TECHNICAL GLOSSARY

2B+D The full capability of a Basic Rate ISDN line, using two 64Kbps Bearer (B) Channels and one 16 Kbps Data (D) Channel.

10BASE-T Also called Ethernet. A ten megabits per second, local area network, using twisted pair wiring.

10/100-T Also called Ethernet. A ten or 100 megabits per second, local area network, using twisted pair wiring.

A

AAL ATM Adaptation Layer of the ATM protocol reference layer. Converts higher layer, native data format and service specifications of user data into the ATM layer cell format (48 octets of data).

ABR Available Bit Rate. An ATM layer service category for which the limiting ATM layer transfer characteristics that the network provides may change after establishing a connection.

ADSL Asymmetric Digital Subscriber Line. Modems attached to twisted pair copper wiring that transmit from 32 Mbps to 6.144 Mbps downstream (to the subscriber) and from 32 Kbps to 640 Kbps upstream, depending on line distance.

AIS Alarm Indication Signal. A signal transmitted downstream informing that an upstream failure has been detected.

ALM Alarm. An event that requires some action. Alarms are rated minor, major, and critical.

AMI Alternating Mark Inversion. Line coding used in DS1 in which ones are represented by alternating +3/-3 volts and zeros are represented with zero voltage.

ANI ATM Network Interface

APC ATM Port Controller

APS Automatic Protection Switching. A means of achieving network resiliency. When a primary circuit fails or its error rate exceeds a set threshold, switching devices automatically switch from that primary circuit to a secondary circuit.

ARP Address Resolution Protocol. Low-level protocol that maps IP addresses to the corresponding Ethernet addresses (obtains physical address when only logical address is known).

ASCII American Standard Code for Information Interchange. A binary data code consisting of at least seven data bits plus one bit for parity or special symbols; established by ANSI for compatibility between data services.

ATM Asynchronous Transfer Mode. Very high speed transmission technology. ATM is high bandwidth, low-delay, connection-oriented, packet-like switching and multiplexing technique. Usable capacity is segmented into 53-byte fixed-size cells.

ATM MIB Asynchronous Transfer Mode Management Information Base. Defined by ATM forum. (see MIB in this glossary.)

ATU-R ADSL Transmission Unit – Remote. Special electronics in support of ADSL placed at the customer's premises. The ATU-R has a matching unit at the carrier's Central Office (called ATU-C). The combined units support a high data rate over standard UTP copper cable local loops.

B

B3ZS Bipolar with 3 Zero Substitution. Line coding technique used with DS3.

B8ZS Bipolar with 8 Zero Substitution. Line coding technique commonly used with DS1.

B-Channel Bearer Channel. In an ISDN interface, this fundamental component carries 64,000 bits per second in both directions, is circuit switched, and can carry either voice or data.

BER Bit Error Ratio. The ratio of error bits to the total number of bits transmitted.

BIP Bit Interleaved Parity. A method of error monitoring.

BootP Boot strap Protocol. An IP protocol which allows an Internet node (or other) to discover certain start-up information such as IP address.

BPV Bipolar Violation. In serial transmission, a method of error detection where each bit must be the opposite polarity of the previous bit, or else a violation occurs.

BRI Basic Rate Interface. An ISDN interface typically used by smaller sites and customers. This interface has one 16 Kbps Data (or "D") channel plus two Bearer (or "B") channels for voice and/or data.

Bridge A level-2, data communication device that connects two or more networks and forwards information between them.

C

CAC Connection Admission Controller. During a broadband call setup phase, the set of actions that the network takes to determine whether a connection request should be accepted or rejected.

C-BIT Framing format for DS3 signal which offers more advantages than traditional M13 framing such as enhanced alarms, datalink, looping capabilities and Far-End-Block-Errors (FEBE)

C-BUS Communications Bus

CBR Constant Bit Rate. An ATM service category which supports a constant or guaranteed rate to transport services; such as video or voice, as well as circuit emulation which requires rigorous timing Controller and performance parameters.

CDV Cell Delay Variation. For ATM, a component of cell transfer delay, induced by buffering and cell scheduling.

Cell A 53-byte data packet, with 5 bytes of header and 48 bytes of ATM payload

CEV Controlled Environmental Vault. A below-ground room that houses electronic and/or optical equipment under Controlled temperature and humidity.

CLEC Competitive Local Exchange Carrier. A term for the unregulated, competitive telecommunications carriers who compete for local exchange service.

CLEI Common Language Equipment Identifier. Alphanumeric code assigned to each plug-in component for identification purposes.

CLF Carrier Line Failure. Physical connection lost.

CLLI Common Language Location Identifier. Code that Telcordia developed to identify physical locations and equipment, such as buildings, central offices, poles and antennae.

CLR Cell Loss Ratio. A negotiated, quality-of-service parameter in an ATM network. Indicates the ratio of lost cells to total transmitted cells.

CMIP Common Management Information Protocol. An ITU standard for the message formats and procedures used to exchange management

information in order to operate, administer, maintain and provision a network.

CMIS Common Management Information Services. A standard OSI network management protocol/service interface for managing heterogeneous networks.

CO Central Office. A building that houses the local switching equipment.

CORBA Common Object Request Broker Architecture. Provides for standard, object-oriented interfaces between Object Request Brokers.

CPE Customer Premises Equipment. A wide range of customer premises terminating equipment connected to the local telecommunications network. This includes telephones, modems, terminals, routers, set-tops, etc.

CPU Control Processor Unit. Circuit card located in Controller Shelf. Provides the main processing function of the Pliant 3000 IAP.

CRC Cyclic Redundancy Check. A process that checks the integrity of a block of data.

CRS Cross Connection. The connection of one wire to another, usually by anchoring each wire to a connecting block, and then placing a third wire between them so that an electrical connection is made.

CRV Call Reference Value. On a GR-303 interface, the number by which you can identify the line equipment to the Local Digital Switch. Used in Q.931 protocol to identify individual calls within the same logical link.

CS Controller Shelf. Pliant Systems' integration point for narrowband, wideband, and broadband subscriber services.

CSU Channel Service Unit, Terminates a DS1 at the customer premise. A CSU puts line coding, framing and is able to be remotely looped up and down for testing.

CSC Common Signaling Channel. A GR-303 alternative, call Control signaling method to Timeslot Management Channel.

CSI Controller Span Interface. Circuit card located in Controller Shelf.

CTC Cut-Thru Card. Circuit card located in Controller Shelf. Connects the protection bus through the Pliant 3000 IAP when no Controller test

interface card is present.

CTI Controller Test Interface. Circuit card located in Controller Shelf. Interface to the Class 5 Switch metallic test bus for drop testing.

CV Code Violation. A violation in the coding of a signal over a digital circuit.

D

D-BUS Download Bus

D-Channel Delta Channel - Data Channel. In an ISDN interface, this fundamental component carries Control signals and customer call data in a packet-switched mode. For ISDN-BRI, the D-Channel runs at 16,000 bits per second.

DCC Data Communications Channel. In SONET, the channels within section and line overhead that are used as embedded operations channels to communicate with each network element.

DCS Digital Cross-connect System. A device for switching and rearranging private line voice services.

DDL Derived Data Link

DDS Digital Data System. A private line digital service, typically with 56 Kbps dedicated or switched data service.

DHCP Dynamic Host Configuration Protocol. An IP protocol that enables PCs and workstations to get temporary or permanent IP addresses from centrally administered servers.

DID Direct Inward Dialing. A telephony feature which allows you to dial business extensions without going through an attendant.

DLC Digital Loop Carrier. A device that concentrates subscriber telephone circuits onto one or more high-speed digital loops in a carrier's central office by converting analog signals into digital bit streams. the form of in-service monitoring and diagnostics.

DS0 Digital Signal, Level 0. At 64 Kbps, the standard speed for one voice conversation digitized under pulse code modulation.

DS1 Digital Signal, Level 1. The North American Digital Hierarchy signaling standard for transmission at 1.544 Mbps. This standard supports 24 simultaneous DS0s.

DS3 Digital Signal, Level 3. The North American Digital Hierarchy signaling standard for transmission at 44.736 Mbps. This standard, used by T3 carrier, supports 28 DS1s plus overhead.

DSL Digital Subscriber Line. Advanced technologies that provide high-speed data and voice on existing copper cables (see xDSL).

DSLAM Digital Subscriber Line Access Multiplexer. A device that takes xDSL subscriber lines and concentrates them to a single high-speed, ATM or Frame Relay line.

DSX-1 Digital Signal Cross-connect Level 1. Panel providing a physical connection point between DS1 signals from various network elements.

DTF Dial Tone First coin service. A type of pay phone service in which callers receive dial tone when they go off hook. Allows dialing before inserting coins.

E

EM Element Manager. An independent platform in the Central Office, Network Operations Center, or similar environment that provides configuration management/operations, fault management, performance monitoring, security management (see EMS).

EMS Element Management System. The set of tools (Element Manager and Craft Interface Tool) for operation, administration, management, and provisioning of the Pliant 3000 IAP.

EOC Embedded Operations Channel. A 64 Kbps embedded channel between the Local Digital Switch and the system that provides OAM&P for GR-303 interfaces.

eoc Embedded operations channel. An embedded channel between the basic rate ISDN service and the network termination.

ES Errored Second. The total number of seconds in which at least one code violation was detected on a digital circuit.

ESF Extended Super Frame. A T1 framing format that uses the framing bit for non-intrusive signaling and Control. In T1, a frame has a 192-bit payload, preceded by a framing bit. Each frame is sent 8,000 times a second.

Ethernet A common method of connecting computers, printers, workstations, etc. in a Local Area Network. Operates over twisted wire and over coaxial cable at speeds up to either 10 Mbps or 1000 Mbps.

EXZ Excessive Zero

F

FAP Fuse and Alarm Panel. Located at the top of a Controller Shelf Rack.

FC Failure Count

FC Fiber Optic Connector

FCFS First Come, First Serve

FDL Facilities Data Link. A T1 term, specifically for extended Super Frame (see ESF). Supports the communication of various network information in CTD Cell Transfer Delay. For one ATM connection, the elapsed time between a cell exit event at measurement point 1 and the corresponding cell entry at measurement point 2.

FE Framing (bit) Error. Errors in Layer 2 frames.

FEBE Far-End Block Error. Error reported when a far end device receives excessive Cyclic Redundancy Check (CRC) errors.

FIFO First In, First Out

FP Fuse Panel. Located at the top of a Node Shelf rack.

Frames A common term used in telecom to distinguish groups of ones and zeros that can be separated into channels.

FT1 Fractional T1. Refers to any data transmission rate between 64 Kbps (DS0 rate) and 1.544 Mbps (T1). Typically used for local area network interconnection, video conferencing, high-speed mainframe connection, and computer imaging.

G

GFR Guaranteed Frame Rate

GR-303 Telcordia (formerly Bellcore) standard for the generic requirements and interfaces on an Integrated Digital Loop Carrier System

GUI Graphical User Interface. Generic name for any computer interface that substitutes graphics for characters. GUIs usually work with mouse/trackball.

H

HDLC High-level Data Link Control. An ITU link layer protocol standard for point-to-point and multi-point communications.

HDSL High-bit-rate Digital Subscriber Line. Delivers T1 (1.536 Mbps usable bandwidth) over a four-wire loop of two pairs.

HEC Header Error Checksum. Using the fifth octet in the ATM cell header, ATM equipment may check for an error and correct the header contents. The check character is calculated using a CRC algorithm that corrects a single bit error in the header or detects multiple errors.

HTML Hyper Text Markup Language. Authoring software used for creating Internet Web pages.

HW Hardware

I

IAP Integrated Access Platform

IDLC Integrated Digital Loop Carrier. Access equipment which extends Central Office services. Connects to a SONET ring or copper T1 on the network side, while providing telephony services on the subscriber side (POTS, ISDN, etc.).

IDT Integrated Digital Terminal. The part of a local digital switch that provides the interface for Integrated Digital Loop Carriers (IDLCs).

IEEE Institute of Electrical and Electronic Engineers. Possibly the world's largest technical professional society. Responsible for many telecom and computing standards (including those used in local area networks).

IG Interface Group. Group of up to 2,048 subscribers on a GR-303 interface.

ILMI Interim Link Management Interface. An ATM Forum-defined interim specification for network management functions between an end user and a public or private network and between a public network and a private network.

IP Internet Protocol. A standard describing software that keeps track of the Internetwork addresses for different nodes, routes outgoing messages, and recognizes incoming messages. This connection-less protocol operates at the Network Layer (layer 3) of the OSI model. Works in conjunction with UDP or TCP, usually identified as TCP/IP.

IS In Service

ISDN Integrated Services Digital Network. A digital phone connection system that transmits both voice and data signals at the same time.

ISDN-BRI Integrated Services Digital Network, Basic Rate Interface. A circuit comprised of two 64 Kbps Bearer (B) channels and one 16 Kbps Data (D) channel used for signaling. Designed for home personal computers and small office use, with a bandwidth of 144 Kbps.

ISDN-PRI Integrated Services Digital Network, Primary Rate Interface. A circuit comprised of 23 64 Kbps Bearer (B) channels and one 64 Kbps Data (D)

channel used for signaling. Designed for telephone switches, computer telephony, and voice processing systems, with a bandwidth of 1.544 Mbps.

J

JSP Java Server Page. Works with Java Hyper Text Markup Language as part of an in-line scripting language for creating dynamic Internet Web pages.

L

LAPD Link Access Procedure - D Channel. A Layer 2, link-level protocol devised for ISDN connections. Reliably transfers blocks of information across one Layer 1 link and supports multiplex service access of different connections at Layer 2.

LAPF Link Access Procedure Frame – For Frame Relay on ISDN. A Layer 2, link-level protocol devised for ISDN connections. Reliably transfers blocks of information across one Layer 1 link and supports multiplex service access of different connections at Layer 2.

LDS Local Digital Switch. A public switched telephone exchange network.

Line Used in SONET to distinguish the physical link between multiplexers.

Line Repeater Used to extend a signal further down a span.

LIU Line Interface Unit

LOF Loss Of Frame

Loop Back Diagnostic test in which the transmitted signal is returned to the sending device after passing through all or part of a data-communications link or network. A loopback test compares the returned signal with the transmitted signal.

LOS Loss Of Signal

M

M13 Basic framing format of DS3 signals.

MAC (Address) Media Access Control. The address for a device as it is identified in the Media Access Control layer in the network architecture.

MDF Main Distribution Frame, connects outside wires to internal wires within a central office.

MIB Management Information Base. A database of information stored on a Network Agent for access by a Network Management Station. Consists of a repository of characteristics and parameters managed in a network device (e.g.; hub, switch, router).

MLT Mechanized Loop Testing. Mechanized means of testing drops.

MMI Machine-to-Machine Interface

MOC Managed Object Class

(**M)PHY** (Multiple) Physical layer devices

N

NDS1 Network DS1. The DS1 facility that connects the Controller Shelf to a Local Digital Switch, cross connect, or channel bank.

NE Network Elements. Processor-Controlled entities of the telecommunications network that primarily provide switching and transport network functions and contain network operations functions.

NFAS Non Facility Associated Signaling, allows Multiple PRIs to use a smaller amount of D channels.

NIU Network Interface Unit, The demarcation point for the local provider, a NIU is a remotely loopable device that can aid in testing and troubleshooting.

NMA Network Monitoring and Analysis. A Telcordia operations support system that monitors network performance. Gathers alarms and performance monitoring data information from network nodes and transport system, analyzes the location and severity of the trouble, and generates an appropriate trouble indication.

NMS Network Management System. Manages a portion of the network. Talks to network management agents which reside in the managed nodes via a network management protocol. Implements functions at the Network Management Layer.

NNI Network-to-Network Interface. Protocol governing how ATM switches establish connection and how ATM signaling requests are routed through an ATM network.

NOC Network Operations Center. Group responsible for daily network operations.

NPC Network Parameter Control. In ATM, a set of actions that the network takes to monitor and Control traffic from the Network-to-Network Interface. Protects network resources from malicious and unintentional misbehavior which can affect the quality of service of other established connections. Detects violations of negotiated parameters and takes appropriate actions.

NPU Node Processor Unit. On the Node Span Interface card, the function that provides call processing and OAM&P for the Node Shelf.

nrt-VBR Non-real time Variable Bit Rate. Class of ATM voice service.

NS Node Shelf. Pliant Systems' equipment that connects to businesses, small offices, and subscriber homes.

NSA Non-Service Affecting. Type of software downloading during which the Controller Shelf does not re-initialize hardware registers, so that existing TDM traffic continues without interruption.

NSC Node Service Card. Generic term for Node Shelf service cards (e.g., ISDN, DDS, DID, POTS, PROG, T1F).

NSI Node Span Interface. Circuit card located in Node Shelf. Connects the Node Shelf to the Controller Shelf.

NTI Node Test Interface. Circuit card located in Node Shelf. Provides drop testing, craft interface, bypass pair interface, and channel test circuitry.

Nx64K The circuit bandwidth or speed provided by aggregating nx64 Kbps channels (where n=integer>1). The 64 Kbps or DS0 channel is the basic channel increment that T Carrier systems provide.

O

OAM&P Operations, Administration, Maintenance, and Provisioning. The specifics of managing a system or network. Typically, a group of network management functions that provide network fault indication, performance information, data and diagnostics.

OC3 Optical Carrier – Level 3. A SONET channel equal to 155.52 Mbps.

OC3c Optical Carrier – Level 3, A SONET channel with a concatenated payload equal to 155.52 Mbps.

OCn Optical Carrier level *n* (where n=optical level number)

ODBC Open DataBase Connectivity. A Microsoft standard that allows a common interface to access databases created by various relational and non-relational database programs.

OOCD Out Of (HEC) Cell Delineation

OOF Out Of Frame. Name of a condition where either the network or the DTE equipment senses an error in framing bits (e.g.; missing two of four framing bits).

OOS Out Of Service

OPS/INE Operation Systems for Intelligent Network Elements

OR Office Repeater, located in a central office, it is responsible for putting the initial voltage on the DS1 span.

OSS Operations Support System. Methods and procedures which directly support the daily operation of the telecommunications infrastructure.

P

Path Used in SONET to represent the start to finish of a SONET signal.

PC Physical Connect, a connection in fiber optics where a connection is made with to faces touching each other

PCM Pulse Code Modulation. Universal method of encoding an analog voice signal into a digital bit stream. Telephony sampling rate of 8,000 times per second.

PMD Polar Mode Dispersion, the spreading of colors into wavelengths as it travel along fiber, ultimately spreading into a wide pulse at the receiving end

PDU Protocol Data Unit. An OSI message of a given protocol comprising payload and protocol-specific Control information, typically contained in a header.

PID Private IDentifier or Processor IDentifier

PLCP Physical Layer Convergence Protocol. In ATM, the part of the physical layer that adapts the transmission facility to handle DS3 transmission.

PLL Phase Locked Loop. A mechanism for transferring timing information within a data stream. The receiver derives the signal element timing by locking its local clock source to the received timing information.

PM Performance Monitor(ing) (also known as Performance Management). Method of measuring the quality of service and identifying a degrading or marginally operating system before it generates an alarm.

PMD Physical Medium Dependent. This sublayer defines the parameters at the lowest level, such as speed of the bits on the media.

PNNI Private Network-to-Network Interface. A routing information protocol that enables extremely scalable, full function, dynamic multi-vendor ATM switches to be integrated in the same network.

POTS Plain Old Telephone Service. Basic service supplying standard single line telephones, telephone lines and access to the public switched network to send and receive calls.

PPP Point-to-Point Protocol. In TCP/IP, a protocol that lets a computer connect to the Internet over a standard dial-up phone line and a modem.

PRI Primary Rate Interface. An ISDN interface that larger customers typically use for telephone switches, computer telephony, and voice processing systems. This interface offers 1.544 Mbps (same as T1).

PROG Programmable Service Card. Circuit card located in the Node Shelf. Programmable line card with eight tip/ring ports that provide switched and non-switched, local and non-local, narrowband services.

PSR Power Supply/Ring Generator. Power card located in the Node Shelf.

PST Primary State

PSTQ Primary State Qualifier

PVC Permanent Virtual Circuit. A permanent association between two entities of data terminal equipment. Established by configuring a fixed logical channel.

PVPC Permanent Virtual Path Connection. An ATM connection where switching is performed only on the VPI field of each cell. A Permanent VPC is provisioned through a network management function and left up indefinitely.

Q

QoS Quality of Service. Method of insuring that voice end and other mission-critical voice frequency information is carried properly over packetized networks.

QRSS Quazi Random Signal Source is a test pattern used to simulate a voice traffic bit pattern.

Q.931 Layer 3 ISDN Signaling Message protocol.

R

RAI Remote Alarm Indication. Alarm at far end of facility.

RAM Random Access Memory.

RARP Reverse Address Resolution Protocol. In TCP/IP, a low-level protocol that a workstation uses to query a node for its logical address.

RDI Remote Defect Indication. An indication that a failure has occurred at the far end of a transmission link.

REN Ringer Equivalent Number. Comparison of a ringer's impedance to a type 500 set ringer. If equal to the ringer impedance, it has a REN value of one bell.

RFC Request For Comment

Ring The second copper wire in the twisted pair.

R/O Read Only

ROM Read Only Memory. A factory-programmed memory device; its contents cannot be altered. Also non-volatile (unaffected by power failures).

ROS Remote Operations Service

rt-VBR Real-time Variable Bit Rate. Class of service provided by ATM.

R/W Read/Write

S

SAPI Service Access Point Identifier. A logical point at which a data link layer entity provides data link (Layer 2) services to a Layer 3 entity.

SAR Segmentation And Reassembly. A process of segmenting relatively large data packets into smaller packets, to comply with a network protocol relying on a smaller specified packet size.

SC Square Connector, fiber optic square shaped connector

SCB Slave Control Bus

SCM Source Code Module (also known as System Code Memory)

Section Used in SONET to represent the connection between SONET equipment.

SEF Severely Errored Framing. A SONET defect which is the first indication of trouble in detecting valid signal framing patterns.

SEFS Severely Errored Framing Seconds. Number of seconds during which a severely errored framing defect was present.

SF Super Frame. A DS1 framing format in which 24 DS0 timeslots plus a coded framing bit are organized into a frame which is repeated 12 times to form the superframe.

SLA Service Level Agreement. An agreement between a user and a service provider, defining the nature of the service provided and establishing a set of metrics for measuring the level of service provided against the agreed level of service (e.g. provisioning, average availability, restoration times for outages).

SMB Server Message Block. Protocol that defines a series of commands used to pass information between network computers. Provides access to server-based files and print queues.

SNMP Simple Network Management Protocol. Common method for network management applications to query a management agent using a supported

management information base (see MIB).

SONET Synchronous Optical NETwork. An optical interface standard that allows transmission products from multiple vendors to work together.

SPE Synchronous Payload Envelope. A SONET term describing the envelope which carries the user data or payload.

SPECTRA SONET Payload Extractor Aligner

SPVC Soft Permanent Virtual Circuit. A PVC that is set up using signaling and has the notion of persistence.

SQL Structured Query Language. A specialized programming language for creating, maintaining, and viewing data in a database.

SRTS Synchronous Residual Time Stamp. A clock recovery technique. Difference signals between source timing and a network reference timing signal are transmitted to reconstruct the source timing at the destination.

STS Synchronous Transport Signal. The electrical equivalent of SONET OC level. Signal starts as electrical and is converted into optical before reaching the fiber optic medium.

STS1 Synchronous Transport Signal Level 1. SONET basic transmission rate of 51.84 Mbps.

SVC Switched Virtual Circuit. A virtual circuit connection established across a network on an as-needed basis and lasting only for the duration of the transfer.

SW Software

T

T1 Trunk Level 1. A digital carrier facility for transmitting a single DS1 digital stream over two pairs of regular copper telephone wires at 1.544 Mbps. Also now means any 1.544 digital stream, regardless of what transmission medium.

T1F T1/Fractional T1 service card. Circuit card located in the Node Shelf (see FT1).

TA Technical Advisory. Published documents describing Telcordia's preliminary view of proposed generic requirements for products, new technologies, services, or interfaces.

TBC Telecom Bus Controller

TBUS Telecom Bus. Controller Shelf backplane bus that routes telephony traffic.

TC Transmission Convergence. The TC sublayer is a dimension of the ATM Physical Layer, working closely with the Physical Medium sublayer. Accepts frames of data transmitted across the physical medium, and delivers them to the ATM Layer for segmenting into cells, generates the Head Error Check, and sends idle cells when the ATM layer has none to send. On reception, the TC sublayer delineates individual cells in the received bit stream and reconstitutes the frames of data, using the Head Error Check to detect and correct received errors.

TCP Transmission Control Protocol. For TCP/IP protocol suite, the protocol that governs the exchange of sequential data. Provides reliable, sequenced, and non-duplicated delivery of bytes to a remote or local user. Provides reliable byte stream communication between pairs of processes in hosts attached to interconnected network.

TCP/IP Transmission Control Protocol/Internet Protocol. A networking protocol that provides communication across interconnected networks, between computers with diverse hardware architectures and between various operating systems.

TDM Time Division Multiplexing. A technique for transmitting a number of separate data, voice and/or video signals simultaneously over one communications medium. Quickly interleaves a piece of each signal one after another.

TEI Terminal End-point Identifier. Used with Service Access Point Identifier (SAPI) to identify the end point of a Layer 2 data link.

Telco Local Telephone Company

TFTP Trivial File Transfer Protocol. A UNIX-based file protocol that transfers files but does not provide password protection or user-directory capability.

Tip The first wire in a twisted pair, usually connected to the positive side.

TL1 Transaction Language 1. Machine-to-machine communications language.

TMC Time-slot Management Channel. Dedicated channel for sending Control messages that set up and tear down calls. Also, a 64-Kbps, embedded channel between the Local Digital Switch and the Pliant 3000 IAP that provides call Control messaging for GR-303 interfaces.

TMS Transaction Monitoring System

TNI TDM Network Interface. Circuit card located in Controller Shelf. Provides DSX-1 interface for GR303 services or for permanently connected DS1 or DS0 services.

TOC3 Telephony Optical Carrier Level 3

TR Technical Requirement. Published technical documents describing Telcordia's view of proposed generic requirements and standards for products, new technologies, generic requirements, or interfaces.

Trap Destination List List of IP addresses sent to autonomous message traps.

Trusted Host List List of trusted IP addresses. A trusted IP address is allowed to interact with the Controller Shelf. IP packets from sources not found in the trusted host list are discarded.

Twisted Pair Two insulated copper wires which are twisted together to reduce interference.

U

UAS Unavailable Second. Outage, measured in seconds, of a facility or connection.

UBR Unspecified Bit Rate. In ATM, a service category that does not specify traffic-related service guarantees. Does not include the notion of a pre-connection negotiated bandwidth.

UDP User Datagram Protocol. TCP/IP protocol describing how messages reach application programs within a destination computer. Normally bundled with IP-layer software. A transport layer, connection-less mode protocol, providing a datagram mode of communication for delivering packets to a remote or local user.

UNI User-to-Network Interface

UPC Usage Parameter Control. In ATM, actions that a network takes to monitor and Control traffic. Checks validity of the ATM connection at the end-system access. Protects network resources from malicious and unintentional misbehavior, which can affect the quality of service of other already established connections. Detects violations of negotiated parameters and takes appropriate actions.

UTOPIA Universal Test & Operations Interface for ATM. An electrical interface between the transmission convergence and the physical medium dependent sublayers of the physical layer. **UNI** The interface for devices connecting to an ATM network.

UTP Unshielded Twisted Pair. A pair of wires, twisted to minimize cross-talk with other pairs of wires in the same cable.

UVPSR Unidirectional Virtual Path Switched Ring

V

VBR Variable Bit Rate. In ATM, a voice service where voice conversations receive only as much bandwidth as they need; the remaining bandwidth is dynamically allocated to other services that may need it more at any given moment.

VBR-rt Variable Bit Rate – real time

VBR-nrt Variable Bit Rate – non real time

VC Virtual Circuit. In packet switching, network facilities that give the appearance to the user of an actual end-to-end circuit (either a VCC or a VPC).

VCC Virtual Channel Connection. In ATM, a concatenation of virtual channel links that extends between the points where the ATM service users access the ATM layer. A VCC

ends at the points where the ATM cell payload is passed to or received from the users of the ATM layer for processing.

VCI Virtual Channel Indicator. A 16-bit header field in an ATM cell. Identifies the virtual channel over which a stream of cells is to travel during a session between devices.

VF Voice Frequency. Any analog voice service that typically consumes 4 KHz or less.

VPC Virtual Path Connection. In ATM, a concatenation of virtual path links between virtual path terminators. Unidirectional.

VPI Virtual Path Indicator. In ATM, an eight-bit field in an ATM cell. Indicates the virtual path over which the cell should be routed.

W

WAN Wide Area Network. Network that covers a large geographical area.

X

xDSL Refers collectively to all types of digital subscriber lines (see DSL).

XML Extensible Markup Language. Allows structured exchanges of data between machines attached to the Web. Enables one Web server to talk to another Web server.