

**IEEE 802.5 Committee
August 27th, 1997
Boston, MA
Meeting 'dd'**

**John Messenger
Proteon LAN Products, York R'n'D**

Summary

These are the official minutes of the 802.5 Interim meeting, held August 27th in Boston, MA.

Attendees

Full time

George Duane
Keith Luke
John L. Hill
David Ochensky
William Douglas
Kevin Karcz
Diane Schmidt
Ted Fornoles
Shay Agmon
Ken Kutzler
Kevin Tolly
Ed Harper
Paul Gessert
Paul Gessert
Tom Jacobs
Chin Peng
Ed Wong
Chin Peng
Ivan Oakley
Tam Ross
Bob Love
Ken Wilson
Trevor Warwick
David Wilson
Sharon Wilbur
Peggy DiMauro
Avishay Noam
Benny Jensen
John Messenger
John Stephen
Dick VanOverbeke
Quentin Depina
Kurt Eckles
Michael Hanrahan
Scott Valcourt

3Com
Bay
Bay Networks
Bay Networks
Cabletron
Cabletron
Cabletron
Cisco
IBM
IBM
IBM
Madge
Madge
Madge
Novacom
Novacom
Olicom
Proteon LAN Products
SilCom
SilCom
SilCom
Texas Instruments
Texas Instruments
UNH

Detailed Meeting Minutes

Introduction, etc.

Agenda approved. Bob to supply electronic copy.

All meeting papers to be supplied to Mick Hanrahan in electronic format. He will supply PDF to the IEEE ftp site and John Messenger for the Proteon 802.5 Document Archive.

Bob will add today's attendees to the 802.5 electronic mailing list.

Presentations

A call for presentations was made and the following ones were announced.

<i>Author</i>	<i>Title</i>
Wilson, K	Changes to TXI protocol for 100Mbit/s operation
Wilson, D	Need to do Gigabit in parallel
Jensen, B	High Speed Token Ring PMD Options
Valcourt, S	UNH Token Ring Interoperability Lab 100Mbit/s?

High Speed Token Ring

Tolly round table presentation, given by Kevin Tolly

Kevin Tolly gave a presentation summarising yesterday's Tolly Round Table on High Speed Token Ring prior to the meeting.

- Standards-based
- Preservation of key token ring attributes (frame size, source routing, priority, availability) - Native?
- Time to market?
- Cost
- Scalability
- Initially dedicated only
- Speed 100 Mbit/s?
- Integration of TR and Ethernet (not a key goal)
- Use an existing PHY
- Support existing wiring
- Desirability of autosensing adapters supporting both existing and future speeds
- Need a credible story for migration of the desktop to HSTR, be that shared or cheap dedicated switched ports.

Therefore, we resolve to pursue an 802.5 standard for dedicated token ring that scales from 100Mbit/s to at least 1Gbit/s. The standard will support key attributes of today's token ring and will be developed in time to allow for multivendor demonstrations of high-speed token ring technology at the Networkworld and Interop in Las Vegas, May 1998. The standard will support the 802.1Q standard for multiple VLANs. The goal of this standard effort is to deliver the most cost-effective upgrade path for TR customers.

Ken Wilson, Changes to TXI Protocol for 100Mbit/s operation

Ken outlined his findings that shared at 100Mbit/s is expensive and difficult. So they have chosen dedicated only at 100Mbit/s. A mapping layer will be necessary to minimize the changes to the MAC by translating existing signals from the PHY.

Ken notes that 100T4 is a small, simple macro that can be integrated into a MAC chip. 100T2 is a large, DSP-based expensive solution.

The clauses in the existing document are listed and impact summarised.

Benny Jensen, Olicom Presentation: PHYS for 100Mbit/s

General Requirements

- Must utilize some existing PHY technology to meet time to market requirements
- Preferably standardized interface to MAC to utilize on-market components
- Preferably auto-sense 16Mbit/s

Existing Technology

- 100Mbit Ethernet TX
 - Full duplex capable
 - Good backing by manufacturers
 - Single IC
- 155 Mbit ATM on UTP
 - Full duplex capable
 - Requires two pair UTP cat 5.
 - Requires multiple ICs
 - Good backing from manufacturers
 - More expensive than 100Mbit Ethernet
- 100 Mbit FDDI/CDDI
 - Full duplex capable
 - Requires two pair UTP cat 5.

MAC Standard Interface

- MII
 - Nibble wide, 25MHz full duplex data
 - Serial Management path
 - Dedicated control pins for ethernet
- UTOPIA
 - Byte wide 25MHz full duplex
 - No management path
- SATURN
 - Derived from UTOPIA

Recommendations:

- PMD
 - 100Base-TX best choice for cost effectiveness and silicon availability
 - ATM155 PMD is faster (could be 160/16) but currently double the cost.
- PHY/MAX interface
 - MII

Lunch

Current Document Status

Bob gave the status of the current documents :-

r, j, and s are at the editors. Publication is expected this spring. Nothing further is required from the committee. However, given a chance for review of the Galley drafts, I will give them as wide circulation as is appropriate.

Action Plan

It's planned to give a tutorial on HSTR at the November 802 Plenary meeting. An aggressive timeline including much off-line work was drawn up.

The Five Criteria

A great deal of wordsmithing and detailed consideration was given to each of the points in the strawman five criteria document produced by Bob Love from the wording we used last time.

The meeting adjourned at 4.40pm.

Straw Polls

<i>No.</i>	<i>Proposer</i>	<i>Seconded</i>	<i>Motion</i>	<i>Y</i>	<i>N</i>	<i>A</i>	<i>Pass / Fail</i>
dd1	RD Love	M Hanrahan	That the agenda be accepted, as modified	31	0	1	Pass
dd2	J Messenger	B Jensen	That the schedule proposed in document 802.5/97/08-03 for HSTR standard development be adopted	25	0	2	Pass
dd3	Jensen	D. Wilson	That 100BaseTX be adopted as the initial copper PHY for High Speed Token Ring	24	1	2	Pass
dd4	Messenger	Wong	That 3 separate PARs be developed and delivered to the LMSC executive committee by October 10th for consideration at the plenary meeting: (1) 100Mbit/s token ring with 100BaseTX PHY; (2) 100Mbit/s token ring with 100BaseFX PHY; (3) Gigabit token ring.	24	0	2	Pass