Integrated Services Digital Network (ISDN)

ISDN is an international standard for voice, video, and data transmission over digital telephone or copper lines. ISDN comes in two different types of service levels, the Basic Rate Interface (BRI) for individuals and smaller users and the Primary Rate Interface (PRI) for larger, enterprise size users. Both types of ISDN consists of 64 Kbps B channels for data and 16 Kbps D channels for control, signaling, and supervisory information.

The Basic Rate Interface consists of two 64 Kbps B channels and one 16 Kbps D channel, providing up to 128 Kbps service. The Primary Rate Interface consists of 23 B channels and one 64 Kbps D channel in the United States or 30 B channels and one D channel in Europe.

The widespread availability of ISDN throughout Northern America, as well as most developed areas in Asia and Europe allow for a vast number of sites to be connected through the PEACESAT network. Although ISDN is not readily available in most Pacific regions covered by the PEACESAT network, all PEACESAT sites are still able to be crossconnected through the PEACESAT Network Operations Center (NOC) in Honolulu, which is equipped with ISDN capability. PEACESAT Honolulu currently has 18 BRI lines and 2 PRI lines in operation.

ISDN is primarily used to connect at 128 Kbps for video conferencing applications. Through the use of special ISDN Inverse Multiplexers (IMUX), connections at 384 Kbps and above can be realized through the "bonding" of multiple ISDN B channels into a single data stream.