

**IEEE 802.5 Committee**  
**March 10<sup>th</sup> - 14<sup>th</sup>, 1997**  
**Irvine, CA**  
**Meeting 'CC'**

Neil Jarvis, 802.5 Recording Secretary (Acting)  
Proteon International Ltd, R'n'D, York, UK

<i>Revision History</i>		
<b>v0.0</b>	7 Mar 97	Template
<b>v1.0</b>	13 Mar 97	First Release

**Attendees**

***Full Time***

Bob Love	<i>IBM</i>	Steve Scandalis	<i>3Com</i>
Mike Hanrahan	<i>Texas Instruments</i>	Syou-Chin Peng	<i>Cabletron</i>
Neil Jarvis	<i>Proteon International</i>	Ed Wong	<i>Cabletron</i>
John Messenger	<i>Proteon International</i>	Carson Stuart	<i>Cisco Systems</i>
George Lin	<i>3Com</i>	Ivan Oakley	<i>Cisco Systems</i>

***Part Time***

Debra Stopp	<i>ADC Fibermux</i>	Michael Griffen	<i>3M</i>
Trevor Warwick	<i>Madge</i>	Kirk Preiss	<i>IBM</i>
Dave Wilson	<i>Madge</i>	Mukund Halthore	<i>PCA Electronics</i>
George Duane	<i>3Com</i>		

## Detailed Meeting Minutes

### ***802.5 Opening Plenary***

Voting rules were recapped. The modified agenda was approved (Voting: 11/0/0). Neil Jarvis again volunteered to be Recording Secretary for this meeting. In reviewing the minutes of meeting BB it was discovered that the table of action items prepared during the meeting was missing. The action items were reviewed on-line, and all 15 items were found to be closed. The table of closed actions will be included in these meeting minutes. The minutes were approved (Voting: 8/0/2).

Bob Love reported on the status of the Token Ring ballots. 802.5rev, 802.5j and 802.5r went out to LMSC and ISO ballot early in 97. The LMSC ballots will close during April. The ISO ballots will close by the end of June. The LMSC ballot comment resolution will form the US resolution to forward to the SC6 ballot resolution.

The committee then attempted to describe the process with which LMSC ballot comments would be resolved, and how the resolution could become part of the US comment on the ISO version of the ballot. The preliminary process goes something like this:

After the LMSC ballot closes, Bob Love will generate an Access database of all the comments. This will be made available to the committee. Individual comments will then be assigned to editors to allow them to generate a disposition. These dispositions will be gathered together by Bob Love and re-circulated to the committee. A ballot resolution group of 802.5 voting members will then be formed, who will review the comment dispositions. This will generate a database of approved dispositions, which will be used by Bob Love to generate an addition to the US position for ISO ballot resolution.

At any time during this process, a decision may be made that an interim meeting is required to resolve some of the ballot comments. Bob Love has volunteered to host this interim meeting in Raleigh at the end of April or the beginning of May.

This process will be voted on during the Thursday plenary meeting. A pre-authorisation of this process might be required. A decision on this will also be made on Thursday.

John Messenger gave a presentation on "The case for an MII for Token Ring" [*Paper 03-05*].

Mick Hanrahan gave a presentation on Texas Instruments' Trophy device, which implements an MII interface to a token ring MAC device.

Bob Love gave Ken Wilson's presentation on "Wake on LAN" [*Paper 03-04*]. Unfortunately the proposal does not express Ken's concerns clearly. An interpretation of the paper, is that the IBM Wake-on-LAN implementation has been re-engineered by another manufacturer in a sufficiently different manner to maybe require the committee to standardise this process.

This discussion was further confused by the mention of the Microsoft "On-Now" specification. There may be a need for the committee to standardise how Token Ring supports this specification.

An attempt will be made to include Ken Wilson in a teleconference at the beginning of Tuesday.

Trevor Warwick gave a liaison report for IETF.

IEEE 802 Treasurer position is now open for nominations, with the current treasurer, Kirk Preiss, retiring.

## **MII Discussion**

The discussion was kicked off with an attempt to determine the likely interest of the 802.5 committee in pursuing a standardised MII interface. The following questions were asked:

*Is anybody opposed to the standardisation of MII-TR? No.*

Is anybody going to implement or use an MII-TR? Only two people said Yes.

Who would be interested in being involved in the standardisation of the MII-TR? Four people expressed an interest.

Off-line discussion has brought up the issue of higher speed Token Ring. The MII as proposed to date, does not satisfy the broad market criteria required by the PAR. Defining an MII that specifies a higher speed interface (100Mbit was mentioned) that also preserves priority and source routing may go some way to satisfy this criteria.

The committee will vote during the closing plenary for the formation of a Study Group for MII-TR. If this passes, there will be a call for papers for the next 802.5 committee meeting. The PAR for working group could be written off-line, and presented to the 802 Executive committee during the next plenary.

## **Wake-on-LAN Presentation**

Dave Wilson gave a presentation [*Paper 03-07*] on Microsoft's OnNow specification, and how this affect token ring. The committee's feeling is that a statement should be made about how Token Ring devices should support Microsoft's "On-Now".

## **Liaison Reports**

John Messenger gave a detailed liaison report [*Paper 03-06*] about the 802.1 interim meeting in January 97.

## **Token Ring and FDDI in VLANs**

George Duane gave a presentation on how to tunnel source routing information through a CSMA/CD VLAN cloud. This approach overloads the meaning of the TR-Encap bit. This is a problem. A solution is as follows:

- On FDDI and Token Ring, source routing is in the normal location, using the RII bit in the SA to indicate its presence. The TR-encap bit is used to indicate if addresses in the PDU data field are in canonical (TR-encap=0) or non-canonical (TR-encap=1) form.
- On Ethernet, the TR-Encap becomes an RI present indicator as described by George's presentation. The TR-Encap bit indicating canonical/non-canonical addresses is re-encoded in a reserved bit of the route control field.

Neil Jarvis gave a preliminary presentation on VLAN tagging formats for Token Ring and FDDI. This is complementary to George's presentation. A diagram was drawn showing the progress of SNAP and LSAP encoded through a network of .1H and .1Q bridges.

Mike Griffen from the FDDI committee presented some issues they have with VLANs and FDDI.

- FDDI Clock budget is broken (4500 bytes is the limit). The majority of implementation have extra *slop* in their budget, but some chip sets will be broken.
- Station management (RMON) looks for frame sizes. Some hardware exists that strips overlength frames.
- Some end station implementation, have hardware that throw away over-length frames.

The committee went off-line to re-write the presentations ready for the 802.1 session tomorrow afternoon.

### ***Ken Wilson Teleconference***

Ken Wilson called into the meeting, to discuss his Wake-On-LAN presentation. The concern he expressed was the multiple sync patterns that were being used in wakeup frames. In addition, Ken raised the question as to whether a low-power state should be added to the join FSM, to ensure a standard method of supporting low-power in token ring.

### ***VLANs revisited***

Neil Jarvis represented his presentation [*Paper 03-09*], in light of the discussion held by the 802.5 task force. The recommendation is now that SNAP encoding is chosen as the Token Ring and FDDI, with the proviso that words are added to 802.1q describing the problems.

### ***Ballot Resolution Group Discussion***

Four motions were written to authorise the ballot resolution group approach that this committee intends to use to resolve the LMSC ballot comments. The motions will voted on during the closing plenary.

### ***MII Study Group***

John presented MII Study Group motion which is to be voted on at the Thursday Plenary

Bob expressed the opinion that there should be more details of what expectation are to be achieved. For example what level of cost reduction., what is the benefit of ease of interchange components.

John to work more on motion off-line.

### ***Low Power revisited***

The committee believes that they can come up with a short recommendation to Token Ring implementers about MAC requirements during low power operation. This recommendation will be forwarded to implementers via e-mail, news groups and the web. The exact words will be created and voted on during the closing plenary.

### ***802.1 VLAN frame formats***

Two straw polls were passed by 802.5, directing George Duane and Neil Jarvis to present their presentations to 802.1. This they did, to a sympathetic audience. The recommendations from both presentation will appear in draft 6 of 802.1q.

FDDI gave a quick rundown of their concerns, and were invited to take part in the 802.1q standardisation process. They also presented their WWW and e-mail reflector information.

URL: <http://sholeh.nswc.navy.mil/>

E-mail: [x3t12@nswc.navy.mil](mailto:x3t12@nswc.navy.mil) (Mail reflector)

[x3t12-request@nswc.navy.mil](mailto:x3t12-request@nswc.navy.mil) (Subscribe/unsubscribe requests)

## **Closing 802.5 Plenary**

802.5 members voted on the 802 plenary locations for 1999. This information will be forwarded to the Exec.

The committee passed the four motions regarding the ballot resolution group process. This approves the formation of the ballot resolution groups for resolving the ballot comments for 802.5j, 802.5r and 802.5rev.

In addition, the committee has approved the formation of a study group for MII, to be led by John Messenger.

All 802.5 plenary votes will be forwarded to SEC for approval.

The committee then wrote and passed a motion describing how committee work could be carried out electronically. This will be used to progress the MII study group work before the next plenary meeting. At the next plenary, the electronic resolution process will be reviewed and may need to be refined. One such suggestion is perhaps to mandate the requirement of a seconder for any group formation request.

This concluded the 802.5 closing plenary. 802.5 will next meet again during the June 97 plenary, to be held in Maui.

## Meeting Document List

**Note:** Documents marked with *r1*, *r2*, *etc.* indicate that they were updated during the meeting, and re-issued to the committee. The number indicates the revision.

<b>Number</b>	<b>Title</b>	<b>Author</b>
03-00	Document List: 802.5 March 97 Plenary	RD Love
03-01r2	802.5 Preliminary Agenda for March 97 Plenary	RD Love
03-02	Plenary Meeting Minutes, Meeting BB	RD Love
03-03	Business Cards	-
03-04	Wake on LAN	KT Wilson
03-05	The case for an MII for Token Ring	JL Messenger
03-06	Liaison report	JL Messenger
03-07	Wake-on-LAN	D Wilson
03-08	Source Routing Encapsulation	G Duane
03-09	Frame Format for VLAN encoding of Token Ring Frames	N Jarvis

## Meeting Action Items

<b>Number</b>	<b>Owner</b>	<b>Description</b>	<b>Status</b>
<b>03-01</b>	RD Love	Create a timeline to check if the ballot comment resolution process proposed above, will generate a US position for SC6 in time.	Open
<b>03-02</b>	Closing Plenary	Approve the LMSC ballot comment resolution process	Complete
<b>03-03</b>	M Hanrahan	Generate a pre-authorisation motion for the comment resolution process	Complete
<b>03-04</b>	RD Love	Generate modified agenda 03-01r1	Complete
<b>03-05</b>	RD Love	Contact Ken Wilson for teleconference for Wake-on-LAN clarifications	Complete
<b>03-06</b>	S Scandalis	Get teleconference equipment	Complete
<b>03-07</b>	RD Love	Find out from the Exec what is required to create a study group for the MII-TR	Complete