



**Standards Committee T1
Telecommunications**

Sponsored by:



VDSL Line Code Evaluation - Status and Process

Presented by:

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As presented to the

IEEE 802.3ah Task Force Meeting

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History

- **February 2000 - WG T1E1.4 agreed to develop an “American National Standard for Trial Use” in 3 parts:**
 - **Common Part**
 - **Multicarrier Modulation (MCM) Part**
 - **Single Carrier (SCM) Part**
- **March 2002 - T1.424 Published**
 - **2 year trial use period ends 3/14/2004**



History

- **August 2002 - Agreed to put a process in place to make a decision on the VDSL line code not later than August 23, 2003.**
- **August 2002 thru March 2003 - aggressive work to develop a test plan, methods, laboratory logistics and additional criteria to facilitate decision**



Status

- **February Meeting and March Teleconferences - VDSL transceiver laboratory test plan discussions resulted in agreement and specification of:**
 - **bit-rate/reach tests**
 - **PSD verification**
 - **upstream power back-off verification**
 - **impulse noise robustness**
- **Includes all criteria requested by IEEE 802.3ah.**
- **BT Exact and Telcordia labs conducting testing with four vendors -- April 7 – June 13.**



Future Meetings/Milestones

- **May 19-23 - Quarterly T1E1 meeting**
 - Only minor activity on VDSL is expected
- **June 16 – “Data Day”**
 - Test labs release all data via T1 website
- **June 18-19 - T1E1.4 Interim meeting**
 - Review and interpretation of laboratory data
 - Line Code Decision
- **August 18-22 - Quarterly T1E1 meeting**
 - Contribution driven updates to T1.424 to support full ANSI standard with only one line code



Process

- **Lab test data and any other appropriate and relevant information is made available to all with a direct and material interest in this subject; discussions will occur to support a “consensus” decision by Working Group T1E1.4.**



Consensus in T1E1.4

- **Not voting** (no quorum at WG level)
- **ANSI accredited Committee T1 & all its subtending technical groups must operate on a consensus basis to meet ANSI due process requirements.**
- **Working Groups consensus defined in Committee T1 Procedures Manual Sections 4.2.6 & 4.2.7**
- **Additional information on consensus process from the American National Standards Institute (ANSI):**
 - **“ANSI Procedures for the Development and Coordination of American National Standards”**
 - **“ANSI Essential Requirements: Due process requirements for American National Standards”**



T1 Procedures Manual

4.2.6 Consensus Process for Working Group Agreements.

Working Groups reach agreement by "consensus" rather than formal votes or letter ballots. Consensus is established when substantial agreement has been reached by those participating in the consideration of the subject at hand. Substantial agreement means more than a simple majority, but not necessarily unanimity. Consensus requires that all views and objections be considered, and that a concerted effort be made toward their resolution. Under some circumstances, consensus is achieved when the minority no longer wishes to articulate its objection. In other cases, the opinions of the minority should be recorded with the report of the substantial agreement (consensus) of the majority.

The WG participants, in consideration of ultimate approval of American National Standards by ANSI, should be cognizant of ANSI's due process requirement of consensus which states "Consensus is established when substantial agreement has been reached by directly and materially affected interest categories".



Links to more info:

- **Committee T1 documents of interest:**
 - **Meeting notes and other contributions**
 - **T1E1.4/2003-036R4 - Lab Test Plan**
 - **http://www.t1.org/t1e1/_e1-grid.htm**
 - **ANSI Accredited Committee T1 Procedures Manual**
 - **<ftp://ftp.t1.org/pub/t1/t1-proc.pdf>**
- **ANSI Documents of interest:**
 - **<http://www.ansi.org>**



감사합니다.

Thank You!