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**Project:** HDSL Standard Project

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**Title:** Basis for HDSL2 Standard

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**Source:** ADC Telecommunications, ADTRAN, Level One Communications, PairGain Technologies, Siemens EZM

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**Date:** December 8-12, 1997

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**Location:** Sacramento, CA

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**Distribution:** T1E1.4 Technical Subcommittee Working Group Members

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### **ABSTRACT**

The above sources have unanimously agreed that [1] and [2] be provisionally agreed as the basis for the proposed HDSL2 Standard [4].

### **NOTICE**

This contribution has been prepared to assist Standards Committee T1-Telecommunications. This document is offered to the committee as a basis for discussion and is not a binding proposal on the sources. The requirements are subject to change in form and numerical values after further study. The sources specifically, reserves the right to add to, or amend, the statements contained herein.

Over the past two years, the above sources, working together towards developing a standard for HDSL2, have expended considerable efforts attempting to meet the requirements for HDSL2 as set forth by Working Group T1E1.4.

We have reached a performance plateau. The most recent proposals [1, 2, 5] have come within 0 - 2 dB of meeting performance and spectral compatibility requirements. We strongly recommend the overall performance margins for HDSL2 be as given in [3].

In order to meet the above margins, the sources unanimously recommend provisional agreement for the one dimensional trellis coded pulse amplitude modulation with a programmable encoder of [1], the spectral shaping of [2] and the performance requirements of [3] as the basis for the proposed HDSL2 standard [4].

**Contributions:**

1. T1E1.4/97-443, "Proposal to Break the FEC Logjam for HDSL2", Sacramento, CA, December 1997.
2. T1E1.4/97-435, "Updated OPTIS PSD Mask and Power Specification for HDSL2", Sacramento, CA, December 1997.
3. T1E1.4/97-469, "Performance Requirements for HDSL2 Systems", Sacramento, CA, December 1997.
4. T1E1.4/97-383, "HDSL Standards Project Proposal", Sacramento, CA, December 1997.
5. T1E1.4/97-300, "A 512 State PAM TCM Code for HDSL2", Minneapolis, MN, September 1997.