ISDN

Before the Internet achieved its present ubiquitous state and reached every school the telephone network offered its own digital communication via telephone lines. Termed ISDN (Integrated Services Digital Network), this uses the existing telephone infrastructure to carry digital signals. Offered by telecommunications providers it is available in many parts of the world. The service is accessed through dial up in the same way as a telephone, so the network does not have to be dedicated between the videoconference centres. The costs include installation (for the special interfaces), rental and call charges. The quality of ISDN videoconferencing is limited by the quality (or bandwidth) of the connection varying from 64kbit/s (ISDN-1) to 2Mbit/s (ISDN-30). The normal bandwidth used for meetings is either 128kbit/s (ISDN-2) or 384kbit/s (ISDN-6). One important feature of ISDN is its Guaranteed Quality of Service (GQOS) which means that if, for example, a 384kbit/s link is dialled then unless there is a fault condition the full 384kbits/s will be provided for the duration of the conference. The Internet, because of the way the data traffic has to compete for space, is currently unable to offer GQOS. ISDN maintains identical down and upload speeds.

More information on ISDN is available at the BT ISDN website, for example.