

## Technical Subcommittee T1E1 Status Report

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IEEE 802.3 Ethernet in the First Mile Study  
Group Meeting – January 9, 2001



# *T1E1 Status Report*



- What is T1E1?
  - **“Interfaces, Power and Protection of Networks”**
  - One of six Technical Subcommittees of Accredited Standards Committee T1 (Accredited by ANSI).
  - Secretariat provided by ATIS (Alliance for Telecommunications Industries Solutions).
  - Includes five active working groups:
    - T1E1.3 – Optical and Electrical Access
    - T1E1.4 – DSL Access
    - T1E1.5 – Power Systems
    - T1E1.7 – Electrical Protection
    - T1E1.8 – Physical Protection and Design

# *T1E1 Status Report*



- What is T1E1? (continued)
  - “Network-to-Customer Interfaces” (as opposed to “Network-to-Network” Interfaces)
  - Late last year, T1E1.1 (Analog Interfaces and Physical Interconnection) merged with T1E1.2 (Optical and Electrical Access) to become T1E1.3.
  - T1E1.4 has the accountability for the development and maintenance of American National Standards for xDSLs and associated technologies (Inline Filters, Central Office/Line Sharing Splitters, Wireline Spectrum Management).
  - Three additional groups are for the foundational requirements for equipment located in Network Equipment Facilities and the Outside Plant Network.

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## **Spectrum Management Standard**

- **Started as the result of a request from the FCC in early 1999; really started as a study project in T1E1 in 2Q95.**
- **Now in publication process; approved by Committee T1 in November 2000, approved by ANSI 1/5/2001. Should be generally available as T1.417 early to mid February.**
- **Next edition is already in the works: most important is the inclusion of “Intermediate Transceiver Units”; a VERY difficult problem in the competitive environment of Unbundled Network Elements (UNE). NRIC V FG3 hopes to provide advice in order to help remove the difficult political/regulatory decisions from the development of solid, implementable technical requirements.**



### **VDSL Standard for Trial Use**

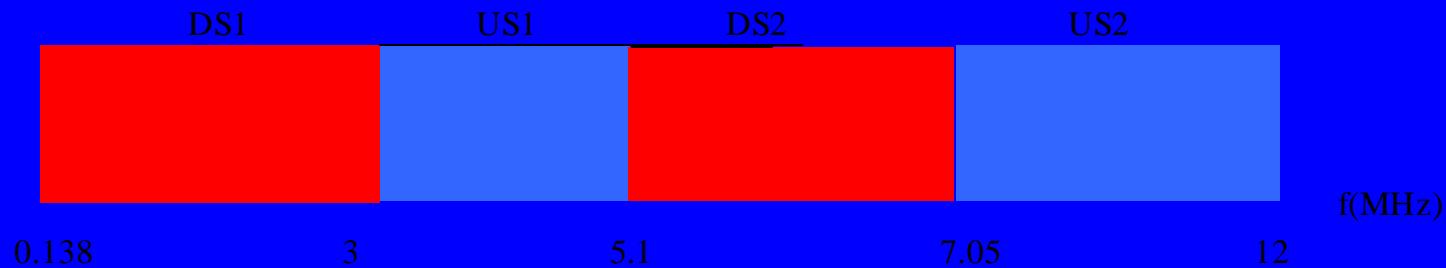
- **T1E1.4 is developing a three part VDSL “Standard for trial use” (common part, single carrier part and multi-carrier part).**
- **All three parts are currently out for Committee T1 letter ballot.**
- **Progress is good and now about at par with similar work in ETSI and ahead of ITU.**
- **Could publish as early as 3Q2001.**
- **Band Plan Agreed for US is known as Band Plan 998.**

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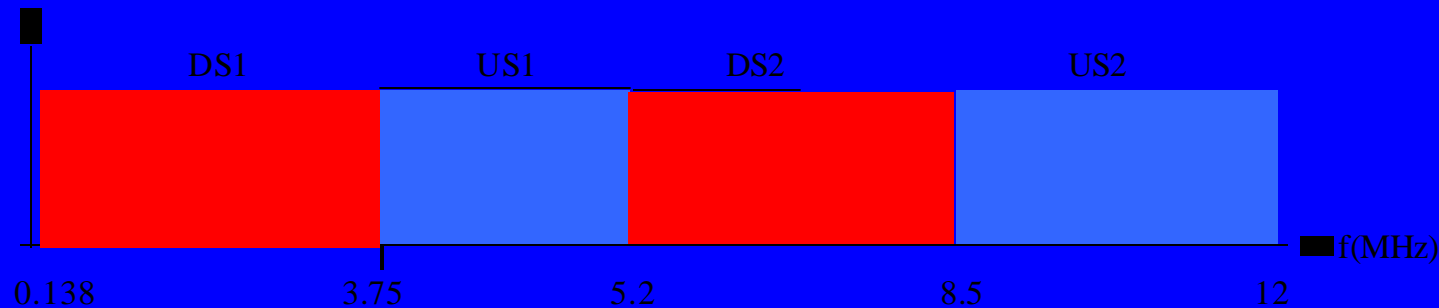


## VDSL Band Plans

Plan 997 = [0.138 - 3 - 5.1 - 7.05 - 12] MHz



Plan 998 = [0.138 - 3.75 - 5.2 - 8.5 - 12] MHz



Plan fx = [0.138 - 2.5 - 3.75 - fx - 12] MHz

- where fx is flexible and operator provisioned by region

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**Table 6.1 - VDSL Payload Bit Rates**

<b>Names of Service Types</b>	<b>Downstream Data Rate (Mbps)</b>	<b>Upstream Data Rate (Mbps)</b>
<b>Asymmetric</b>	22	3
<b>Symmetric</b>	6	6
<b>Symmetric</b>	13	13

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### **Other T1E1 work items that may be of interest to IEEE 802**

- **T1.328: Physical Protection of Telecommunications Links.**
- **T1.315: Voltage Levels (Power Systems)**
- **T1.xxx: Grounding & Bonding**
- **TRQ for V & I limits for network powered remote CPE**
- **T1.332: Electrical Protection at BB Facilities**
- **T1.304:Temp & Humidity**
- **T1.307: Ignitability**
- **T1.319: Fire Spread**
- **T1.329: Earthquake Resistance**



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## **Contact & Other Information**

- Web: <http://www.t1.org>
  - **General info on Committee T1**
    - membership, participation, structure, mail lists
    - meeting notices, schedules and agendas
    - T1 and T1E1 leadership team contact info
- **FREE download of single copy of ASC T1 standards:**  
<http://www.atis.org>
- **Active liaisons and mutually beneficial working relationships with: IEC, ITU-T, ETSI, DSL Forum, ATM Forum, GRUG, NFPA, TIA TR41, TIA TR30, other T1 TSCs and hopefully IEEE 802**