

## Glossary

<b>Analogue system</b>	A system in which the transmitted electrical signal has a continuously variable parameter (eg amplitude or frequency) which corresponds directly (and characterizes) the sound (or other) source.
<b>APCN</b>	Asia Pacific Cable Network.
<b>AT&amp;T</b>	American Telephone and Telegraph Company. The major international carrier in the USA and also a supplier of <b>submarine cable systems</b> .
<b>BT</b>	British Telecommunications plc.
<b>C&amp;W</b>	Cable & Wireless plc.
<b>Cable-laying vessel</b>	A vessel specially equipped to lay cables on the sea-bed.
<b>Coaxial cable</b>	A cable where the outer metallic return conductor is around the inner core conductor.
<b>Digital system</b>	A system which transmits data encoded as a stream of bits or binary digits (0s and 1s).
<b>DTI</b>	Department of Trade and Industry.
<b>ECMR</b>	European Community Merger Regulation.
<b>Festoon system</b>	A <b>submarine cable system</b> which links a series of points along a coast.
<b>Fibre-optic cable</b>	A cable which uses <b>optical fibre</b> as the transmission medium, and in which the signal is transmitted as light.
<b>FLAG</b>	Fibre-optic Link Around the Globe. A proposed 28,000 km link between the UK and Japan, serving a number of Mediterranean, Middle East and Asian countries along the route, which is to be developed by a group of investors led by <b>NYNEX</b> .
<b>Fujitsu</b>	Fujitsu Ltd, Japanese electronics company and supplier of <b>submarine cable systems</b> .
<b>Gbits/s</b>	Gigabits (1,000,000,000 bits) per second.
<b>Hz</b>	Hertz. Vibrations per second.
<b>KDD</b>	Kokushin Denshin Denwa Co Ltd, the largest Japanese overseas telecommunications carrier and also a supplier of <b>submarine cable systems</b> .
<b>Km/sec</b>	Kilometres per second.
<b>Land line</b>	A cable which runs only across land.
<b>Laser</b>	A source of intense monochromatic light.
<b>Long-haul system</b>	A cable system which requires submarine <b>repeaters</b> .

<b>Mbits/s</b>	Megabits (1,000,000 bits) per second.
<b>Microwave link</b>	A transmission system in which signals are transmitted through the atmosphere.
<b>Multiplexing</b>	Electrically combining incoming signals into a higher-speed signal for onward transmission.
<b>NEC</b>	Nippon Denki Kabushiki Kaisha, Japanese electronics company and supplier of <b>submarine cable systems</b> .
<b>NTT</b>	Nippon Telegraph & Telephone Corp, Japan's national telecommunications carrier.
<b>Nm</b>	Nanometer. A measure of length one thousand millionth of a metre.
<b>NT</b>	Northern Telecom Limited.
<b>NTEL</b>	Northern Telecom Europe Limited.
<b>NYNEX</b>	NYNEX Corporation, the holding company for local telephone operating companies in New York and New England, USA. It leads the investors in the <b>FLAG</b> project.
<b>OFTEL</b>	Office of Telecommunications.
<b>Optical amplifier</b>	An amplifier used in a fibre-optic system which amplifies the signal in light.
<b>Optical fibre</b>	Fibres of ultra-pure glass, having a central core of higher refractive index glass than an outer cladding, capable of conducting modulated light signals by total internal reflection.
<b>Optical fibre cable</b>	Consists of <b>optical fibres</b> either singly or several per cable, surrounded by various protective claddings.
<b>Pirelli</b>	Pirelli Cavi SpA, Italian manufacturer of cables.
<b>Power-feed equipment</b>	Equipment which supplies the electrical power which drives the <b>repeaters</b> .
<b>PTAT</b>	A privately-owned transatlantic cable system commissioned by a group of investors led by <b>C&amp;W</b> .

<b>Pump laser</b>	A laser light source used in conjunction with special fibre to provide optical amplification.
<b>R&amp;D</b>	Research and development.
<b>Repeater</b>	A unit which contains an amplifier to boost signal strength and an equalizer to correct distortion. A unit is placed at intervals along a submarine cable to allow longer cables to be used. The unit retimes, reshapes and amplifies a signal for onward transmission.
<b>Short-haul system</b>	A cable system which does not use submarine <b>repeaters</b> . The maximum distance for this type of system is about 350 km at present.
<b>Soliton transmission</b>	The propagation of a pulse of energy through a medium without dispersion, so that the pulse arrives unbroadened.
<b>Submarine cable system</b>	A system which connects two or more remote land terminals by an underwater cable.
<b>TAT systems</b>	A series of transatlantic telephone cable systems.
<b>Terminal equipment</b>	The land-based part of a <b>submarine cable system</b> , which comprises transmission equipment, <b>power feed equipment</b> and supervisory software.
<b>TPC</b>	Trans-Pacific Cable.
<b>Unrepeated system</b>	A <b>submarine cable system</b> which does not use <b>repeaters</b> (see <b>short-haul system</b> ).
<b>WDM</b>	Wavelength division multiplexing. The simultaneous transmission of data on two or more closely-spaced wavelengths through the same <b>optical fibre</b> . This increases the capacity of optically-amplified systems.