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Proudly Presents

The MCI Telecommunications Glossary

MISP80.TXT

Part I Volume II (E - N)

Typed and Edited by Knight Lightning

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- E -

ECHO

A signal that has been reflected or

otherwise returned with sufficient

magnitude and delay to be perceived by

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the speaker.

ECHO RETURN LOSS (ERL)

The loss which must be in the echo path

to reduce echo to a tolerable amount.

ECHO SUPPRESSOR

A device which detects speech signals

transmitted in either direction on a

four-way circuit, and introduces loss

in the direction of transmission.

EIGHT HUNDRED SERVICE (800)

A commonly used reference for inward WATS

service (See WATS, Inward).

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EITHER END HOP OFF (EEHO)

Uses either Head Hop Off or Tail End Hop Off.

ELECTRONIC DATA PROCESSING

The use of electronic memories to store, up-date, read, and use information.

ELECTRONIC KEY TELEPHONE SETS (EKTS)

A generic term indicating key telephones with special buttons which are electronically programmed to access various PBX features.

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ELECTRONIC SWITCHING SYSTEM (ESS)	A Bell System term for electronic
ELECTRONICALLY PROGRAMMABLE READ ONLY MEMORY (EPROM)	Memory which is initially programmed by the manufacturer. Changes can be made to conform to the customer requirements at their premises.
ELECTRONIC TANDEM NETWORK (ETN)	1. A private network automatically and electronically connecting the calling office to the called office through Tandem-Tie-Trunks. The network switches also function as PBX's. 2. An AT&T

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product name. 3. Used as a generic term

a PBX base network.

END OFFICE CONVERSATION

When an end office offers equal access.

ENHANCED PRIVATE SWITCHED

A private network utilizing Bell provided

COMMUNICATIONS SERVICE (EPSCS)

equipment located in the central office

and dedicated to a specific customer.

E&M LEADS

A pair of leads which carry signals

between trunk equipment and separate

signaling equipment unit. The M lead

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transmits battery or ground signals to

the signaling equipment, and the E lead

receives open or ground signals from the

signaling equipment.

E&M SIGNALING

An arrangement whereby signaling between

a trunk circuit and an associated

signaling unit is effected over two

leads providing full-time, 2-way,

2-level supervision.

ENTERPRISE NUMBER

A unique telephone exchange number that

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permits the called party to be

automatically for the incoming calls.

Synonym: "Toll Free Number;" INWARD WATS.

EQUALIZATION

The procedure of compensating for

fluctuation in circuit amplitude, delay,

or distortion.

ERLANG

A unit of traffic intensity. One Erlang

is the intensity at which one traffic

path would be continuously occupied,

e.g., one call per hour.

ERLANG B TABLE A method for determining grade of service

for a specified amount of traffic.

ERROR RATE The probability of an error occurring

during the transmission of a message.

EXCHANGE A telephone switching center.

EXCHANGE AREA A geographical unit established within a

telephone company's serving area for the

adminastration of telephone service

provided. One schedule of charges applies

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to the whole area. Usually served by one

or more central offices and their

associated outside plant.

EXCAHNGE NETWORK FACILITIES FOR

AT&T's pricing arrangement for local

INTERSTATE ACCESS (ENFIA)

loops offered to OCCs for connecting the

OCC's network to the local telephone

company's central office.

EXPECTED MEASURED LOSS (EML)

The calculated 1 kH loss of the trunk

shown on the circuit or design layout

record.

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EXTENDED AREA SERVICE (EAS)

A telco tariff giving customers the option whereby the subscriber can pay a higher flat rate in order to obtain geographic coverage without additional per-call charges (non-toll charges).

- F -

FACILITY

Synonym: Circuit.

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FACSMILE

The transmission of pictures, maps or

other documents via communications

circuits using a device which scans the

original document, transforms the image

into coded signals and reproduces the

original document at a distant point.

FEDERAL COMMUNICATIONS COMMISSION (FCC) The government agency established by the

Communications Act of 1934 which

regulates the interstate communications

industry.

FIBER OPTICS

High speed transmisson using light to

send images (in telecommunications:

voice or data) through a flexible bundle

of glass fibers.

FOREIGN EXCHANGE LINES (FX)

A special access hardwire circuit that

provides service between a telephone at a

customer's location and a distant central

office.

FOUR WIRE CIRCUIT

A communications path which employs two

separates electrical paths one recieving

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and one transmitting.

FREQUENCY

The number of complete cycles per unit of

time.

FREQUENCY DIVISION MULTIPLEXING (FD) The division of an available frequency

into bands. This modulation technique

requires the derived channels, each to

have their own baseband and that

"guardbands" be provided between channels

to minimize interference or crosstalk

from adjacent channels.

FREQUENCY RESPONSE

The reaction of frequencies to the

circuit components.

FULL DUPLEX

A circuit which allows transmission of a

message in both directions at the same

time.

FULL PERIOD

The condition of a switching system where

each input a switching stage has access

to every output from the stage.

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- G -

GRADE OF SERVICE

The probability of a call being blocked by busy trunks, expressed as a decimal fraction, and usually meaning the busy-hour probability.

GROUP

12 circuits processed as a unit in a carrier system.

- H -

HALF DUPLEX

A circuit for transmitting or receiving

signals in one direction at a time.

HANDSET

That portion of the telephone containing

hand-held when the telephone is in use.

HARDWARE

Physical equipment or components of a

computer system rather than a programmed

method use.

HARDWIRE To wire or cable directly between units

of equipment.

HARMONIC The full multiple of a base frequency.

HARMONIC DISTORTION The ratio, expressed in decibels, of the

power at the fundamental frequency, to

the power of a harmonic of that

fundamental.

HEAD END HOP OFF (HEHO) A method of traffic engineering whereby

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calls are completed by using long

distance facilities directly off the

switch that serves that location.

HERTZ (Hz)

International standard unit of frequency.

Replaces, and is identical to, the order

unit "Cycles-per-second."

HOMING

Returning to the starting position, as in

a rotary stepping switch.

HOOKSWITCH

The device on which the telephone

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receiver hangs or on which a telephone

handset hangs or rests when not in use.

The weight of the receiver or handset

operates a switch which opens the

telephone circuit, leaving only the bell

connected to the line.

HOT-CUT

Virtually instantaneous replacement of

one line with another.

HYBRID

An electronic circuit which performs the

wire conversations necessary for the

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connection of a local loop with a

long-haul facility.

- I -

INTERCEPT

To stop a telephone call directed to an

improper telephone number, and redirect

that call to an operator or a recording.

INTERCONNECT

1) The arrangement that permits the

connection of customer's telecommunica-

tions equipment to a communications

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common carrier network. 2) The industry
name for manufacturers, excluding the
Bell system, which provide CPE telephone
equipment.

INTER-EXCHANGE MILEAGE (IXC)

The airline mileage between two cities.

Synonym: Long Haul Mileage.

INTEREXCHANGE PLANT

The facilities between the subscriber
switching center and another switching
center.

INTERFACE

The junction or point of interconnection between two systems or equipment having different characteristics.

INTERFERENCE

Any unwanted noise or crosstalk on a communications circuit which acts to reduce the intelligibility of the desired signal or speech.

INTER-MACHINE TRUNK (IMT)

A circuit which connects two automatic switching centers.

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INTER-OFFICE TRUNK (IOT)

A direct trunk between local exchange

offices.

INTERNATIONAL RECORD CARRIER (IRC)

Companies that handle the intra-U.S.

portion of international record

transmission.

INTERSTATE

Any connection made between two states.

INTRASTATE

Any connection made that remains within

the boundaries of a single state.

- J -

JACK

A connecting device having springs which

make electrical contact with mating

contacts of a plug.

JITTER

Short term instability of the amplitude

and/or phase of a signal.

Commonly called: PHASE JITTER.

- K -

KEYSET

Muti-push button keys located on a

telephone which may be punched in

sequence for sending telephone number

desired, precedence, or routing signals.

KEY SYSTEM

The equipment utilized to provide the

features associated with key sets.

LEASED LINES

Any circuit or combination of circuits

designated to be at the exclusive

disposal of a given subscriber.

Synonym: Private Line.

LEAST COST ROUTING (LCR)

A method of automatically selecting the

least costly facility for transmission of

a call.

Synonym: Most Economical Route Selection

(MERS): Route Optimization.

LEVEL	An expression of the relative signal strength at a point in a communications circuit compared to a standard.
LOADING	A system for adding regularly spaced inductance units to a circuit to improve its transmission characteristics.
LOCAL ACCESS AND TRANSPORT AREA (LATA)	Defines the local calling area as established by the court ordered AT&T divestiture plan.

LOCAL AREA NETWORK (LAN)

Intraoffice communication system usually used to provide data transmission in addition to voice transmission.

LOCAL LOOP

The local connection between the end user and the Class 5 central office.

LONG HAUL

Circuits spanning considerable distances.

LOOP BACK

A method of performing transmission tests on a circuit not requiring the assistance of personnel at the distant end.

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use the metallic loop formed by the trunk

conductors and the terminating equipment

bridges.

- M -

MAIN DISTRIBUTION FRAME (MDF)

The point where outside plant cables

terminate and from which they cross

connect to terminal or central office

line equipment.

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MAIN PBX

A PBX directly connected to a switch via an access trunk group.

MANUAL TIE LINE

A tie line which requires the assistance of an attendant at both ends of the circuit in order to complete a call.

MASTER GROUP (MG)

240 circuits processed as a unit in a carrier service.

MESSAGE TELEPHONE SERVICE (MTS)

AT&T's tariffed pricing name for long

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distance telephone calls.

MESSAGE UNIT (MU)

A local toll rate calling plan which is

time and distance sensitive.

METAL OXIDE SEMICONDUCTOR (MOS)

A type of computer memory utilizing 1/4

inch square slices of silicon. These

silicon slices require constant electric

current for the data to be retained.

MICROWAVE (M/W)

Radio transmission using very short

lengths , corresponding to a frequency of

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1,000 megahertz or greater.

Synonym: Microwave Radio.

MICROWAVE RADIO

Synonym: Microwave.

MODEM

A device which modulates and demodulates signals on a carrier frequency and allows the interface of digital terminals with analog carrier systems.

MODULATION

Alterations in the characteristics of carrier waves. Usually impressed on the

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amplitude and/or the frequency.

MONITORING DEVICE

Records data on calls placed through a

length of calls, calling location.

MOST ECONOMICAL ROUTE SELECTION

Synonym: Least Cost Routing

(MERS)

MULTIPLEXING

The act of combining a number of

individual message circuits for

transmission over a common path. Two

methods are used: (1) frequency division,

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and (2) time division.

- N -

NETWORK

A collection of switches connected to one

another by transmission facilities.

NETWORK NUMBERING EXCHANGE (NNX)

The three digit location code

representing the central office. "N" may

be any number between "2" and "9" and "X"

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may be any number.

NETWORK TRUNKS

Circuits connecting switching centers.

NODE

A terminal of any branch of a network.

NON-BLOCKING

A switching network having a sufficient

number of paths such that a subscriber

originating a call can always reach any

other idle subscriber without

encountering a busy.

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NUMBERING PLAN AREA (NPA)

A geographical division within which no

two telephones will have the same 7 digit

number. "N" is any number between "2"

and "9"; "P" is always "1" or "0"; and

"A" is any number excluding "10."

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This concludes Part I Volume II of the MCI Telecommunications Glossary. Look for

More G-philes on MCI by Knight Lightning coming soon to Metal Shop!

This has been a 2600 Club production

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Thanx to Taran King