

# IEEE 802.5

March 9<sup>th</sup> - 13<sup>th</sup>, 1998  
Irvine, CA

## Minutes of Meeting FF

Neil Jarvis, Recording Secretary (Acting)  
SilCom (A Microvitec Group Company), R'n'D, York, UK

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Revision History		
V1.0	13 Mar 98	End of recording
V1.1	17 Mar 98	First release
V1.2	19 Mar 98	Updated attendees. Fixed a date error. Added ballot results.

## Attendees.

George Duane  
George Lin  
John Hill  
Karl Reinke  
Paul Gessert  
Ivan Oakley  
Tim Wakeley  
Bob Love  
Ken Wilson  
Bob Ross

3Com  
3Com  
AMP  
Bay Networks  
Bay Networks  
Cisco  
HP  
IBM  
IBM  
LAN Utilities

Richard Knight  
Simon Harrison  
Edgardo Laber  
Moshiko Levhar  
Ivar Jeppesen  
Jim Snow  
John Messenger  
Neil Jarvis  
Ted Fornoles, Jr  
Ken-ichi Arai

Madge  
Madge  
Micro Linear  
Novacom  
Olicom  
Racore  
SilCom  
SilCom  
Xylan  
?

## Agenda.

### MONDAY 9<sup>th</sup> March 1998

9:00am	11:30am	<b>802.5t Draft 1 : Comments Processing</b>
11:30am	1:00pm	<i>Lunch</i>
1:00pm	3:15pm	<b>802 Opening plenary</b>
3:30pm	6:00pm	<b>802.5 Opening Plenary</b>
		Welcome and Introductions
		Request for volunteers for Working Group officers
		Approval of Agenda for this meeting
		Review and Approval of Minutes for Meetings EE and ee
		Status Update on publication of 802.5j, r, and REV
		<i>Amendment 1 DTR Standard : Station v station problem</i>
		May Interim meeting sites
		Web site update (10 mins) : Jarvis
		Committee tools (30 mins) : Jarvis
		Short discussion on Aggregation of Multiple Link Segments
		New Business

### TUESDAY 10<sup>th</sup> March 1998

8:30am	9:30am	TXI Access Protocol and Phantom Lockup problems, 802.5/98/03-03) : Jarvis
9:30am	10:30am	<b>802.5t Draft 1 : Comments Processing</b>
10:30am	Noon	Source Routing support in 802.1Q : Duane
Noon	1:30pm	<i>Lunch</i>
1:30pm	5:00pm	<b>802.5t Draft 1 : Comments Processing</b>
		Properties of frames at 100 Mbit/s, 802.5/98/03-05 : Jarvis
		RMII Annex review : Reinke

### WEDNESDAY 11<sup>th</sup> March 1998

8:30am	9:30am	<b>Aggregation of Multiple Link Segments Tutorial</b>
10:00am	Noon	<b>802.5t Draft 1 : Comments Processing</b>
		Transmit Proposal - Item KTW-9 (802.5/1998/03-04)
Noon	1:30pm	<i>Lunch</i>
1:30pm	5:00pm	<b>802.5t Draft 1 : Comments Processing</b>

### THURSDAY 12<sup>th</sup> March 1998

9:00am	Noon	<b>802.5t Draft 1 : Comments Processing</b>
Noon	1:30pm	<i>Lunch</i>
1:30pm	5:00pm	<b>802.5 Closing Plenary</b>
		Review of 802.5t Standards Development
		Choice of Interim meeting location and dates
		Gigabit report (Knight)
		Officer Elections
		New Business and Wrap up
7:00pm	12:00am	<b>802 Executive Meeting</b>

### FRIDAY 13<sup>th</sup> March 1998

8:00am	10:00am	<b>802 Closing Plenary</b>
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*Except for Monday morning all 802.5 sessions will be plenary sessions*

## Document List.

Number/ Release	Description	Author	Comments
03-00	Document list	-	
03-01	HSTR Draft 1.0	Editors	
03-02r1	Proposal for High Media Rate Trade-up protocol	Ivar Jeppesen	
03-03r1	TXI Access Protocol and Phantom Lockup problems	Neil Jarvis	
03-04r1	KTW-9 Resolution	Ken Wilson	
03-05	<b>Withdrawn</b>	-	
03-06r1	RMII Consortium Response to IEEE 802.5 Request for Information	Karl Reinke	
03-07r3	Ballot comments report	-	r2: As at start of meeting r3: As at end of meeting
03-08r2	Ballot Comment Database (Access 97)	Editors	r1: As at start of meeting r2: As at end of meeting
03-09r1	Issues Surrounding Transparent Source Route forwarding	George Duane	
03-10	Analysis of FR_MAC/FR_xxx transitions	Ken Wilson	
03-11	PAR for Virtual Bridged Local Area Networks: Source Routing	Committee	
03-12	Novacom meeting details	Peggy DiMauro	
03-13	Closing plenary status presentation	Neil Jarvis	
03-14	RMII Annex proposal	Karl Reinke	
03-15	Business Cards	-	
03-16	Progressing VLAN/Source Routing	John Messenger	
03-17	Response to 03-02r1.	Ken Wilson	
03-18	Gigabit project status	Richard Knight	
03-min	Meeting 'FF' minutes	Neil Jarvis	This document.

**Monday, 09 March 1998**

**802.5t, Draft 1, Ballot Results.**

The ballot on 802.5t, 100Mbit/s DTR, Draft 1 closed successfully at noon (PST), Sunday, 8th March. The ballot to approve draft 1 failed. Full results are as follows:

Member	Vote Received
Jeremy Curtis	Abstain
William Douglass	Approve
Paul Gessert	Approve
Sharam Hakimi	-
Michael Hanrahan	Disapprove
Neil Jarvis	Disapprove
George Lin	Abstain
Bob Love	Disapprove
John Messenger	Disapprove
Avishay Noam	Approve
Ivan Oakley	Abstain
Syou-Chin Peng	-
Bob Ross	Approve
Steve Scandalis	Abstain
Mike Siegel	Abstain
Kevin G. Smith	Abstain
Carson Stuart	Abstain
Trevor Warwick	-
Dave Wilson	Disapprove
Ken Wilson	Disapprove
Ed Wong	Abstain

Measurement	Count
Balloting pool size	21
Approve vote count	4
Disapprove vote count	6
Abstain vote count	8

Question	Criteria	Result	Answer
Ballot Closed?	75% of voters participated	85%	Yes
Ballot Passes?	75% of Approve/Disapprove votes are Approve	48%	No

**802.5t, Draft 1, Comment Resolution.**

**Opening Plenary**

- Welcome and Introductions
- Request for volunteers for Working Group officers  
Bob Love is standing for chair. Vice chair and recording secretary positions remain open.
- Approval of Agenda for this meeting  
J Messenger/K Wilson: Motion to approve agenda. Unanimous.
- Review and Approval of Minutes for Meetings 'EE' and 'ee'  
J Hill/I Oakley: Approve minutes for 'EE'. Unanimous  
J Messenger/K Wilson: Approve minutes for 'ee'. Unanimous.

- Status Update on publication of 802.5j, r, and REV  
May 1<sup>st</sup> is the intended publication date for these two standards.
- Amendment 1 DTR Standard: Station v station problem.  
New note should be checked against the original vote taken on the definition of station.
- Web site update (Jarvis)  
Request for an idiot page on Token Ring.  
Web page to be moved to <http://grouper.ieee.org/>
- Committee tools (Jarvis)  
Move that: Office 97 is used by document editors, and an Access 95 (readable in/convertible to 97) database is used for comment input. PDF is still the electronic interchange format.  
Moved by: Neil Jarvis, Karl Reinke  
Vote: 8/1/2 [Passes]
- Short-ish discussion on Aggregation of Multiple Link Segments  
Trunking should not be a 802.3 working group. It belongs in 802.1, full stop. This should be the official committee position during the PAR process. The back-off position is that liaison officers should be appointed from 802.5 to attend the trunking group meetings, tasked with trying to ensure MAC independence.
- Volunteers are urgently sought from 802.5 attendees to track the trunking work.
- May Interim meeting sites  
Novacom, AMP and UNH have all offered sites for forthcoming interim meetings.

## **Tuesday, 10 March 1998**

### ***Phantom Lockup, Neil Jarvis.***

[\(<http://p8025.york.microvitec.co.uk/meetings/mar98/03-03r1.pdf>\)](http://p8025.york.microvitec.co.uk/meetings/mar98/03-03r1.pdf)

Highlighted a DTR 4/16 Mbit/s issue. Will be fixed in HSTR, but will require a maintenance PAR to get it updated in the base standard.

### ***Source Routing and .1Q, George Duane.***

[\(<http://p8025.york.microvitec.co.uk/meetings/mar98/03-09r1.pdf>\)](http://p8025.york.microvitec.co.uk/meetings/mar98/03-09r1.pdf)

Introducing “Spanning Groves”.

Separates T and SR (or SRT) domains. Runs additional spanning tree between interface devices (using new MAC address), creating a single connection between domains.

This work needs to be added to the new .1Q source route annex. We are now missing an editor for this work, and company commitment is sought.

### ***802.5t, Draft 1, Comment Resolution.***

## **Wednesday, 11 March 1998**

### ***802.5t, Draft 1, Comment Resolution.***

## **Thursday, 12 March 1998**

### ***802.1q/Source Routing***

03-15 Presented by JLM. Straw poll of attendees showed commitment to pursue this work in 802.5. John also presented the PAR (03-11). This will be word-smithed at the interim meeting, before being sent to the SEC for information. We will also require the 5-criteria document to accompany this PAR.

### **802.5t, Draft 1, Comment Resolution.**

See vote 03-01, 03-02, 03-03, 03-04, 03-10, 03-16 and 03-17

4 DIS comments remain open, awaiting off-line work prior to draft 2.0.

### **Closing Plenary**

- Elect officers  
Bob is re-elected as Chair. The positions of Vice-chair and recording secretary remain open.
- Review of 802.5t Standards Development  
257 comments, 4 DIS remain open, 9 comment databases.  
4 approved, 6 disapproved, 8 abstained: Vote failed.
- 802.5t/D2 vote for ballots.  
See vote 03-05, 03-05 and 03-16.
- Maintenance PAR  
See vote 03-14.
- Gigabit report (Knight)
- Gigabit connectors (Hill)
- Choice of Interim meeting location and dates  
May interim: 12<sup>th</sup> to 15<sup>th</sup>, Israel, Novacom  
August interim: Week of 24<sup>th</sup>, Harrisburg, PA, AMP
- Appoint liaisons for trunking working group
  1. Ivan Oakley (tentative)
  2. TBD
- New Business and Wrap up
  - Web site information
    - URL: <http://grouper.ieee.org/groups/802/5/index.html>
    - Username: p8025
    - Password: go\_faster
  - Add search engine.
  - Add working group pages, which are updated with links to relevant information.
- Meeting adjourned.

## Official Motions

<b>Straw Poll:</b>	03-01	<b>Date:</b>	12 Mar. 98
<b>Moved by:</b>	Ken Wilson	<b>Status:</b>	PASS
<b>Seconded by:</b>	Neil Jarvis		
Move that:			
The editors of draft 2.0 of 802.5t, adopt the new description of the transmit process contained in 802.5/1998/03-04.			
<b>Yes:</b>	10	<b>No:</b>	0
<b>Abstain:</b>	2		

<b>Straw Poll:</b>	03-02	<b>Date:</b>	12 Mar. 98
<b>Moved by:</b>	Ivar Jeppesen	<b>Status:</b>	PASS
<b>Seconded by:</b>	Ken Wilson		
Move that:			
Draft 2.0 of 802.5t will adopt the concept of the trade-up proposal contained in 802.5/98/03-02r1. This concept is refined by 03-17.			
<b>Yes:</b>	10	<b>No:</b>	0
<b>Abstain:</b>	3		

<b>Straw Poll:</b>	03-03	<b>Date:</b>	12 Mar. 98
<b>Moved by:</b>	Neil Jarvis	<b>Status:</b>	PASS
<b>Seconded by:</b>	Ivar Jeppesen		
Move that:			
Draft 2.0 of 802.5t will adopt the phantom lockup resolution proposal contained in 802.5/98/03-03.			
<b>Yes:</b>	11	<b>No:</b>	0
<b>Abstain:</b>	2		

<b>Straw Poll:</b>	03-04	<b>Date:</b>	12 Mar. 98
<b>Moved by:</b>	Ken Wilson	<b>Status:</b>	PASS
<b>Seconded by:</b>	Karl Reinke		
Move that:			
Draft 2.0 of 802.5t will mandate that the PHY shall support 18200 octets and not contain references to the idle detect timer. In addition, update Annex U in the same manner.			
<b>Yes:</b>	13	<b>No:</b>	0
<b>Abstain:</b>	1		

<b>Vote:</b>	03-05	<b>Date:</b>	12 Mar. 98
<b>Moved by:</b>	Ken Wilson	<b>Status:</b>	PASS
<b>Seconded by:</b>	Neil Jarvis		
Move that:			
802.5t/D2 go out for working group ballot on April 1 <sup>st</sup> , 1998 based on D1 and the resolution of comments against that draft.			
Note: The plan is to mail out ballots electronically on 1 <sup>st</sup> April 98 with votes and comments due on 10 <sup>th</sup> May 98 with request to have comments 1 week earlier to get into the database.			
<b>Yes:</b>	8	<b>No:</b>	0
<b>Abstain:</b>	1		

<b>Vote:</b>	03-06	<b>Date:</b>	12 Mar. 98
<b>Moved by:</b>	Neil Jarvis	<b>Status:</b>	PASS
<b>Seconded by:</b>	Bob Ross		

Move that:

If the ballot on D2 is successful and changes necessary to satisfy the closing of comments against D2 do not result in significant technical changes to that draft, and if 75% of those voting members at the interim voting yes or no to go out for confirmation ballot vote yes, 802.5t/D2 shall go out for confirmation ballot.

Note: It is proposed to go for ballot on 8<sup>th</sup> June 98 and close on 24<sup>th</sup> June 98, prior to July 98 802 plenary session. D2 will be successful if 75% of the yes/no votes are yes after ballot resolution. Those voting must decide if the changes are significant technical changes.

**Yes:** 7 **No:** 0 **Abstain:** 1

<b>Vote:</b>	03-07	<b>Date:</b>	12 Mar. 98
<b>Moved by:</b>		<b>Status:</b>	WITHDRAWN
<b>Seconded by:</b>			

Move that:

The PAR for Virtual Bridged Local Area Networks: Source Routing (802.5/97/03-11) be forwarded to the SEC.

**Yes:**  **No:**  **Abstain:**

<b>Vote:</b>	03-08	<b>Date:</b>	12 Mar. 98
<b>Moved by:</b>	Moshiko Levhar	<b>Status:</b>	PASS
<b>Seconded by:</b>	Neil Jarvis		

Straw polls for and against the following locations for the May Interim:

- Israel (Novacom)  
+: 9 -: 1
- University of New Hampshire, NH (IOL/UNH)  
+: 0 -: 3
- Harrisburg, PA (AMP)  
+: 8 -: 1

Move that 802.5 hold an interim meeting in Israel, the week of May 12<sup>th</sup> to 15<sup>th</sup> 1998. May 12<sup>th</sup> will be dedicated to 802.1q/Source routing. May 13<sup>th</sup> to May 15<sup>th</sup> will be draft 2.0 comment resolution.

**Yes:** 5 **No:** 1 **Abstain:** 3

<b>Vote:</b>	03-09	<b>Date:</b>	12 Mar. 98
<b>Moved by:</b>	John Messenger	<b>Status:</b>	PASS
<b>Seconded by:</b>	Bob Love		

Move that:

That 802.5 chair write to Mick Hanrahan to express the committee's warmest thanks for his contribution in his role as Vice Chair of 802.5. We particularly wish to recognise his leadership and his contributions in clarifying the operating rules and voting rules, and in leading committee discussions and work.

**Yes:** 11 **No:** 0 **Abstain:** 0



<b>Straw Poll:</b>	03-10		
<b>Moved by:</b>	Karl Reinke	<b>Date:</b>	12 Mar. 98
<b>Seconded by:</b>	Bob Ross	<b>Status:</b>	PASS
Move that:			
Karl's Annex W (802.5/98/03-14) be converted to be informative, and changed to refer to MII-variants instead of non-MII. This annex be adopted in draft 2.0 of 802.5t. Words be added to 9.8 to mandate minimum PHY requirements.			
<b>Yes:</b>	12	<b>No:</b>	0
<b>Abstain:</b>	1		

<b>Vote:</b>	03-11		
<b>Moved by:</b>	John Hill	<b>Date:</b>	12 Mar. 98
<b>Seconded by:</b>	Neil Jarvis	<b>Status:</b>	PASS
Move that:			
Bob Love be elected as chair of 802.5.			
<b>Yes:</b>	7	<b>No:</b>	0
<b>Abstain:</b>	1		

<b>Vote:</b>	03-12		
<b>Moved by:</b>		<b>Date:</b>	12 Mar. 98
<b>Seconded by:</b>		<b>Status:</b>	WITHDRAWN
Move that:			
?? be 802.5's liaison officers to the 802.3 trunking working group			
<b>Yes:</b>		<b>No:</b>	
<b>Abstain:</b>			

<b>Vote:</b>	03-13		
<b>Moved by:</b>	John Messenger	<b>Date:</b>	12 Mar. 98
<b>Seconded by:</b>	Karl Reinke	<b>Status:</b>	PASS
Move that:			
802.5 create a study group to investigate source routing in VLANs. (See 03-11 and 03-15). Simon Harrison will be chair for the study group.			
<b>Yes:</b>	9	<b>No:</b>	0
<b>Abstain:</b>	0		

<b>Vote:</b>	03-14		
<b>Moved by:</b>	Neil Jarvis	<b>Date:</b>	12 Mar. 98
<b>Seconded by:</b>	Ken Wilson	<b>Status:</b>	PASS
Move that:			
Maintenance PAR be forwarded to SEC.			
<b>Yes:</b>	7	<b>No:</b>	0
<b>Abstain:</b>	1		

<b>Vote:</b>	03-15	<b>Date:</b>	12 Mar. 98
<b>Moved by:</b>	Ken Wilson	<b>Status:</b>	PASS
<b>Seconded by:</b>	Ivar Jeppesen		

Move that:

If changes necessary to satisfy the closing of comments against D2 result in significant technical changes to that draft, and if 75% of those voting members at the interim voting yes or no to go out for a third working group ballot vote yes, 802.5t/D3 shall go out for ballot.

Note: Those voting must decide if the changes are significant technical changes.

**Yes:** 7 **No:** 0 **Abstain:** 1

<b>Vote:</b>	03-16	<b>Date:</b>	12 Mar. 98
<b>Moved by:</b>	Neil Jarvis	<b>Status:</b>	PASS
<b>Seconded by:</b>	Ken Wilson		

Move that:

The committee accepts this meeting's straw polls and comment resolution on draft 1.0 of 802.5t.

**Yes:** 7 **No:** 0 **Abstain:** 1

<b>Vote:</b>	03-17	<b>Date:</b>	12 Mar. 98
<b>Moved by:</b>	Karl Reinke	<b>Status:</b>	PASS
<b>Seconded by:</b>	Ken Wilson		

Move that:

The committee may remove the proposed Annex W (MII-variant) from draft 2.0, if it will delay the development of the standard beyond the envisaged timescales.

**Yes:** 5 **No:** 1 **Abstain:** 2

<b>Vote:</b>	03-18	<b>Date:</b>	12 Mar. 98
<b>Moved by:</b>	John Hill	<b>Status:</b>	PASS
<b>Seconded by:</b>	Karl Reinke		

Move that:

802.5 hold an interim meeting in Harrisburg, PA the week of August 24<sup>th</sup> 1998.

**Yes:** 8 **No:** 0 **Abstain:** 1