

NATO UNCLASSIFIED

Annex E: HF Modem remote control interface (information only)

This Annex defines a common remote control interface with a minimum set of modem commands required for operation of the system. This Annex has not been implemented or tested. The requirements of this Annex are provided as information to implementers and are not mandatory for an implementation to be in compliance with the STANAG.

The electrical interface for remote control of the modem shall be configurable, with EIA-232D/423 for unbalanced connections and EIA-422 for balanced connections. The remote control interface shall include transmit data and receive data.

Remote control commands shall consist of ASCII alpha-numeric strings with 8 data bits, even parity, and one stop bit, at 9600 bps.

At minimum, the following commands shall be supported. In all cases, the <address> field shall be replaced by a decimal number between 0 and 255 which shall indicate the address of a specific modem. The modem shall be configurable to select this address and shall respond only to properly addressed commands.

<address> INITIALIZE This command shall instruct the modem to load a predefined set of operating parameters. The mechanism for defining this set is not standardized.

<address> MODEM RATE <x> (replace x with 75, 150, 300, 600, 1200, 2400, etc; ie, <address> MODEM RATE <1200>); selects the coding applied to the user data before transmission.

<address> MODEM INTERLEAVE <x> (replace x with ZERO, LONG, SHORT, ie, <address> MODEM INTERLEAVE <SHORT>); selects the interleaving used in the modem

<address> MODEM SNR? Returns the signal to noise ratio of the received signal, in the following format:

<address> MODEM SNR=<value> where value is replaced with the SNR in dB.

<address> MODEM IDENTIFY? Returns the manufacturer, model, and software/firmware revision information for a modem, in the following format: <address> MFR <x> ; MODEL <y> SW/FW <software/firmware revision information> where the quantities in angle brackets are replaced by the appropriate ASCII strings. The angle bracket characters shall not appear in any of these strings.

<address> MODEM WAVEFORM <x> Replace x with 4285 (for 4285 with annex E coding), 4529, 110A (MIL-STD-188-110A single tone), or HIGH (for future high data rate waveforms); ie, MODEM WAVEFORM <4529> to select the STANAG 4529 waveform.