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by Harry Newton

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E Block Carrier

E Block Carrier A 10 MHz PCS carrier serving a Basic Trading Area in the frequency block 1885 — 1890 MHz paired with 1965 — 1970 MHz.

E Channel E stands for echo. It is the 16 Kbps ISDN basic rate channel echoing contents of DCEs to DTEs. Used in bidding for access to multipoint link.

E Link Extended Link. A Signaling System 7 (SS7) connection. This protocol controls all transfers between COs in North America. A SS7 signaling link used to connect a Signaling End Point (SEP) to an STP pair not considered its home STP pair.

E Mail Electronic Mail.

E Mail Gateway A LAN application that fetches messages from one electronic mail system, translates them to the format of another electronic mail system, and then sends them to the "post office" of that other system. The post office is the public entry point — the place you put mail you want the other system to receive.

E Port A expansion port on a switch. It is used to link multiple switches together into a Fibre Channel fabric. See Fibre Channel.

E Purse Electronic purse. An electronic monetary transaction card being proposed by several government agencies.

E Rate From Network World, December 15, 1997: "E Rate is the program President Clinton and Vice President Gore are referring to when they say they want every classroom connected to the Internet by the year 2000. It grants elementary and secondary schools a discount on carrier services, including not only Internet access but also a raft of other offerings."

E-1 The European equivalent of the North American 1.544 million bits per second (Mbps) T-1, except that E-1 carries information at the rate of 2.048 million bits per second. This is the rate used by European CEPT carriers to transmit 30 64 Kbps digital channels for voice or data calls, plus a 64 kilobits per second (Kbps) channel for signaling, and a 64 Kbps channel for framing (synchronization) and maintenance. CEPT stands for the Conference of European Postal and Telecommunication Administrations. Since robbed-bit signaling is not used (as it is for T-1 in North America) all 8 bits per channel are used to code the wave-shape sample. See E1, E2, E3, and T-1.

E-2 Interim data signal that carries four multiplexed E-1 signals. Effective data rate is 8.448 million bits per second (Mbps). See E1, E3 and T-1.

E-3 CEPT signal which carries 16 CEPT E-1s and overhead. Effective data rate is 34.368 million bits per second (Mbps).

E-911 See the next two definitions.

E-911 Control Office In the US emergency services telephone network, the E-911 Control Office is the central office that provides the tandem switching of 911 calls. Each E-911 public safety answering point (PSAP) connects to one or more E-911 Control Offices. The E-911 Control Office delivers 911 voice calls, with Automatic Number Identification, to the PSAP and provides normal and emergency-specific switching functions. The specialized switch at the E-911 Control Office is known as an E-911 Tandem or Selective Router.

E-911 Service Enhanced 911 service. Dial 911 in most major cities and you'll be connected with an emergency service run typically by a combination of the local police and local fire departments. 911 service becomes enhanced 911 emergency reporting service when there is a minimum of two special features added to it. E-911 provides ANI (Automatic Number Identification) and ALI (Automatic Location Information) to the 911 operator. Picture: A call comes in. Someone is dying. The 911 operator's screen comes alive as his phone rings. The number calling is on the screen. The caller is dying and needs an ambulance. The operator punches a button or two and his screen immediately indicates the location of the ambulance dispatch center nearest the caller. The operator contacts the dispatch center, another button may dispatch a fax of a map of how to get there to the ambulance and an ambulance gets there in short order and saves a life. (Remember, this is a book, not the real world.) See also CESID and PSAP for a full explanation of how the caller's location is sent. See E-911 Control Office.

E-BCCH Extended-Broadcast Control Channel. A logical channel element of the BCCH signaling and control channel used in digital cellular networks employing TDMA (Time Division Multiple Access), as defined by IS-136. See also BCCH, IS-136 and TDMA.

E-Band See E Band.

E-Band A smooth change in the direction of the axis of a waveguide, throughout which the axis remains in a plane parallel to the direction of electric E-field (transverse) polarization.

E-Check An Ecommerce term for an electronic check. The E-check is a demand for payment which is sent electronically over a network from the buyer to the seller. The e-check

subsequently is sent from the seller to the seller's bank, and then to the buyer's bank. See also E-Commerce.

E-Commerce Electronic Commerce. Buying and selling over the public Internet, the public Web and corporate Intranets. I prefer e-commerce to e-commerce. But you see it spelled both ways. Predictions for the amount of e-commerce should not be underestimated. See the Internet.

E-DSS1 E-DSS1 is the European shorthand way of saying Euro-ISDN.

E-IDE Enhanced IDE. An enhancement to the original IDE disk drive found on many PCs. E-IDE raises the storage capacity limit from 504 megabytes to 8,033 megabytes and the data transfer rate from up to 3 megabytes per second to up to 16.6 megabytes per second. See also Enhanced IDE.

E-Interface The network interface between the Cellular Digital Packet Data (CDPD) networks and other external networks.

E-Mail Electronic Mail. Also spelled email, which is this dictionary's preferred spelling.

E-Nose Electronic nose, gas chromatograph detection systems. These can detect and analyze target samples for a wide variety of applications as in security control, environmental protection control, food and drug safety control.

E-OTD Enhanced Observed Time Difference is a new technology that could be used in mobile phones for location based services. The E-OTD positioning method, generally relies upon measuring the time at which signals from the Base Transceiver Station (BTS) arrive at two geographically dispersed locations — the mobile phone/station (MS) itself and a fixed measuring point known as the Location Measurement Unit (LMU) whose location is known. The position of the MS (also called a cell phone) is determined by comparing the time differences between the two sets of timing measurements. To obtain accurate triangulation, OTD measurements are needed from at least three geographically distinct BTSs. Based on the measured values, the location of the MS can be calculated either in the network or in the MS itself, if all the needed information is available in the MS. The term "MS-assisted" applies to the former method and "MS-based" to the latter. The MS performs measurements without the need for any additional hardware. To obtain accurate triangulation, OTD measurements are needed from at least three geographically distinct BTSs. Based on the measured values, the location of the MS can be calculated either in the network or in the MS itself, if all the needed information is available in the MS. The term "MS-assisted" applies to the former method and "MS-based" to the latter. See Location Services.

E-Rate Electronic Rate. A special discounted rate for Internet access for schools and libraries. E-rate was established as part of the Telecommunications Act of 1996. Technically known as the Schools and Libraries Universal Service Program, e-rate is funded through a portion of the special surcharges of up to five percent on every telephone bill. The carriers remit a portion of those surcharges to the Universal Service Fund, which is administered by the Universal Service Administrative Company (USAC), a not-for-profit corporation established and operated by the National Exchange Carriers Association (NECA). USAC distributes the designated funds to the Schools and Libraries Corporation (SLC) and to the Rural Health Care Corporation (RHCC), which now are divisions of USAC. The SLD (Schools and Libraries Division) get up to \$2.25 billion per year, and the RHCD (Rural Health Care Division) up to \$400 million per year, with the funds parceled out after the usual ton of paperwork is submitted and dissected. E-rate subsidies are for internal wiring, telecommunications services, and Internet access.

E-Signatures As it sounds, e-signatures are signatures that are recorded and transmitted digitally. They have advantages over actual signatures in that 30 physical aspects of a signature are recorded in an e-signature, making it harder to forge.

E-Stamp Electronic Stamp. Developed by E-Stamp Inc., and planned for trial by the USPS (U.S. Postal Service), the E-Stamp is a means for buying postage over the Internet. In support of a corporate Intranet post office, the system comprises PC software, a small security device which attaches to a user's printer port, and 1,024-bit encryption software for purposes of security. Think of it as a PC-based postage meter which can be refueled over the Internet.

E-Tail A squeezing of electronic and retail. Really awful. I prefer e-commerce. See Ecommerce and E-tailer.

E-Tailer A company that does most of its retailing, consumer-to-consumer business over the Internet. Such companies include priceline.com, ftd.com, 1-800-Flowers.com, ebay and expedia.com.

E-TDMA Extended Time Division Multiple Access. A proposed, new, standard for cellular. Other standards are TDMA (Time Division Multiple Access), CDMA (Code Division

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