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26th Updated & Expanded Edition

Harry Newton
with Steve Schoen

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26th Expanded and Updated Edition

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BCOB-X Bearer Class X: Indicated by ATM end user in SETUP message for ATM transport service where AAL, traffic type and timing requirements are transparent to the network.

BCP See Best Current Practice.

BCS Batch Change Supplement. A batch change supplement is a supplement to a batch change in the programmed logic associated with a general purpose computer system, or with a specialized computer or computerized system such as a PBX or router. A "batch change" refers to a change in programmed logic that is made on a batch basis (i.e. in one big bunch of changes). Sometimes, batch changes require additional changes, in the form of supplements.

BCSM See Basic Call State Model.

BD See Building Distributor.

BDC See Backup Domain Controller.

BDCS Broadband Digital Cross-Connect.

BDFB Breaker Distribution Fuse Box, a distinct rack of equipment in the Switch Room.

BDLC Burroughs Data Link Control, a bit oriented protocol.

BDN Bell Data Network. The predecessor to ACS (Advanced Communication System). See ACS.

BDSL Broadband Digital Subscriber Line. Same as VDSL.

BDT Billing Data Tape.

BDU See broadcasting distribution undertaking.

Be Burst excess, or Excess Burst Size. A Frame Relay term. See Excess Burst Size.

beachfront spectrum An industry term for the 700 MHz spectrum, which historically has been used by analog TV broadcasters and which these broadcasters must vacate by Feb. 17, 2009. The 700 MHz spectrum is regarded as highly desirable "beachfront" spectrum by wireless operators because electromagnetic waves in this part of the frequency spectrum, having lower frequencies and longer wavelengths than those in the part of the frequency spectrum that, for example, wireless broadband providers are authorized to use, are better able to penetrate walls and go deeper inside of buildings.

beacon A token ring frame sent by an adapter indicating that it has detected a serious ring problem, such as a broken cable or a MAU. An adapter sending such frames is said to be beaconing. See Beaconing.

Beacon Hill The name given to many hills in England, Canada, Australia, and the United States, because of their being the highest ground. Prior to the invention of the electric telegraph, these were ideal sites for watch towers and signaling stations. Some of these hills are still used today for communications purposes. For example, radio and TV broadcasting companies have built antenna masts on Beacon Hill in Devon, England.

beacon initiative A "plan and rationale to help bring the information highway to Canadian businesses and consumers. The central theme of the initiative is an open collaborative effort with all interested players to bring enhanced interactive data, image and video services to Canadians." That's what the press release of April 5, 1994 said. Companies in the Beacon Initiative include BC Telephone, AGT Limited, SaskTel, Manitoba Telephone System, Bell Canada, NBTel, Maritime Tel & Tel, Island Telephone, Newfoundland Telephone and Stentor Communications.

beacon interval Data transmitted on your wireless network that keeps the network synchronized.

beaconing Token Ring process to recover the network when any attached station has sensed that the ring is inoperable due to a hard error. Stations can withdraw themselves from the ring if necessary. A station detecting a ring failure upstream transmits (beacons) a special MAC frame used to isolate the location of the error using beacon transmit and beacon repeat modes. See Beacon.

beam 1. Concentrated radiation transmitted by a directional antenna.

2. Transmit data optically or via infrared waves between two devices.

beam bender A repeater that is used to direct a base station's wireless signal to an area that is blocked by an obstruction from the base station antenna's coverage pattern. For example, a beam bender may be installed to reach wireless subscribers in an urban canyon or in a natural valley that is blocked from the base station by a ridge line. At a minimum, a beam bender

consists of a receive antenna and a separately mounted transmit antenna, with the two antennas being connected to each other by a cable or wireless arrangement. A beam bender is installed in a location that has line of sight to both the base station and subscribers.

beam diameter The distance between the diametrically opposed points on a plane perpendicular to the beam axis at which the irradiance is a specified fraction of the beam's peak irradiance. The term is most commonly applied to beams that are circular or nearly circular in cross-section.

beam divergence As through the air telecom signal go further, they diverge. Beam divergence measures that divergence.

beam-steering mechanism The mechanism that steers a laser in a free-space optical communication system, for example, in an optical switch.

beamforming Techniques for sending a directional signal rather than an omnidirectional to improve signal strength. The technique emerged at a consumer level when Netgear introduced wireless WiFi routers that sent an Internet signal in one direction—for example that someone curled up in an upstairs bedroom with an iPad can get jitter-free video.

beamsplitter A device for dividing an optical beam into two or more separate beams, often a partially reflecting mirror.

beamwidth 1. The width of the main lobe of an antenna pattern. Usually the beamwidth of an antenna's main lobe is defined as 3 dB down from the peak of the lobe.

2. The angle of signal coverage provided by a radio. Beamwidth may be decreased by a directional antenna to increase gain.

beanpole funds Grant money that the state of Colorado makes available to qualifying small-town government agencies, schools and non-profit organizations to enable them to acquire the equipment and services to connect to a statewide broadband communications network known as the Multi-Use Network. Beanpole funds are intended to narrow the digital divide in Colorado by providing incentives for broadband service providers to build out their networks to small towns in the state.

beans 1. Also called a B Connector or Plain B Wire Connector. A twisted-pair splicing connector that looks like a one-inch drinking straw. They have metal teeth inside them to pierce the vinyl insulation of the wire to make a good connection. Sometimes water-retardant jelly is placed inside. See B Connector.

2. Beans are also filled with nutrients essential to a healthy diet. My children love them because of their after-effects.

bear pit In Elizabethan England, bear baiting consists of letting a pack of crazed hounds loose on a chained bear, and watching from a safe distance while the beasts fight. Very popular. Almost as much fun as a public hanging. Even the Queen thinks this is great fun. One of the most famous of these bears is called Sackerson.

bear trap The stock market is on a long-term slide. Then suddenly it rises for 10%, 20%, or 30%. Does this mean the bear market is over or will it start up again when this little rally stops? A bear market is characterized by many "boomlets." I counted over eight boomlets in the period of 2000 through 2002. Yet the market continued to fall. When a boomlet happens many investors start talking about the beginning of a new bull market. But it's not. It's just a pause. And investors call it a bear trap.

bearer A descriptive term meaning "information-bearing." For example, a bearer channel is one that bears (carries) the actual voice signals or data being transmitted.

bearer channel In its most basic definition, a bearer channel is a basic communication channel with no enhanced or value-added services included other than the bandwidth transmission capability.

In private line international telecommunications, a bearer channel can consist of any number of DS-0s between two countries that have an agreement to pass traffic between them. This type of bearer is usually an E-1 link between two countries but can be 384 Kbps or any number of 64 Kbps channels combined together. Bearer is usually referred to as a half channel between the two countries that have an agreement to pass traffic, and is referred to as the international half circuit. The middle of the ocean or satellite up-link is the demarcation point for these bearers.