

Thomas Starr | John M. Cioffi | Peter J. Silverman

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# Understanding Digital Subscriber Line Technology

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determine the loop quality and SNR for each specific 4 kHz DMT tone. The following signal tone is used during the channel analysis phase of initialization: MEDLY.

4. **Exchange:** Having gathered the information about the quality of the connection and the requested configuration, the modems configure themselves and exchange information about their configuration. The specific bandwidth allocated to the requested bearer channels is assigned, the specific DMT tones and the amount of data encoded in each tone are determined and assigned. The connection is tested in both directions after which each modem notifies its peer that it is ready to enter normal communications, known in the standard as "showtime." The following signal tones are used during the exchange phase of initialization: R/C-REVERB, and R/C-SEGUE.

### Reference

- [1] American National Standards Institute. *Standards Project Relating to Carrier to Customer Connection of Asymmetric Digital Subscriber Line (ADSL) Equipment T1.413 Issue 2*, 1998.