### **IEEE 802.5**

### November 8<sup>th</sup> to 11<sup>th</sup>, 1999 Kauai, HI USA

### Minutes of meeting 'KK'

Simon Harrison, Recording Secretary Madge.Connect Ltd sharriso@madge.com http://www.8025.org/

	Revision History								
r0	11 Nov 99	End of recording							
r1	15 Nov 99	First release							
r2	1 Dec 99	Corrections							

### Attendees

#### Full Time:

Robert Love (IBM) John Messenger (Madge) Simon Harrison (Madge) Ivan Oakley (Cisco) Bob Ross (LAN Ventures)

#### Part Time:

Marty Haslam (Racore) Jim Carlo (802 Chair) Paul Nikolich (802 Vice Chair) Paul Eastman (802.4 chair - hibernating group)

### **Daily Notes**

### Monday, 8<sup>th</sup> November 1999

Bob Love opened the meeting with a review of the committee status: Progress is required for 802.5w (Corrigenda) since comments during LMSC require technical changes, despite no DIS votes being cast. The group also needs to decide the right path and future planning for the group. Specifically, when should the group hibernate? How much effort is required to complete the approved PAR work?

IBM's position is that stability in token ring is very important but there is no interest in new work. Stability in this context also involves maintenance.

Madge would like to see active work in maintenance and other-group watching in order to best serve the customer. There should be a pragmatic approach to open PARs. We should do maintenance and possible clarification work (e.g. how to use dot5 with other standards). No further big undertakings, though.

Cisco: Maintenance is important. Unlikely to contribute significantly to any new 802.5 standards work.

# At this point Paul Eastman (chair of 802.4) joined the meeting. 802.4 have been hibernating for 4 years. He talked to the committee about hibernation from 802.4's perspective.

802.4 worked on a modification to their standard during hibernation<sup>1</sup>. A different PHY layer was added. It was done offline because nobody wanted to make the effort to go to the meetings although there was a strong drive from the end-users that they wanted the changes. All work was done via email (at a time when some committee members didn't have ready access to email services), fax and post. Voting membership was given to everyone who requested a vote. Specific expert group numbers: 28 experts, 14 wanted to participate actively. During the process, voting membership and technical expertise expanded slightly.

The chair still keeps in touch with group members every year (they have lost about half of the experts so far) but still retain a core of committed people. They probably won't go for reaffirmation in 2000. They have no seat on the LMSC committee (revoked a couple of years ago).

Advantage to working in hibernation: Don't end up in situations where 5 people turn up to meetings but there are lots more experts who might contribute but don't have time/sponsor to attend the meetings.

Difficulties: Hard to keep feeding info back through chair. Some inevitably gets lost. Chair has a large amount of co-ordination work to do.

It was suggested that a large amount of 802.4's problems would be resolved now because of universally accepted electronic working methods.

But getting responses from people is very difficult, even in committee. Attending meetings, has an advantage that we can drag commenters from other groups into our meeting to resolve cross-group comments.

Must create a core of expertise that is as all-encompassing as possible. Rely on this core of people being available.

When deciding whether to tackle a work item, the chair would first decide if it was a serious request from actual users. Then he would try to get enough people to act on it. A judgement call would be made.

There are rules covering what hibernating groups can and can't do. (Operating rules section 5.52).

<sup>&</sup>lt;sup>1</sup> Paul Nikolich later pointed out that 802.4 came out of hibernation to work on this modification.

Can we come out of hibernation? E.g. if chair was heading down the wrong direction and the group wanted to change things. This seems to be an Exec decision.

But without hibernation you can end up in situation where voters are generally not the technical experts, they have a vote just because they turn up to meetings. Technical experts move on to other stuff and lose voting rights. Best therefore to have a core of nominated experts within hibernation.

#### Status of open PARs

**802.5t**: Galley proofs being reviewed. See below for patent letter issues. Currently on-track for publication by March 2000 meeting.

**802.5v**: Ballot closed with no DIS comments. Editorial changes complete. Now ready to progress to LMSC Sponsor ballot.

802.5w: LMSC Sponsor ballot turned up a number of comments that need review.

**802.5x**: Source Route forwarding rules for 802.1Q. No work whatsoever done in one year. Basically should withdraw. Call in committee for an editor again. No response. Post to reflector: unless an editor comes forward for 802.5x and/or there is significant interest, the plan is to withdraw the PAR by the March 2000 meeting.

**802.5y** (Rev2) - withdrawn.

**802.5z** Link Aggregation. Strawman draft posted before this meeting. Would like to vote to adopt the strawman at this meeting.

802.5aa Enhanced Source Routing ... withdrawn.

#### 802 Exec Report, Bob Love

Exec: How do we make standards available? Would like to make the standards available free of charge. This is strongly resisted by IEEE (\$450,000 revenue from 802). Meeting at 1PM Tuesday to discuss this issue.

Revised voting rules: Two types of technical motions - LMSC/working group ballot comment resolution - and everything else

#### 802.5t Patent issues

There are two groups: Critical ones and non-critical ones.

*Critical:* Nortel: Closed (got letter) Cisco: Still in progress, but things are happening. Hyundi:Closed (got letter) DEC: Patent assigned from Cabletron. Closed (got letter) LSI Logic: In progress. Answer within two weeks (rapidly approaching)

*Non-Critical:* Mostly non-responses (which are, in fact, OK) Still waiting for a reasonable proportion, but this isn't really crucial.

Heading towards successful resolution.

### Tuesday, 9<sup>th</sup> November 1999

For this session the committee was joined by Jim Carlo (802 Chair), Paul Nikolich (802 Vice-Chair) and Paul Eastman (chair of hibernating committee 802.4).

#### Open work items

#### 802.5w (Corrigenda)

15<sup>th</sup> Dec cut-off date for standards board meeting in January. No DIS comments were received on previous recirculation but technical changes have been made as a result of A/C comments. Therefore a further recirculation is required.

#### 802.5t (100Mbit/s Dedicated Token Ring)

By 15<sup>th</sup> Dec the patent letters must be resolved on 802.5t. This process is well under way and looks like it will complete successfully.

Some of comments against 802.5w reflect back on to 802.5t. These comments relate to the PICS, which, it was generally agreed, was not a normative section of the document.

802.5w could be expanded to include modifications to 802.5t (but how does this affect our PAR?). This has been previously considered but we can't change 802.5t until it has been approved. It was decided that we didn't wish to delay the corrigenda to wait for 802.5t to be published.

The outstanding comments against 802.5w relate to the PICS. Since the PICS is only an informative section the committee decided not to fold the changes back into 802.5t. We will fix the problems in 802.5w, though, and so a recirculation on 802.5w is required.

#### 802.5v (1000 Mbit/s Dedicated Token Ring)

This document was approved for sponsor ballot at the last exec meeting. "conditional approval expires at the opening of the next plenary". But the conditions have been met so the conditional approval turns into a full approval. Ballot group closes - list sent to Jim - on Dec 5<sup>th</sup>. ACTION: Love to send out email to SEC regarding successful ballot status as soon as possible.

Carlo: Assume 802.5v goes out for ballot by end of year. The committee must get things moving; don't prat around checking email addresses etc.

#### 802.5x (Source Route Forwarding Rules for 802.1Q)

Plan to cancel PAR in March. Note to reflector asking for interest/editor. If no response, withdraw.

802.5y (Rev2) Withdrawn

#### 802.5z - Link Aggregation

Editor: Messenger. New draft just released out. Messenger: Dot1/3 problems have delayed us. Relatively trivial work that shouldn't really be shot down yet. Review this meeting. Is it relevant that although just Madge are implementing, there may be OEM deals ... Carlo: Yes. Love: No.

#### Hibernation discussion.

#### Review of current membership

802.5 attendance: John Messenger; Bob Ross; Ivan Oakley; Bob Love; Simon Harrison - all voting members.

Voting membership: 14 now. After meeting: 10.

Absent voting members: Andy Fierman; Neil Jarvis; Ivar Jeppesen; Richard Knight; Karl Reinke. Companies represented: CISCO, Madge, IBM, Nortel, LAN Ventures, [Intel/Olicom, Siemens].

#### Round-the-table opinions for group direction

The group should exist in an adequate form indefinitely to maintain token ring. This could be in hibernation although it is important to finish open PARs rather than shut down PARs. Public perception of the token ring group is important. One opinion is that users directly associate the market with the token ring committee and therefore hibernation sends out a very negative message.

It was suggested that the group should start leaning towards hibernation because more and more work is done off-line electronically. Working off-line is fairer to people who can't devote time to attend meetings but still have an interest in the work. It was generally agreed that the committee should do this soon but was unsure of the right time-frame.

IBM's marketing feedback is that there is no requirement for new features. Wants feature freeze, and hibernation is the appropriate vehicle to achieve this.

There was agreement that hibernation was not appropriate at this meeting. A time-frame could be set out to complete open items before changing mode of operation. It was again stressed that open work items should be finished rather than shelved.

Paul Eastman explained how dot4 still finished fibre-optic conformance in hibernation and then opened a new PAR.

How does the hibernation process work? The process of hibernating a working group requires chair approval and SEC. Group can be returned to active by LMSC via chair petition.

John Messenger reported that Dave Carleson (802.2 chair) had suggested that 802.5 should not think about hibernating until all work items are complete, and all our documents have been merged into one standard. Some participants felt that the message of stability conflicts with the desire to rationalise the documents by merging all supplements into one document (a process which will inevitably result in technical changes).

As work items are complete, it was suggested that a more appropriate way of protecting users' interests might be to work within another group (for example 802.1) to make sure new technologies are sympathetic to Token Ring MACs. A number of work items, such as Rapid Reconfiguration Spanning Tree, should be (are being) tracked by 802.5 members.

802.5 should put together a statement of direction, as a reflector email and/or 802.5 motion. List open projects and status of work items. The benefits of making a clear statemennt are: 1) Exec understands the situation. 2) Let all parties know the group is winding down so any major objections will be flushed out. It is important that a statement about the group's future direction is issued, since silence may generate negative press. Committee to draft statement to be issued by the chair. **See document 11-05**.

What is it that we can achieve in hibernation? There were two differing views presented: hibernation means no new work; hibernation is just a different mode of operation that doesn't really restrict what work the group can do.

It was noted that since a number of group members are pressing for standard stability then working within a hibernating group will be difficult.

During the major portion of 802.4's work, technically they remained in hibernation but some SEC members insisted that they could not do new work while hibernating. They ended up agreeing that 802.4 saw themselves in hibernation but to all intents and purposes the SEC saw them coming out of hibernation.

In light of 802.4's experiences, can 802.5 continue work on open PARs in hibernation? Can this complete through LMSC Sponsor Ballot process etc without coming out of hibernation? 802.6 withdrew some open PARS and perhaps dot11 too. They had substantially completed their work before hibernating. So it seems that 802.5 might not be able to do all the work they expect while in hibernation.

Committee will bring a statement to vote on during Thursday's session. Points to include: Work has become more electronic in nature. Problem of competing priorities. Therefore can open up group membership rather than have a dwindling attendance. Emphasise continuity. Call for volunteers; expand force of experts.

#### W Comment resolution

Changed comments: MJH-03[accept], MJH-04 [mod]. These differ from the web-posed version because the editor missed the point of the comment.

Attention was drawn to the new scheme for indicating changes of changes, using double-underlines and underlined strike-through text.

#### 802.1 Technical Issues

• How do we map slow protocols to Token Ring protocols? Trivial SNAP encapsulation? (or MAC frames!)

[Trivial SNAP agreed. Note on RIF - why did 802.1 discuss a 2-byte RIF? Prefer no RIF since SR stack may not be present in an entirely TB network.]

• 802.1T, U Maintenance of D and Q

New concept for dot1: MAC up/down status. Could use FOP-type signalling ... but does this change for ring purges? Investigate where it is used. MAC/TR issues? SR?

[Must clarify how dot1 use this indication. Should we use FOP or Open/Close indications?]

• New BPDU formats

Migration:

New version: problem from last meeting... conformance test code insists new versions are thrown away!

New flags in existing version: illegal.

Migration to ethernet on pt-to-pt links? [Migrate to ethertypes! Possibly use Pt-to-pt indication from MAC to indicate that this segment supports new spanning tree.]

• 802.1x/D1

Group/Functional address problem. Since a reserved bridge address is used for this protocol, this needs to map to a TR address. Client/Supplicant is not in promisc. so can only match one group-address. If group address used, can clients match against it? Group address hashing matcher in hardware? Can't use functional address if it is bridged. MAC Frame? EAP discussion:

Token ring format makes sure RIF is absent.

MAC addresses used in EAP? Canonical/non-canonical format problem.

#### Group review of 802.5z Link Aggregation

The substance of Link Aggregation is contained in one page. The document does not incorporate 75 pages of managed objects.

Line 16 - Add "Protocol" to () phrase. Line 17 - improve wording "to 802.3 to 802.5" Line 51 - Change note so that frame importance describes lowest prority. PICS: Add paragraph to explain editorial conventions of [] referencing dot3 clauses.1 PICS: Place [] around complete dot3 reference: [802.3 42.2.3] "m)" line 53 says this document includes managed objects. This needs to go. Group has decided that we wouldn't include managed objects.

### Wednesday, 10<sup>th</sup> November 1999

No group meeting session was scheduled for Wednesday.

## Thursday, 11<sup>th</sup> November 1999

#### **Closing Plenary**

Presentation of the "future plan" note to be posted to the reflector. See document 11-05.

#### Comment resolution on 802.5v

All comments editorial and successfully resolved. Draft 1.3 will be produced for LMSC sponsor ballot.

Votes taken. See "meeting motions" below.

There was an objection voiced against 802.5z (Link Aggregation) moving forward to a draft so quickly due to the short time available for review of the straw-man (1 week).

#### Any Other Business

None.

Bob Love: Aloooooooooooooooooaaaaaaa!

Meeting adjourned.

# **Meeting Motions**

Straw Poll or Vote?	Vote					Number:	11-01
Moved by:	Bob Love					Date:	8/11/99
Seconded by:	John Messer	nger				Status:	PASS
Move that the minutes	of the July 19	99 plenary	meeting	g be app	proved.		
Yes: 5 No:	0	bstain:	0				

Straw Poll or Vote?	Vote					Number:	11-02			
Moved by:	Ivan Oakley	1				Date:	8/11/99			
Seconded by:	Bob Ross					Status:	PASS			
Move that the agenda f	Move that the agenda for the November 1999 802.5 plenary meeting (802.5:1999/11-01) be approved.									
Yes: 5 No:	0 <b>A</b>	bstain:	0							

Straw Poll or	Vote? S	traw Poll						Number:	11-03		
Mov	ved by: B	ob Ross						Date:	9/11/99		
Second	Seconded by: Simon Harrison Status:										
The task force	accepts the	commen	t resolution	s on 80	)2.5w/d1	.2 propo	sed by the e	ditor. The edit	or is		
instructed to pr	oduce draf	t 1.3 base	d on the co	mment	resolution	ons and f	forward the	resulting draft	to LMSC		
sponsor ballot.											
<b>Yes:</b> 5	No:	0	Abstain:	0							

Straw	Poll or	Vote?	Straw p	oll				Number:	11-04
	Moved by:John MessengerSeconded by:Bob Ross						Date:	9/11/99	
	Second	led by:	Bob Ro	SS				Status:	PASS
Move th	hat the 1	task forc	e adopts	802.5z/d.01 w	ith char	nges as noted as a wo	rking gr	oup draft.	
Yes:	4	No:	0	Abstain:	0				

Straw	Poll or V	ote?	Vote						Number:	11-05
	Move	d by: B	ob Ross						Date:	11/11/99
S	Seconde	d by: Jo	ohn Mes	senger					Status:	PASS
Move th	at all con	nment res	solutions	s on 802.5v/	d1.2 be	adopted a	and incor	porated into	o a new draft	
802.5v/c	802.5v/d1.3 for LMSC Sponsor ballot.									
Yes:	5 N	lo:	0	Abstain:	0					

Straw Poll or Vote? Moved by:	Vote John Messer	ager		Number: Date:	11-06 11/11/99						
		0			PASS						
Move that 802.5v/d1.3 (1000 Mbit/s Token Ring) be forwarded to SEC for approval to move to Sponsor											
ballot.											
Results after Final Reci	rculation Ball	lot:									
10 Approve / 0 Do Not	Approve / 3	Abstain									
No technical comments	received dur	ing the final re	irculation ballot. No te	echnical changes were	made as a						
result of comment resol		-		C							
Total number of voting	members: 14	•									
Yes: 5 No:	0 A	bstain: 0									

Straw Poll or Vote?	Vote	<b>Number:</b> 11-07
Moved by:	Simon Harrison	<b>Date:</b> 11/11/99
Seconded by:	Ivan Oakley	Status: PASS
Move that a ballot reso	lution group be formed to address comments again	inst 802.5w/d1.2.
Initial members: Messe	nger, Harrison. Further membership will be solici	ited via the email reflector.
Yes: 5 No:	0 <b>Abstain:</b> 0	

Straw Poll or Vote?	Vote	Number:	11-08						
Moved by:	Bob Ross	Date:	11/11/99						
Seconded by:	John Messenger	Status:	PASS						
Move that the task-force draft 802.5z/d0.1, with changes as noted, be adopted as the basis as draft 1.0 for forwarding for working group electronic letter ballot and subsequent recirculation ballot as necessary.									
8	ill be performed by a ballot resolution group formed electro		<u>, , , , , , , , , , , , , , , , , , , </u>						
Yes: 4 No:	1 Abstain: $0$								

Straw Poll or Vote?	Vote		Number:	11-09
Moved by:	Bob Ross		Date:	11/11/99
Seconded by:	Ivan Oakley		Status:	PASS
Move that IEEE 802.5	adopt docume	ent 11-05. This will be distributed electronical	lly to the web	and email
reflector, and presented	to the SEC a	t the Thursday executive session.	-	
Yes: 5 No:	0 A	bstain: 0		

Straw Poll or Vote?	Vote							N	Number:	11-10	0
Moved by:	Ivan Oakley								Date:	11/1	1/99
Seconded by:	Bob Ross								Status:	PAS	S
Move that the SEC be a	requested to co	onditionally	/ appro	ove for	rwardi	ing of	802.5w	to RE	VCOM fo	r	
publication following s	publication following successful recirculation ballot.										
Yes: 5 No:	0 A	bstain: 0	)								