceptance Testing (ACAT):** ACAT of Switched Access Service involves the Access Service Provider provision of a technician at its office(s) and the customer provides a technician at its location, with suitable test equipment to perform the required tests.

ACATs may, for example, consist of the following tests:

- Impulse Noise
- Phase Jitter
- Signal to C-Notched Noise Ratio
- Intermodulation (Nonlinear) Distortion
- Frequency Shift (Offset)
- Envelope Delay Distortion
- Dial Pulse Percent Break

**Administrative Numbers:** Administrative numbers are numbers used by telecommunications carriers to perform internal administrative or operational functions necessary to maintain reasonable quality of service standards. (FCC 00-104 §52.15 (f)(1) (i))

Examples of administrative numbers are: Test numbers, employee/official numbers, Location Routing Numbers, Temporary Local Directory Numbers, soft dial tone numbers and wireless E9-1-1 (Emergency Service Routing Digits (ESRD)/Emergency Service Routing Key (ESRK)) numbers.

**Administrative Operating Company Number (AOCN):** A four character numeric or alphanumeric that identifies the administrator of one (or more) data records contained in iconectiv®'s Business Integrated Rating and Routing Database System (BIRRDs). Numeric/alphanumeric AOCNs are determined by Operating Company Number (OCN) assignment. The AOCN further identifies the entity authorized by the code holder to input and maintain data into BIRRDs.

**Advanced Intelligent Network (AIN):** A telecommunications network architecture that uses databases to facilitate call processing, call routing, and network management, allowing carriers to change the routing of both inbound and outbound calls from moment to moment. [FCC-5] 2. A proposed Intelligent Network (IN) architecture that includes both IN/1+ and IN/2 concepts.

**Affected Parties:** 1) those entities that have applied for and/or received central office code (NXX) assignments or reservations, or thousands-block (NXX-X) assignments; 2) all interested members of the industry within the affected NPA. This term is further defined in ATIS-0300119, Thousands-Block (NPA-NXX-X) & Central Office Code (NPA-NXX) Administration Guidelines (TBCOCAG).

**Agency Authorization:** See "Customer's Agent"

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**Alternate Mark Inversion (AMI) Signal:** A pseudo ternary signal, representing binary digits, in which (a) successive "marks" are of alternately positive and negative polarity and the absolute values of their amplitudes are normally equal and (b) "spaces" are of zero amplitude. Synonym bipolar signal.

**Answer/Disconnect Supervision:** Denotes the transmission of the switch trunk equipment supervisory signal (off-hook or on-hook) to the customer's point of termination, typically as an indication that the called or calling party has answered or disconnected.

**Applicant/Code Applicant:** Service Providers who submit a Central Office Code Request to the Central Office (CO) Code Administrator for the purpose of being assigned a CO Code for their use. In thousands-block telephone number pooling, the Pooling Administrator is authorized to apply for the assignment of CO Codes as outlined in ATIS-0300119, Thousands-Block (NPA-NXX-X) & Central Office Code (NPA-NXX) Administration Guidelines (TBCOCAG).

**ASC:** See "Access Service Customer"

**ASP:** See "Access Service Provider"

**Assigned Numbers:** Assigned numbers are numbers working in the Public Switched Telephone Network (PSTN) under an agreement such as a contract or tariff at the request of specific end users or customers for their use, or numbers not yet working but having a customer service order pending. Numbers that are not yet working and have a service order pending for more than five calendar days shall not be classified as assigned numbers. (FCC 00-104 §52.15 (f)(1) (iii))

**Attenuation Distortion:** The difference in loss at specified frequencies relative to the loss at 1004 Hz, unless otherwise specified. [NECA/ FCC-5]

**Audit:** (relative to numbering guidelines and FCC regulations): The accumulation and evaluation of evidence about documented information of an auditee to determine and report on the degree of compliance with Industry Numbering Committee (INC) industry guidelines. Audit or auditing also refers to examination and verification during testing and other telecommunication switch functions.

**Automatic Code Gap (ACG):** A code control that is implemented automatically in response to a request from a database to limit traffic. This control can be in the form of six (6) through ten (10) digits. A six-digit control is used to protect the database in instances of a general overload. A ten-digit control is used to control focused overloads.

**Automatic Congestion Control (ACC):** ACC is a two-part feature. In order for ACC to function properly it must be implemented in the originating and terminating nodes of an interconnected network. The first part enables a (terminating) network node to alert interconnected nodes that it is in Machine Congestion 1 or 2 (MC1 or MC2). The second part allows a distant (originating) network node to automatically react to an ACC message and enact trunk group controls (Cancel To (CANT) and SKIP) on specific trunk groups.

**Automatic Number Identification (ANI):** 1) A service feature in which the directory number or equipment number of a calling station is automatically obtained. Note: ANI is used in message accounting. 2) The code that provides the billing number of the line or trunk that originated a call. [T1.104-1988] 3) A system that identifies the billing account for a call. For 9-1-1 systems, the ANI identifies the calling party and may be used as a call back number. [47CFR]

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**Automatic Scheduled Testing (AST):** AST of Switched Access Services (Feature Groups B, C and D), where the customer provides remote office test lines and 105 test lines with associated responders or their functional equivalent, will consist of monthly loss and C-message noise tests and annual balance test.

**B8ZS (Bipolar with 8-Zero Substitution):** A code in which eight consecutive zeros are replaced with the sequence 000+-0-+ if the preceding pulse was + and with the sequence 000-+0+- of the preceding pulse was -, where + represents a positive pulse, - represents a negative pulse, and 0 represents no pulse.

**Balance (100 TYPE) Test Line:** An arrangement in an end office which provides for balance and noise testing. The test can be either 600 ohm or 900 ohm depending on office type.

**Bit Error Rate:** Deprecated term. See "Bit Error Ratio".

**Bit Error Ratio (BER):** The number of erroneous bits divided by the total number of bits transmitted, received, or processed over some stipulated period. Note 1: Examples of bit error ratio are (a) transmission BER, i.e., the number of erroneous bits received divided by the total number of bits transmitted; and (b) information BER, i.e., the number of erroneous decoded (corrected) bits divided by the total number of decoded (corrected) bits. Note 2: The BER is usually expressed as a coefficient and a power of 10; for example, 2.5 erroneous bits out of 100,000 bits transmitted would be 2.5 out of 10<sup>5</sup> or  $2.5 \times 10^{-5}$ .

**Bit Error Rate Test:** A test performed on a digital facility/service which counts erroneous bits and divides them by the bits sent over a set period of time. Usually expressed as a power of 10 e.g. (1 x 10<sup>-6</sup>).

**Business Information Rating and Routing System (BIRRDs):** A centralized database maintained by iconectiv® through which Service Providers or their authorized representatives enter and maintain routing and rating data in support of their NANP numbering assignments. Output from BIRRDs includes the iconectiv® LERG™ Routing Guide and the iconectiv® TPM™ Data Source.

**Block Holder:** The Service Provider to which a thousands-block (NXX-X) has been assigned for use.

**Blocked Call:** A blocked call is said to have occurred when a call presented to a telecommunications Service Provider facility cannot be completed due to Blocking.

**Blocking:** 1) The formatting of data into blocks for purposes of transmission, storage, checking, or other functions. 2) Denying access to, or use of, a facility, system, or component. 3) The failure of a telecommunications network to meet a user service demand, because of the lack of an available communications path.

**C-Message Noise:** The frequency weighted average noise within an idle voice channel. The frequency weighting, called C-message, is used to simulate the frequency characteristic of the 500-type telephone set and the hearing of the average subscriber.

**C-Notched Noise:** The C-message frequency weighted noise on a voice channel with a holding tone, which is removed at the measuring end through a notch (very narrow band) filter.

**Call Agent:** Provides call processing, call control, feature control and Operations Administration Maintenance & Provisioning to manage services for a packet network comprised of multiple types of media gateway endpoints.

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The network itself may transport traffic over many types of packet switching fabric, such as Internet Protocol (IP), Ethernet, Asynchronous Transfer Mode (ATM), or Frame Relay. The Media Gateways (i.e., Access and Trunk Gateways) may be connected to the network via various bit-rate and physical layer interfaces. The Call Agent may use one or many different control protocols to communicate with the media gateways. The Call Agent provides the intelligence and capability to control the overall node-to-node signaling for both on-net and off-net calls. This is sometimes referred to as a "Softswitch".

**Call Gap (CG):** A code control that regulates the maximum rate at which calls are released toward a destination code. Equipment vendors commonly provide the capability to Call Gap at intervals of 0.10 to 600 seconds on a range of numbers from three (3), six (6), or seven (7), through ten (10) digits.

**Call Through Test:** Confirms capabilities of the interface relative to an actual or simulated call: Basic call set-up; sequential, acknowledged transmission of user data; and call termination.

**Called Party Pays:** A service for which the end user receives and pays for call.

**Calling Party Pays:** A service for which the end user originates and pays for a call.

**Canadian Central Office Code (NXX) Assignment Guidelines (Canadian COCAG):** The Canadian Radio-television and Telecommunications Commission (CRTC) approves recommendations made by the Canadian Steering Committee on Numbering (CSCN), which recommends guidelines to the CRTC for the administration of Central Office (CO) Codes within Canadian Numbering Plan Areas (NPAs) by a Canadian independent third party administrator called the Canadian Numbering Administrator (CNA). The purpose of these Guidelines is to provide direction to the CNA, Code Applicants, and Code Holders with respect to the administration, assignment, activation, and use of CO Codes and the numbering resources contained therein.

**Cancel To (CANT):** A trunk group control that allows traffic to be canceled before hunting for a circuit to a destination. Equipment vendors commonly provide the capability to implement this control on a percentage basis.

**Carrier Identification Code (CIC):** Used to route and bill calls in the public switched telephone network. CICs are four-digit codes in the format XXXX, where X is any digit from 0 through 9. Separate CIC pools are maintained for Feature Group B (line side) access and Feature group D (trunk side) access. CICs are assigned by the North American Numbering Plan Administrator (NANPA) according to guidelines developed by the ATIS-sponsored Industry Numbering Committee.

**Central Office (CO):** 1) A common carrier switching center in which trunks and/or loops are terminated and switched. Note: In the DOD, "common carrier" is called "commercial carrier." Synonym switch. Other synonyms [loosely] end office, exchange, local central office, local exchange, local office, switching center (except in DOD DSN [formerly AUTOVON] usage), switching exchange, telephone exchange. 2) A switching unit, in a telephone system which provides service to the general public, having the necessary equipment and operations arrangements for terminating and interconnecting subscriber lines and trunks or trunks only. There may be more than one central office in a building. [47 CFR Pt.36-A]

**Central Office (CO) Code:** The second three digits (NXX) of a ten-digit telephone number in the form NXX-NXX-XXXX, where N represents any one of the numbers 2 through 9 and X represents any one of the numbers 0 through 9. (47 C.F.R. § 52.7(c))

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**Central Office (CO) Code Administrator:** Responsible for the administration of the NXXs within a Numbering Plan Area.

**Central Office Code (NXX) Exhaust:** A point in time at which the quantity of TNs within existing CO codes (NXX) which are "Available for Assignment" equals zero within a switching entity/Point Of Interconnection (POI) or, conversely, when the quantities of "TNs Unavailable for Assignment" equal 10,000 times the quantity of existing CO codes (NXX) assigned to a switching entity/POI. Where CO code sharing occurs or partial CO codes are assigned to a switching entity/POI, the latter number should be adjusted accordingly.

**Certify/Certification:** The authorization of a carrier by a regulator to provide a telecommunications service in the relevant geographic area. FCC § 52.15 (g)(2)(i) requires that applications for initial numbering resources shall include evidence that the applicant is authorized to provide service in the area for which numbering resources are being requested.

**Chronic Trunk:** A trunk experiencing a much higher than normal rate of failure or switching irregularities, over a period of time, with resulting high incidence of test O.K. or no trouble found.

**CLEC (Competitive Local Exchange Carrier):** In the United States, a CLEC is a facility based communications company that competes with the already established local telephone business by providing its own network and switching. The term distinguishes competitors from established Local Exchange Carriers (LECs) and arises from the Telecommunications Act of 1996, which was intended to promote competition among both long-distance and local phone Service Providers. Similarly in Canada, CLECs are addressed by Telecom Decision CRTC 97-8, 1 May 1997 (Decision 97-8).

**CLONES:** CLONES is maintained by iconectiv® as the Location Registry for the creation and maintenance of Common Language® Location Code (CLLI™ Code) by Common Language subscribers. For an 11-character location identifier to be termed a CLLI™ Code, it must have been created and currently reside in CLONES. Associated information includes postal code, latitude and longitude, vertical and horizontal coordinates, and switching system type.

**Code Holder:** An assignee of a pooled or non-pooled NXX code that is assigned by the CO Code Administrator. The responsibilities of an assignee for a pooled NXX are defined in Section 8.2.1 and for a non-pooled NXX are defined in Section 8.3.1 of ATIS-0300119, Thousands-Block (NPA-NXX-X) & Central Office Code (NPA-NXX) Administration Guidelines (TBCOCAG). A given Code Holder is identified in the LERG™ Routing Guide as the NPA-NXX-A (Assignee) OCN record holder.

**Common Language® Location Code (CLLI™ Code):** An eleven-character alphanumeric descriptor used to identify switches, points of interconnection, and other categories of telephony network elements and their locations. For an 11-character location identifier to be termed a CLLI™ Code, it must reside in CLONES. Companies that are subscribers of Common Language® Location Information Service can refer questions to their company's CLLI™ Code Coordinator.

**Competitive Access Provider (CAP):** A telecommunications carrier that provides access services which are alternate to (or which bypass) a local exchange carrier.

**Code Activation:** See "Active Code".



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**Code Holder:** An assignee of an NXX code which was allocated by the Central Office (CO) Code Administrator.

**Company Code:** A unique four-character alphanumeric code (NXXX) assignable to all telecommunications Service Providers. For purposes of this document N=0-9 and X=0-9 or A-Z.

**Compatibility Testing:** Ensures that the software interface between the two contracting networks perform in a manner which demonstrates that all basic functions and utilities operate as specified.

**Conservation** (relative to numbering guidelines): Consideration given to the efficient and effective use of a finite numbering resource in order to minimize the cost and need to expand its availability in the introduction of new services, capabilities and features.

**Contamination** (relative to numbering guidelines and FCC regulations): Contamination occurs when at least one telephone number within a thousands-block of telephone numbers is not available for assignment to end users or customers. Blocks contaminated up to and including 10 percent are eligible for donation. For purposes of this provision, a telephone number is "not available for assignment" if it is classified as administrative, aging, assigned, intermediate, or reserved as defined in FCC rules (FCC 00-104, §52.7 (h)).

**Control Office:** An Access Service Provider (ASP) center or office that has been designated as Control Office on a given access service furnished to an Access Service Customer (ASC).

**Conversion Timing:** The actual agreed upon scheduled date and time to commence cutover in a coordinated conversion.

**Cooperative Scheduled Testing (CST):** CST of Switched Access Services (Feature Groups B, C and D), where the Access Service Provider provides a technician at its office(s) and the customer provides a technician at its location, with suitable test equipment to perform the required tests, will consist of quarterly loss and C-message noise tests, and annual balance tests. However, the customer may specify a more frequent schedule of tests. In addition to the loss/noise/balance measurements, the customer may also order, at additional charges, gain-slope and C-notched testing.

The Access Service Provider will provide, on a quarterly basis, a CST report that lists the test results for each trunk tested. Trunk test failures requiring customer participation for trouble resolution will be provided to the customer on an as-occurs basis.

**Coordinated Conversion:** A process whereby a portion of the equipment or facilities from an existing service is to be reused in a replacement service.

**Customer(s):** Any individual, partnership, association, joint-stock company, trust, corporation or governmental entity, or other entity which orders access services from an Access Service Provider including interexchange carriers and end users.

**Customer's Agent:** An entity which has an agreement between itself and its customer empowering it to act as the customer's agent in providing and maintaining that customer's service. The entity obtains an agency authorization for its customer specifying the degree and term of the responsibility.

**Customer Premises Equipment (CPE):** All telecommunications terminal equipment located on the customer premise, except equipment not covered by FCC exception or waiver.

**Data Network Control Center (DNCC) or Equivalent:** Is the name used to describe the center which administers and maintains Data Networks (e.g., X.75 Gateways).

**Data Transmission (107 Type) Test Line:** An arrangement which provides for a connection to a signal source which provides test signals for one-way testing of data and voice transmission parameters.

**Decibel:** A unit used to express relative difference in power, usually between acoustic or electric signals, equal to ten (10) times the common logarithm of the ratio of two signal powers.

**Design, Verify, and Assign (DVA):** Describes a given point in the order completion process in which the circuit design is checked for accuracy and all assignments are verified/available.

**Di Group:** A basic group of Pulse Code Modulation (PCM) channels assembled by Time Division Multiplex. In the United States it usually consists of 24 channels at 1.544 Mbs.

**Digital to Analog (D/A):** Used to describe when a digital to analog conversion takes place.

**Digital/Analog Conversion:** The changing of a digital signal to an analog signal carrying equivalent information.

**Digital Switch:** A Switch in which connections are established by operations on digital signals without conversion to analog.

**Directory Assistance (DA):** A service providing the requested telephone number for a given name and address.

**Directory Assistance Call Completion (DACC):** After the telephone number has been received, DACC is a service that permits a call to be completed to the requested number, typically at the calling party's option for an additional charge.

**DSX:** A digital cross connect field which can be utilized for DS1, DS2 or DS3 level cross connections at a digital level.

**Echo Return Loss:** A frequency weighted measure of return loss over the middle of the voice band, where talker echo is most annoying.

**Effective 2-Wire:** A condition which permits the simultaneous transmission in both directions over a channel, but it is not possible to insure independent information transmission in both directions. Effective 2-wire channels may be terminated with 2-wire or 4-wire interfaces.

**Effective 4-Wire:** A condition which permits the simultaneous independent transmission of information in both direction over a channel. The method of implementing effective 4-wire transmission is at the discretion of the Access Service Provider (physical, time domain, frequency-domain separation or echo cancellation techniques).

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**Effective Date:** The date by which routing and rating changes must be complete for the assigned thousands-block or the assigned Central Office Code. Also, the date by which the thousands-block becomes an active block. (Also referred to as "the LERG™ Routing Guide effective date.")

**End Office Switch:** An Access Service Provider switching system where Telephone Exchange Service customer station loops are terminated for purposes of interconnection to trunks. It is the office providing dial-tone and is the first line in switching. An End Office may also be a Host Office or a Remote Switching Office.

**End-to-End Testing:** The testing, with assistance from the Access Service Providers (ASPs), of an Access Service Customer (ASC) provided service comprised of facilities and/or equipment of the ASC and the access services provided by the ASP(s).

**End User:** Any customer of an interexchange or foreign telecommunications service that is not a carrier, except that a carrier shall be deemed to be an "end user" to the extent that such carrier uses a telecommunications service for administrative purposes, without making such service available to others, directly or indirectly.

**Envelope Delay Distortion:** A measure of the linearity of the phase versus frequency of a channel.

**Equal Level Echo Path Loss (ELEPL):** The measure of Echo Path Loss (EPL) at a 4-wire interface which is corrected by the difference between the send and receive Transmission Level Point (TLP). [ELEPL = EPL - TLP (send) + TLP (receive)].

**Exchange:** A geographic area tariffed by a state utilities commission and served by an incumbent Local Exchange Carrier (LEC). A LEC's franchise territory is comprised of multiple Exchanges and the Basic Local Calling Areas are defined by Exchanges. The Exchanges are generally in the state General Subscriber Services Tariff, Section A3.

The term "Exchange" denotes a geographic area generally smaller than a Local Access Transport Area (LATA) and usually embraces a city, town or village and its environs. Subscribers in a given Exchange area may be served by one or more central offices together with the associated facilities or subscribers in an Exchange area may be served by a central office located in an adjacent Exchange area. (A LATA is usually comprised of multiple Exchanges.)

**Exchange Access Services:** Service provided by Local Exchange Carriers (LECs) to interconnecting entities (such as interexchange carriers) in the areas in which the LECs offer telecommunication services.

**Expected Measured Loss (EML):** A calculated loss which specifies the end-to-end 1004-Hz loss on a terminated test connection between two readily accessible manual or remote test points. It is the sum of the inserted connection loss and test access loss including any test pads.

**Facility:** Medium that allows the movement of information by means of an electrical transmission system or path.

**Feature Groups:** Switched Access Service (SAS) will be provided by the ASPs in different arrangements known as feature groups.

**Feature Group A (FGA):** FGA is provided on a single or multiple line group basis and is arranged for originating calling only, terminating calling only, or two-way calling. FGA is arranged for use by the customer in the provision of its FX/ONAL service or MTS/WATS-type service.

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FGA provides a line side termination at the first point of switching. The line side termination will be provided with either ground start or loop start supervisory signaling at the option of the customer.

**Feature Group B (FG B):** Trunk side connections provided to an Access Service Provider (ASP) switch. End users will access the Access Service Customer (ASC) network by dialing 950-XXXX where the XXXX specifies a particular ASC's Switched Access Services (SAS) group. The following is an example of this feature group. The ASP switch will select an idle SAS in the group to the ASC switch and connect it to the end user's termination upon detection of a seizure on the SAS, the ASC switch will return dial tone to the end user indicating that it is prepared to receive the Personal Identification Number (PIN) and the address digits of the distant station. In the terminating direction, the ASC switch will select an idle SAS in the group to the ASP switch and, upon receipt of a start dial signal from the ASP switch, will send the address digits of the called party to the ASP switch which will complete handling of the call. FG B includes previous Exchange Network Facilities for Interstate Access (ENFIA) B and ENFIA C services only.

**Feature Group C (FG C):** Trunk side connections provided to the Access Service Provider (ASP) switch and will consist only of service provided to AT&T. Initially, this FG will be comprised of the access portion of existing Bell System toll completing, toll connecting and two-way non-intertoll trunks. Existing dialing patterns for originating and terminating calling will remain in effect for FG C.

**Feature Group D (FG D):** Trunk side connections provided to the Access Service Provider (ASP) switch and will be available to all Access Service Customer (ASCs) including AT&T-C. FG D will provide equal access to all ASCs such that end users will be required to dial the same number of digits to access each individual ASC. As currently proposed, the access digits dialed would be 101XXXX where XXXX specifies the ASC unless an end user "presubscribes" to a particular ASC. In this case the end user need only dial the called party's number (preceded by a 1 where required).

**Federal Communications Commission (FCC):** The board of commissioners, appointed by the president of the United States under the Communications Act of 1934, having the power to regulate interstate and foreign communications originating in the United States by wire and radio.

**Final Trunk Group:** A trunk group that does not route advance or alternate route to another trunk group if all of its trunks are busy.

**First Point of Switching:** The first Telephone Company location at which switching occurs on the terminating path of a call proceeding from the customer location to the terminating end office and, at the same time, the last Access Service Provider location at which switching occurs on the originating path of a call proceeding from the originating end office to the customer location.

**Foreign NPA (FNPA):** Any other Numbering Plan Area (NPA) different from the Home NPA (HNPA). This may be outside the geographic NPA from which a call originates or part of an overlay of the Home NPA.

**Former ASC:** The Access Service Customer (ASC) providing the existing service involved in a coordinated conversion.

**Frequency Shift:** The change in the frequency of a tone as it is transmitted over a channel.

**Gateway:** A network element that permits communication between two organizationally or technically dissimilar networks.

**Glare:** A condition where by two-way trunks are subject to occasional simultaneous seizures at both ends because of the unguarded interval between the seizure of the trunk at one end and the consequent recognition of seizure at the other end.

**Glare Master/Control:** The designated switch that retains control of a two-way trunk in the event of simultaneous seizure from both ends.

**Home NPA (HNPA):** Numbering Plan Area (NPA) in which a calling subscriber is located.

**Homing Tandem Operating Company** The company identified in the iconectiv® LERG™ Routing Guide as being the owner of the tandem to which the switching entity serving the NXX code homes.

**iconectiv® LERG™ Routing Guide:** Contains information about the local routing data obtained from the Telcordia Business Integrated Rating and Routing Database System (BIRRDs) system. This information reflects the current network configuration and scheduled network changes for all entities originating or terminating Public Switched Telephone Network calls within the North American Numbering Plan.

**Incumbent Local Exchange Carrier (ILEC):** Incumbent local exchange carrier means (as stated in FCC 1996 Act, Section 251(h) (1)), with respect to area, the local exchange carrier that on February 8, 1996 provided telephone exchange service in such area; and on February 8, 1996, was deemed to be a member of the National Exchange Carrier Association (NECA) pursuant to section 69.601(b) of the Commission's regulation (47 C.F.R. 69.601(b)); or is a person or entity that, on or after February 8, 1996, became a successor or assign of a member described in clause (1). NOTE: The NECA categories of ILEC and Regional Bell Operating Company (RBOC) are used in the iconectiv® LERG™ Routing Guide to identify all incumbent exchange carriers. However, to differentiate between the incumbent independent telephone companies and the Bell Operating Companies (BOC) prior to 1984, the independent companies are identified by the ILEC category and the BOC are identified by the RBOC category.

**Impaired:** Is where an individual circuit exceeds the transmission limits or where the quality of service is diminished. A circuit is also impaired if its signaling functions (e.g., seizure, disconnect, ANI) are experiencing intermittent failures.

**Impulse Noise:** Any momentary occurrence of the noise on a channel over a specified level threshold. It is evaluated by counting the number of occurrences which exceed the threshold, over at set time period.

**Individual Case Basis (ICB):** Used to describe instances where normal procedures do not apply.

**Industry Carriers Compatibility Forum (ICCF):** A now retired forum for the discussion and resolution of national technical issues associated with network interconnection. This forum was merged into the Network Interconnection Interoperability Forum on January 1, 1997.

**Industry Numbering Committee (INC):** A standing committee of the Alliance for Telecommunications Industry Solutions (ATIS) that 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.

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**Initial Code:** The first geographic NXX code assigned to a Service Provider for each rate center in which it provides service.

**Inoperative:** Is where an individual circuit will not function in service (e.g., open, shorted) or cannot transmit address signaling in either direction.

**In Service:** A code or block for which local routing information has been input to the LERG™ Routing Guide and the carrier has begun to activate and assign numbers within the NXX code or NXX-X block to end users (FCC 00-104, ¶240).

**Institute of Electrical and Electronic Engineers (IEEE):** The U.S. organization for professional electrical engineers.

**Intercarrier Testing:** The testing of multiple Access Service Customer (ASC) connected services, i.e., testing over the facilities and equipment provided by multiple ASC(s) and the access service(s) provided by the Access Service Providers.

**Interexchange Carrier (IC or IXC):** A telecommunications company engaged for hire that provides interprovincial/intraprovincial (Canadian), interstate/interLATA (US), or intrastate/interLATA (US) services.

**Interexchange Customer Service Center (ICSC or equivalent):** An Access Service Negotiation work group which will handle inquiries and orders. It is to serve as a point of contact for the access service needs of Interexchange Customers.

**InterLATA:** Term used to describe the traffic going between Local Access and Transport Areas or Market area.

**Intermediate Network:** Any interconnecting network(s) between the originating network and terminating network.

**International Telegraph and Telephone Consultative Committee (CCITT):** One of two committees that support the International Telecommunication Union by conducting studies on technical and operating questions and recommending standards; the other is the International Radio Consultative Committee.

**IntraLATA:** Term used to describe the traffic within a Local Access and Transport Area or Market area.

**Inventory:** All telephone numbers distributed, assigned or allocated:

- (1) To a Service Provider, or
- (2) To a pooling administrator for the purpose of establishing or maintaining a thousands-block number pool (FCC 00-104, § 52.7 (j)).

**(Industry) Inventory Pool:** Used in thousands-block number pooling to describe a reservoir of unassigned thousands-blocks administered by the Pooling Administrator for purposes of assignment to certified Service Providers participating in thousands-block number pooling.

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**Internet Protocol Enabled Services (IPES):** A Service Provider deploying Internet Protocol (IP)-enabled services, including Voice over Internet Protocol (VoIP) services, on a commercial basis to residential and business customers. Company Codes in this Category shall be used to identify IP-enabled Service Providers interconnecting to the Public Switched Telephone Network (PSTN) and can be used to enable the deployment of any new IP-enabled service, technology or advanced service. VoIP is transmission of voice (such as ordinary telephone calls) using Internet Protocol.

**Isolation:** The process of determining the circuit element which has failed (also see "sectionalization").

**Jeopardy:** A jeopardy condition exists when the forecasted and/or actual demand for NXX resources will exceed the known supply during the planning/implementation interval for relief. NOTE: This definition only applies to ATIS-0300037, Network and Routing Resources Educational Document: Intercompany Responsibilities in the Telecommunications Industry. There may be other defined uses of jeopardy in other NGIIF documents.

**Killer Trunk:** A trunk that is seized repeatedly, but is not held for an appreciable length of time due to a malfunction. Within a group these trunks have higher than average attempt rates and shorter than normal holding times.

**LATA:** See "Local Access Transport Area".

**LATA Switching System Generic Requirements (LSSGR):** Comprises a series of Technical References dealing with proposed generic requirements for switching systems based on the typical needs of a Bell Operating Company (BOC).

**LEC:** See "Local Exchange Carrier".

**Lineside:** Refers to that part of a Access Service Providers switching system, associated with the connection of a line (loop assigned to a customer) to the switching system.

### **Links:**

A-Link - Access Links connecting a switching point or a database to its home Signal Transfer Point (STP).

B-Link - Bridge Links interconnecting STP pairs of the same hierarchical level within the same network.

C-Links - Cross Links connecting mates of an STP pair in the same network

D-Links - Diagonal Links 1) connecting STP pairs between different networks or 2) connecting STP pairs of different hierarchical levels within the same network.

E-Links - Extension Links connecting a Signaling Point to an STP pair other than its home STP pair.

F-Links - Fully associated Links directly connecting two switching points to one another or a switching point to a database node.

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**Local Access Transport Area (LATA):** Denotes a geographic area established for the provision and administration of communications service. It encompasses one or more designated exchanges, which are grouped to serve common social, economic and other purposes. For some Access Service Providers this is synonymous with the term Market Area.

**Local Exchange Carriers (LECs):** A local telephone company, *i.e.*, a communications common carrier that provides ordinary local voice-grade telecommunications service under regulation within a specified service area.

**Local Number Portability (LNP):** Permits telephone subscribers to retain their telephone numbers should they desire to change local Service Providers or their location within their Exchange Rate Center

**Local Reseller:** An access customer who resells the access service obtained from a Local Exchange Carrier.

**Location Routing Number (LRN):** The ten-digit (NPA-NXX-XXXX) number assigned to a switch/Point of Interconnection (POI) used for routing in a permanent local number portability environment.

**Loop Around Test Line:** Denotes an arrangement utilizing a Access Service Provider central office to provide a means to make certain two-way transmission tests on a manual basis. This arrangement has two central office terminations; each reached by means of separate telephone numbers and does not require any specific customer location equipment. Equipment subject to this test arrangement is at the discretion of the customer.

**Loss Deviation:** Denotes the variation of the actual loss from the designed value.

**LSSGR:** See "LATA Switching System Generic Requirements".

**Maintenance Window:** A published period of time (generally a 3 hour period, once a week) when ASP X.75 service maybe unavailable or disrupted. This period will be utilized for purposes of maintenance routines.

**Manual Scheduled Testing (MST):** MST of Switched Access Services (Feature Groups B, C or D and Directory Access Service not routed through an access tandem), where the Access Service Provider provides a technician at its office(s) and at the customer's location, will consist of quarterly loss and C-message noise tests, and annual balance tests. However, the customer may, at additional charge, specify a more frequent schedule of loss/noise/balance tests, the customer may also order, at additional charge in accordance with tariff, gain-slope and C-notched noise testing.

The Access Service Provider will provide, on a quarterly basis, an MST report that lists the test results for each trunk tested. Trunk test failures requiring customer participation for trouble resolution will be provided to the customer on an as-occurs basis.

**Migration of NXX Code(s):** Code migration is transferring a code from one switch to another and/or from one OCN to another and/or one Service Provider to another. This situation should be a coordinated project. Testing and testing timeframes would be determined by the interconnected project partners and does not need industry testing participation. A test line number should be published in the LERG™ Routing Guide for any company choosing to participate in testing NXX migration scenarios may include, but are not limited to, the following:

- Migrating all NXX codes from a switch to another switch/same or different tandem



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- Migrating one or more but not all NXX codes from a switch to another switch (OCN of the switch may or may not stay the same)
- Type 1 to Type 2 wireless code migration (OCN of the switch changes)

When the "A" record is moving from one switch to another switch, then the test number and test response field on the NXD screen should be populated with the appropriate test number and test response.

**Milliwatt (102 Type) Test Line:** Denotes an arrangement in an end office which provides a 1004 Hz tone at 0 dBm0 for one-way transmission measurements towards the customer's location from the Access Service Provider end office.

**Months to Exhaust (MTE):** A calculation that is used by Service Providers to document the need for an additional code or block as follows:

TNs Available for Assignment divided by Average Monthly Growth Rate.

A calculation used by the Pooling Administrator to document the need for an additional Central Office Code as follows:

Blocks Available for Assignment divided by Average Monthly Growth Rate.

**Multi-ASP Service:** A Switched Access or Special Access Service provided by 2 or more Access Service Providers.

**North American Numbering Plan (NANP):** An integrated telephone numbering plan serving countries as shown under NANP Area. According to Industry Numbering Committee, NANP is a numbering architecture in which every station in the NANP Area is identified by a unique ten-digit address consisting of a three-digit NPA code, a three digit central office code of the form NXX, and a four-digit line number of the form XXXX.

**North American Numbering Plan Administration (NANPA):** NANPA holds overall responsibility for the neutral administration of NANP numbering resources, subject to directives from regulatory authorities in the countries that share the NANP. NANPA's responsibilities include assignment of NANP resources, and, in the U.S. and its territories, coordination of area code relief planning and collection of utilization and forecast data.

**NANP Area:** Consists of the United States, Canada and the Caribbean countries: Anguilla, Antigua, Bahamas, Barbados, Bermuda, British Virgin Islands, Canada, Cayman Islands, Dominica, Dominican Republic, Grenada, Jamaica, Montserrat, Sint Maarten, St. Kitts & Nevis, St. Lucia, St. Vincent & Grenadines, Turks & Caicos Islands, Trinidad & Tobago, and U.S. Caribbean territories (including American Samoa, Puerto Rico, the U.S. Virgin Islands, Guam and the Commonwealth of the Northern Mariana Islands).

**NECA Tariff FCC No. 4:** The National Exchange Carrier Association (NECA) serves as the agent for this Federal Communications Commission (FCC) tariff. This tariff contains Service Providers' wire center and interconnection information that supports the ordering, billing, and provisioning of interstate access services.

**Network Impacting Event:** A failure (hardware, software, human, or process) of a telecommunications network component that prevents call completion.

**Network Management:** A set of procedures, equipment, and operations designed to keep a network (e.g., the public switched network) operating near maximum efficiency when unusual loads or equipment failures would otherwise force the network into a congested, inefficient state.

**Network Modification:** Any type of planned equipment, software, trunk or facility activity which has the potential to significantly affect interconnected networks (e.g. rearrangement of existing network elements, switch homing rearrangements, SS7 rehomings).

**Network Service Center (NSC):** The NSC is responsible for assuring the overall quality of network service. The NSC monitors, analyzes, tracks, reports results and issues referrals to other centers for follow-up work on trouble patterns. The NSC will be the contact point for non-circuit specific trouble reports from the Access Service Customer.

**Nonconforming End Office:** Office that is not yet equipped or incapable of being equipped, for provision of originating and terminating Feature Group D Local Access Transport Area (LATA) access service.

**Nonscheduled Testing (NST):** NST of Switched Access Services is where:

The customer determines a need to test its services and contacts the Access Service Provider (ASP) to perform (billable) tests in one of the following manners.

- The customer provides remote office test lines and 105 test lines with associated responders or their functional equivalent ("automatic testing") or
- The ASP provides a technician at its and the customer provides a technician at its location with suitable test equipment to perform the required tests ("cooperative testing") or
- The ASP provides a technician at its office(s) and/or at the customer's location with suitable test equipment to perform the required tests ("manual testing").

Nonscheduled Tests may consist of any tests, e.g., loss, noise, slope, envelope delay, which the Access Service Customer may require.

**Nonsynchronous Test Line:** An arrangement in step-by-step end offices which provides operational tests which are not as complete as those provided by the synchronous test lines, but can be made more rapidly.

**Numbering Plan Area (NPA):** Also called area code. An NPA is the 3-digit code that occupies the A, B, and C positions in the 10-digit North American Numbering Plan (NANP) format that applies throughout the NANP Area. Traditionally, NPAs were of in the form of NX0/1X, where N represents the digits 2-9 and X represents any digit 0-9. After 1/1/95, NPAs were changed to the form of NXX. In the NANP, NPAs are classified as either geographic or non-geographic.

a) Geographic NPAs are NPAs which correspond to discrete geographic areas within the NANP Area.

b) Non-geographic NPAs are NPAs that do not correspond to discrete geographic areas, but which are instead assigned for services with attributes, functionalities, or requirements that transcend specific geographic boundaries. The common examples are NPAs in the N00 format, e.g., 800.

**Numbering Plan Area (NPA) Code Relief:** NPA code relief refers to an activity that must be performed when and NPA nears exhaust of its 792 NXX capacity. Options for relief are described in the NPA Code Relief Planning & Notification Guidelines.

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**NXX:** In the LERG™ Routing Guide, this may also be referred to as a Central Office Code (COC) or as a Destination Code. NXX's are technically the three digits following the NPA (Area Code) in the numbering schema used by countries participating in the North American Numbering Plan (NANP).

**Open Circuit Test Line:** An arrangement in an end office which provides an ac open circuit termination of a trunk or line by means of an inductor of several Henrys.

**Operating Company Number (OCN):** A four character numeric or alphanumeric code that uniquely identifies providers of communications service, excluding Interexchange Carriers. NOTE: NECA-assigned Company Codes may be used as OCNs.

**Other Access Service Provider (OASP):** An Access Service Provider designated to coordinate the installation and maintenance of a Multi-ASP Access service.

**Overlap Outpulsing:** Access Service Provider outpulsing to the Access Service Customer before customer has completed dialing.

**Overtime:** Any Access Service Provider (ASP) installation or repair effort performed outside of a craft person's scheduled working hours. If this work is performed at the specific request of an Access Service Customer (ASC), either for the convenience of the ASC or for reasons not within the control of the ASP, this work is billable to the ASC at applicable tariff rates.

**Patch:** Temporary use of other facilities or functions to restore service ability to a failed network or component.

**Packet Switching:** A data transmission technique where user information is segmented and routed in discrete data envelopes called packets.

**Personal Communication System (PCS):** A company that provides an all-digital, higher frequency (1900MHz) alternative to traditional cellular, telecommunications service.

**Personal Communication System (PCS) Reseller:** A company that obtains numbers from another Service Provider to resell PCS services to its customers.

**Personal Identification Number (PIN):** An identification number given by an Access Service Customer to its customer for billing and security purposes.

**Phase Jitter:** The unwanted phase variations of a signal.

**Plain Old Telephone Service (POTS):** Term used to refer to lines connected to a local switching system that have basic service capability. Such lines are not identified within a closed user group such as centrex or connected to Customer Premises Equipment, i.e., PBX.

**Plant Test Date (PTD):** Describes a given point in the order completion process. It is normally one to two days prior to the due date when the Local Exchange Carrier tests their portion of the circuit.

**Plesiochronous:** That relationship between two signals such that their corresponding significant instants occur at nominally the same rate, any variations being constrained within a specified limit. For example, two signals having the same nominal digit rate, but not stemming from the same clock or homochronous clocks, are usually plesiochronous. Note: There is no limit to the phase difference that can accumulate between corresponding significant instants over a long period of time.

**Point of Interconnection (POI):** The physical location where a Service Provider's connecting circuits interconnect for the purpose of interchanging traffic on the Public Switched Telephone Network. This term is sometimes referred to as Point of Interface.

**Point of Presence (POP):** The physical location (a structure where the environmental, i.e., power, air conditioning, etc., specification for Access Service Provider terminating equipment can be met) at which an Interexchange Customer establishes itself for the purpose of obtaining exchange access. The POP is the physical location within which the Plain Old Telephone Service occurs. POPs must be identified for both switched access and special access.

**Point of Termination:** The term "Point of Termination" denotes the point of demarcation within a customer-designated location i.e., Point of Presence at which the Access Service Provider's responsibility for the provision of Access Service ends.

**POTS:** See "Plain Old Telephone Service".

**Pooling Administrator (PA):** The entity or entities responsible for administering a thousands-block number pool (FCC 00-104, §52.7 (g)).

**PPSN:** See "Public Packet Switched Network".

**Pre-service Tests:** A procedure that ascertains the proven function and quality of the service to the ASC Terminal Location (POT), prior to cooperative turn-up of the service by the Bell Operating Company (BOC) and Access Service Customer (ASC). The BOC and ASC each have responsibility for pre-service testing up to their respective side of the POT.

**Public Packet Switched Network (PPSN):** A Bell Operating Company Public Packet Switched Network.

**Public Switched Telephone Network (PSTN):** A worldwide network of public circuit switched networks based on E.164 addressing, which is the International Telecommunication Union – Telecommunications Standardization Sector (ITU-T) recommendation defining the international public telecommunications numbering plan.

**Public Utility Commission (PUC) or equivalent:** Is that branch of the local or state government responsible for Public Utility Provider's Rate & Regulations.

**Pulse Code Modulation (PCM):** Is the conversion of an analog signal, such as voice, to a digital format, ordinarily in terms of binary-coded pulses representing the quantized amplitude sample of the analog signal.

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**Quasi/Pseudo Random Signal Source:** A test signal consisting of a bit sequence which approximates a random signal.

**Rate Area:** A defined geographical division of an exchange area used as the basis for establishing uniform tariffs for local traffic (including multi-message unit traffic) for classes of service available within the area. Rate Areas are customarily found in larger metropolitan areas and may also be the basis for establishing tariffs for short-haul toll traffic.

**Rate Center:** Rate Center is used for numbering resource applications and reports to associate telephone numbers with a geographic area, as defined by the relevant regulatory agency. A Rate Center is also a uniquely defined point (Vertical & Horizontal Coordinates) located within an exchange area from which mileage measurements are determined. These measurements can be used with the tariffs in the message rating processes.

**Rate Center Major Vertical & Horizontal Coordinate:** A Coordinate used to pinpoint the location of a Rate Center within an exchange area. The Vertical and Horizontal Coordinates can be used to calculate air mileage measurements between two Rate Centers that are used to determine the appropriate mileage rates in determining the charge for message telephone service calls. (Note: In some service areas subsets of the Rate Center major vertical & horizontal coordinate are defined as minor vertical and horizontal coordinates. The Minor Vertical and Horizontal Coordinates can be used to divide Rate Centers into zones for more specific distance calculations. Most often used to rate interstate messages when straight distance between the calling and called point is less than forty miles.)

**Reassignment:** In a pooling environment, reassignment refers to the process of reestablishing the assignment of a thousands-block, which was previously assigned to another Service Provider (SP) or to a new SP. Reassignment may also mean the transfer of a working or assigned NXX from one switching entity/Point of Interconnection (POI) to another. Reassignment may also be related, but not limited, to facility rearrangements or Trunk Circuit Identification Code (TCIC) numbering plan rearrangements.

**Reclamation:** The process by which Service Providers are required to return numbering resources to the North American Numbering Plan Administration (NANPA) or Pooling Administration (PA) (FCC 00-104, § 52.15 (i) (1)). Reclamation is also required throughout the remainder of the North American Numbering Plan (NANP) area by the regulatory authorities that govern the appropriate numbering administrators i.e. Canada, Caribbean, and Atlantic.

**Release:** On the scheduled conversion date, the "new" Access Service Customer (ASC), upon being informed by the Access Service Provider (ASP) at each end of its service that they are ready, contacts the "former" ASC and obtains a release of the existing ASC service. The conversion then takes place with the new ASC coordinating the ASPs performing the conversion work.

**Reseller:** A Service Provider (SP) which purchases facilities and/or services and obtains numbering resources from another SP for resale. A reseller's services could include, but are not limited to: Local, switchless, and wireless technologies.

**Responsible Organization:** The entity identified by the Toll Free Subscriber or the subscribers agent assumes the duty of managing the appropriate records in 800 Data Base Service Management Systems (SMS). Management and Administration shall include Data Entry, Record Change, Trouble Acceptance, Referral and or Clearance. It is recommended that any entity performing the above function comply with this and other Toll Free Number Data Base associated documents.

**Restoral:** To place an Access Service back into service.

**Restoration Priority (RP):** Describes supremacy given to some Government and National Security circuits.

**Return Loss:** A measure of the similarity between the two impedances at the junction of two transmission paths. The higher the return loss, the higher the similarity.

**Return Supervision:** Signaling which responds to an incoming request for service or change of status.

**Sectionalization:** The process of determining on which side of the Point of Termination a trouble locates.

**Sequence:** Sequential circuit scheduling when converting more than one circuit or circuit group.

**Service Continuation:** The negotiated continuation of service in a coordinated conversion prior to the former Access Service Customer (ASC) disconnect due date.

**Service Control Point (SCP):** A logical entity that provides functions common to all applications, overload controls, and maintenance.

**Service Provider (SP):** A telecommunications carrier or other entity that receives numbering resources from the North American Numbering Plan Administrator, a Pooling Administrator or a telecommunications carrier for the purpose of providing or establishing telecommunications service (FCC 00-104, § 52.5 (i)).

**Short Circuit Test Line:** An arrangement in an end office which provides for an ac short circuit termination of a trunk or line by means of a capacitor of at least four microfarads.

**Signal-to-C-Notched Noise Ratio:** The ratio in dB of a test signal to the corresponding C-Notched Noise.

**Signaling System 7 (SS7):** An international standard, general purpose CCS (Common Channel Signaling) protocol.

**Singing Return Loss (High & Low):** The frequency weighted measure of return loss at the edges of the voice band, where singing (instability) problems are most likely to occur.

**SKIP:** SKIP is a trunk group control that allows traffic to be directed to the next route before hunting for a circuit to a destination. Equipment vendors commonly provide the capability to implement this control on a percentage basis.

**Softswitch:** See "Call Agent".

**Special Service Center (SSC):** The SSC is responsible for installation and maintenance of ASP Specially Installed and Maintained Services (SIMS) circuits, i.e., those that require the use of test sets, methods, and tools not normally associated with standard message services such as Feature Groups B, C, and D. Feature Group A services will normally be controlled by the SSC.

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**Switch Rehome:** The changing of an existing homing arrangement between a lower class office and a higher class office, e.g., Class 5 end offices and Class 4 tandem, Class 4 tandem office(s) and Class 3 tandem, etc. A homing arrangement is the final route or the last-choice trunk group between switching systems in a specific routing hierarchy. (Not all final routes between a lower class office and a higher class office constitute a homing arrangement.)

Note: The telephony terms “homing”, “homing arrangements”, “homing tandem”, “rehome”, “rehome”, “tandem rehome”, etc., are specific to trunking arrangements between switches as defined above. However, it has become a common practice to apply these same terms when addressing activity associated with numbering resources. For example, an NPA-NXX code is “assigned to” or “served by” a switching entity. When the code moves, migrates, or transfers to another serving switch it is frequently referred to as a code “rehome”. Although the term “rehome” when used to describe code activity is not technically correct, it is understood within the PSTN that the serving switch for the code is changing. Caution is advised when using telephony terminology in a manner other than it was originally intended, e.g., contracts, interconnection agreements, industry guidelines, industry agreements, definitions, etc.

**Switch Tandem Rehome:** See “Switch Rehome”.

**Switch-to-Switch Testing:** The ability to perform tests between adjacent switching machines to evaluate the overall integrity of an ASC provided service comprised of facilities and equipment of the ASC and the access services provided by the ASP(s).

**Switched Access Service (SAS):** An Access Service Provider (ASP) provided switched electrical communications path between the ASC terminal location (POT) and the ASP switching office.

**Switched Digital Acceptance Testing (SDAT):** Describes acceptance testing procedures used when Switched Access Services are provided with a digital switch on digital facilities.

**Switching Control Center (SCC):** The SCC has overall responsibility for the administration and maintenance of Service Provider central offices. This responsibility will include installation and maintenance Control Office for FG B, C and D. The SCC may be the designated reporting location for Access Service Customer circuit specific trouble reports.

**Switching Entity:** An electromechanical, electronic, or digital system for connecting lines to lines, lines to trunks, or trunks to trunks for the purpose of originating/terminating calls. A single switching system may handle several Central Office (CO) codes.

**Synchronous Test Line (103):** An arrangement in an end office which performs marginal operational tests of supervisory and ring-tripping functions.

**Tandem Switch:** Connects one trunk to another and serves as a trunk concentration and distribution function to minimize direct end office interconnection. A tandem switch is an intermediate switch or connection between an originating switch and the final switch call destination. A tandem switch does not allow origination or termination of telephone calls. Tandems serve a designated geographic area consisting of specific rate centers.

**Technical Requirement, Reason, Limitation or Constraint:** A limitation of the Point of Interconnection or Switching Entity where an existing code, a thousands-block, and/or numbers cannot be used for designated network routing and/or rating of Public Switched Telephone Network calls. Examples that constitute “technical constraint”

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include limitations on a switch, network element, or planning constraint, Customer Premises Equipment limitations or unique Advanced Intelligent Network Triggers.

**Telecommunications Customer (TC):** See Part VI of the NGIIF Reference Document for the definition of Telecommunications Customer (TC).

**Telecommunications Provider (TP):** See Part VI of the NGIIF Reference Document for the definition of Telecommunications Provider (TP).

**Terminating Direction:** The use of Access Service for the completion of calls from an Access Service Customer (ASC) location to an End User location.

**Test Line Coordinator:** The contact person who coordinates the updating and distribution of test line information for their company and is responsible for providing test line information to the industry.

**Test Number:** A three to ten digit number assigned for inter- and intra-network testing purposes.

**Thousands-Block:** A range of one thousand line numbers within an NPA-NXX beginning with X000 and ending with X999, where X is a value from 0 to 9.

**Thousands-Block (NPA-NXX-X) & Central Office Code (NPA-NXX) Administration Guidelines (TBCOCAG) (ATIS-0300119):** ATIS Industry Numbering Committee (INC) developed these guidelines for the administration and assignment of Central Office (CO) Codes (NPA-NXX) and Thousands-Blocks (NPA-NXX-Xs) to Local Number Portability (LNP)-capable Service Provider (SPs) within geographic numbering plan areas (NPAs).

**Thousands-Block (NXX-X) Number Pooling:** Thousands-block number pooling is a process by which the 10,000 numbers in a Central Office (CO) Code (NXX) are separated into ten sequential blocks of 1,000 numbers each (thousands-blocks), and allocated separately within a rate center (FCC 00-104, § 52.20 (a)).

**Three-Tone Slope:** Please see "3-Tone Slope" at beginning of document.

**TPM™ Data Source:** A set of data files issued by iconectiv®, primarily to support call rating. The TPM™ includes all assigned NPA NXX and thousands-blocks within the NANP with associated data elements that include: OCN, Rate Center, Rate Center Major Vertical and Horizontal Coordinates, Rate Center LATA , RAO, Placename, state/province/country, daylight savings indicator, time zone, and portability indicator.

**Transmission Level Point (TLP):** A specification in decibels, of the relative level at a particular point in a circuit as referred to a zero transmission level point (0 TLP).

**Transmission Measuring (105 Type) Test Line/Responder:** An arrangement in an end office which provides far-end access to a responder and permits two-way loss and noise measurements to be made on trunks from a near end office.

**Transmission Specifications:** The appropriate limits, e.g., acceptance and immediate action limits, of the Access Service transmission parameters.



**Trigger:** An intelligent network switch functionality that allows suspension of call processing in order to query an external database to obtain additional information, e.g., routing or billing information. An example of one type trigger is analysis of the dialed digits, i.e., either 3 digits, 6 digits or 10 digits.

**Trunk:** A communications path connecting two switching systems in a network, used in the establishment of an end-to-end connection.

**Trunk Gateway:** Provides an access interface between traditional Public Switched Telephone Network (PSTN) circuit-based networks and packet networks. Examples of the PSTN trunk interfaces are Integrated Services Digital Network (ISDN) User Part (ISUP), Primary Rate Interface (PRI), Multi Frequency (MF) and Digital Tone Multi Frequency (DTMF). The Trunk Gateway may also support an interface for line based Generic Requirement GR-303/TR-08 remote terminals. The Trunk Gateway may be connected to the network via various bit-rate and physical layer interfaces. A Call Agent provides the specific call control, call processing and other management functions for the trunks terminated on the Trunk Gateway.

**Trunk Group:** A set of trunks which are traffic engineered as a unit for the establishment of connections between switching systems in which all of the communications Paths are interchangeable.

**Trunkside:** Refers to that part of an Access Service Provider's or Access Service Customer's switching system, associated with the connection of a Trunk to the switching system.

**Type 1 Interconnection Service Provider:** A wireless Service Provider (SP) that utilizes Type 1 (trunk side with line treatment) interconnection with another SP's end office switch.

**Value Added Network (VAN):** An underlying facility which has been optimized and has additional features and functions added to increase its value to the End User.

**Vertical and Horizontal (V&H) Coordinates:** For purposes of determining airline mileage between locations, vertical and horizontal coordinates are derived from geographic latitude and longitude coordinates.

**Wide-Area Telecommunications Service (WATS):** A specialized form of fixed rate long-distance telecommunications service. WATS lines are commonly used by businesses and government agencies. Some individuals in small corporations also have WATS subscriptions.

**WATS Access Line (Frequently referred to as WAL):** Provides a connection between a customer's end user's premises and an Access Service Provider end office switch capable of performing the necessary screening functions for Toll Free Service, WATS or similar services and is provided only for use at the closed end of such services.

WATS Access Lines are arranged for either originating calling only or terminating calling only. They are provided with rotary dial or dual tone multi-frequency address signaling and either loop start or ground start supervisory signaling, at the option of the customer.

**Wire Center:** A building in which one or more central offices, used for the provision of Telephone Exchange Services, are located.

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**Work Order Record and Details (WORD):** A WORD document contains the information and specifications required to install and maintain a specific Switched Access Service circuit.

**X.75 Gateway Service:** A protocol for network interworking which supports communication between adjacent networks and communication thru transit networks.