

BID 950

The BID 950 was introduced to NATO in 1988 as part of the Cryptographic Equipment Low-speed Telegraph (CELT) project to replace TSEC/KW-7 and BID 610 equipment. In 1992 the BID 950 was accepted by NATO as a Digital On-Line Cryptographic Equipment Number 2 (DOLCE II) to replace the BID 1000. In this role the BID 950 is used to protect medium speed data circuits up to 64 kbps.



BID 950 (Photo courtesy NATO IA CD site)

When used in the telegraphic mode, it was the equivalent of an installation of two BID 610 units with a BID 700 (although not compatible with them). It could be used in CTAK or KAK. Also, it was switchable between ITA2 and ITA5 in telegraphic mode with 1, 1.5 or 2 stop bits. There was also a pulse release mode.

In data mode it could communicate with another BID 950 or put into BID 880 mode to work with that machine type. Clocking speeds could be internal or external from transmit or receive clocks (up to 48 kbps) from a DCE device such as a modem.

The BID 950 unit was a standard 19 inch rack type unit about 4 inches high and was modular in construction. There were 6 modules in all. All the modules were removable by undoing four screws at the corner of each module and withdrawing it from the front so maintenance could be carried out without having to take the complete unit out of its rack.

The BID 950 was designed and built by Plessey crypto in Liverpool, UK. Most of the electronics consisted of custom built ICs. Maintenance could be done down to component level replacement. Some depots returned all defective boards back to the manufacturer for repair. All the connections were on a backplane and of the Amphenol type except one connector on the front for use with a Fill Gun.

Keying material was loaded by using the tape reader on the front of the Fill Gun. One user reports "We only used the tape reader although I did try connecting the gun from a KG84 to the front connector and that worked fine. We used the BID 950 in both telegraphic and data modes and they proved to be quite reliable in service."

Most of the BID950's ran at 50 baud so their capability was greatly underutilized.

This crypto machine could be used in simplex or duplex mode and was completely self contained. Fill was available via a tape reader or a separate "gun" that could store about half a dozen daily fills. By using a socket at the back of the machine, one could fill it from a computer".