

AGENDA & MINUTES (Unconfirmed) - IEEE 802 LMSC EXECUTIVE COMMITTEE MEETING

Friday November 19, 2004 1:00 PM – 6:00 PM

San Antonio, TX

1.00 MEETING CALLED TO ORDER - Nikolich 1 01:06 PM

Paul Nikolich called the meeting to order at 1:00 PM Members in attendance were:

- Paul Nikolich - Chair, IEEE 802 LAN / MAN Standards Committee
- Mat Sherman - Vice Chair, IEEE 802 LAN / MAN Standards Committee
- Pat Thaler - Vice Chair, IEEE 802 LAN / MAN Standards Committee
- Bob O'Hara - Recording Secretary, IEEE 802 LAN / MAN Standards Committee
- Buzz Rigsbee - Executive Secretary, IEEE 802 LAN / MAN Standards Committee
- Bill Quackenbush - Treasurer, IEEE 802 LAN/MAN Standards Committee
- Tony Jeffree - Chair, IEEE 802.1 - HILI Working Group
- Bob Grow - Chair, IEEE 802.3 - CSMA/CD Working Group
- Stuart Kerry - Chair, IEEE 802.11 - Wireless LANs Working Group
- Bob Heile - Chair, IEEE 802.15 – Wireless PAN Working Group
- Roger Marks - Chair, IEEE 802.16 – Broadband Wireless Access Working Group
- Mike Takefman - Chair, IEEE 802.17 – Resilient Packet Ring Working Group
- Carl Stevenson - Chair, IEEE 802.18 – Regulatory TAG
- Steve Shellhammer - Chair, IEEE 802.19 – Wireless Coexistence TAG
- Jerry Upton - Chair, IEEE 802.20 – Mobile Broadband Wireless Access
- Ajay Rajkumar - Chair, IEEE 802.21 – Media Independent Handover
- Carl Stevenson - Chair, IEEE 802.22 – Wireless Regional Area Networks

2.00 MI APPROVE OR MODIFY AGENDA - Nikolich 9 01:09 PM

1.00 MEETING CALLED TO ORDER - Nikolich 1 01:00 PM

2.00 MI APPROVE OR MODIFY AGENDA - Nikolich 9 01:01 PM

3.00 - 01:10 PM

3.01 - 01:10 PM

3.02 - 01:10 PM

4.00 II TREASURER'S REPORT - Hawkins 10 01:10 PM

4.01 II Announcements from the Chair - Nikolich 5 01:20 PM

Category (* = consent agenda) -

5.00 IEEE Standards Board Items - 01:25 PM

5.01 ME 802.3REVam to sponsor ballot - Grow 10 01:25 PM

5.02 ME 802.3ar Congestion Management PAR to NESCOM - Grow 10 01:35 PM

5.03 ME 802.3as Frame Extension PAR to NESCOM - Grow 5 01:45 PM

5.04 ME 802.15.1REVa to REVCOM - Heile 10 01:50 PM

5.05 ME 802.1ah PAR to NESCOM - Jeffree 5 02:00 PM

5.06 ME 802.1aj PAR to NESCOM - Jeffree 5 02:05 PM

5.07 ME 802.1ak PAR to NESCOM - Jeffree 5 02:10 PM

5.08 ME Conditional forwarding of 802.1AB to REVCOM - Jeffree 5 02:15 PM

5.09 ME 802.11u PAR to NESCOM - Kerry 5 02:20 PM

5.10 ME 802.11v PAR to NESCOM - Kerry 5 02:25 PM

5.11 ME 802.16h to NESCOM - Marks 5 02:30 PM

5.12	ME	802.17b PAR to NESCOM	-	Takefman	5	02:35 PM
5.13			-			02:40 PM
6.00		Executive Committee Study Groups & Working Groups	-			02:40 PM
6.01			-			02:40 PM
6.02			-			02:40 PM
6.03			-			02:40 PM
6.04			-			02:40 PM
6.05			-			02:40 PM
6.06			-			02:40 PM
6.07			-			02:40 PM
6.08			-			02:40 PM
7.00		Break	-		15	02:40 PM
8.00		IEEE-SA Items	-			02:55 PM
8.01	MI	Get IEEE802 Budget approval	-	Hawkins	10	02:55 PM
8.02			-			03:05 PM
8.03			-			03:05 PM
8.04			-			03:05 PM
9.00		LMSC Liaisons & External Interface	-			03:05 PM
9.01	ME	Approval of 802 filing with FCC on TV Band NPRM	-	Stevenson	5	03:05 PM
9.02	ME	802.16 contribution to ITU-R	-	Marks	5	03:10 PM
9.03			-			03:15 PM
9.04			-			03:15 PM
9.05			-			03:15 PM
9.06			-			03:15 PM
10.00		LMSC Internal Business	-			03:15 PM
10.01	MI*	Continuation of 802.3 Residential Ethernet SG	-	Grow	0	03:15 PM
10.02	MI*	Continuation of 802.3 Congestion Management SG	-	Grow	0	03:15 PM
10.03	MI*	Continuation of 802.3 Frame Expansion SG	-	Grow	0	03:15 PM
10.04	MI	Authorization of 802.3 Power Over Ethernet Plus SG	-	Grow	2	03:15 PM
10.05	MI	Authorization of 802.3 to Operate with Treasury	-	Grow	3	03:17 PM
10.06	MI	P&P Change for Coexistence	-	Shellhammer	10	03:20 PM
10.07	MI	Confirmation of Officers of 802.22	-	Stevenson	10	03:30 PM
10.08	MI	Confirmation of appointment of interim chair of 802.18	-	Nikolich	10	03:40 PM
10.09	MI*	Continuation of 802.15 mmWave SG	-	Heile	0	03:50 PM
10.10	MI*	Continuation of 802.15.1b enhanced data rate SG	-	Heile	0	03:50 PM
10.11	ME	802.11j Press Release	-	Kerry	5	03:50 PM
10.12	MI*	Continuation of 802.11 WEIN SG	-	Kerry	0	03:55 PM
10.13	MI*	Continuation of 802.11 WNG SG	-	Kerry	0	03:55 PM
10.14	MI*	Continuation of 802.11 ADS SG	-	Kerry	0	03:55 PM
10.15	MI	Member Emeritus	-	Nikolich	10	03:55 PM
10.16	MI	Equipment purchase approval	-	Rigsbee	10	04:05 PM
10.17	II	Meeting site selection	-	Rigsbee	15	04:15 PM
10.18	MI	Adopt "SA & CS Conformance" P&P change	-	Sherman	5	04:30 PM
10.19	MI	Ballot "P&P Revision Process" P&P change	-	Sherman	10	04:35 PM
10.20	MI	Ballot "EC Voting" P&P change	-	Sherman	5	04:45 PM
10.21	MI	Ballot "WG Voting" P&P change	-	Sherman	5	04:50 PM
10.22	MI	Ballot "EC Membership" P&P change	-	Sherman	5	04:55 PM
10.23	MI	Ballot "WG Membership" P&P change	-	Sherman	5	05:00 PM
10.24			-			05:05 PM
10.25			-			05:05 PM
10.26			-			05:05 PM
10.27			-			05:05 PM
10.28			-			05:05 PM
10.29			-			05:05 PM
10.30			-			05:05 PM

10.31			-			05:05 PM
10.32			-			05:05 PM
10.33			-			05:05 PM
10.34			-			05:05 PM
11.00		Information Items	-			05:05 PM
11.01	II	Viewpoint regarding plenaries	-	Kerry	1	05:05 PM
11.02	II	Interchange with other WGs	-	Kerry	1	05:06 PM
11.03	II	Responsibilities and guidelines for interim meeting hosts	-	Hawkins	10	05:07 PM
11.04	II	802.3 Change in Officers	-	Grow	1	05:17 PM
11.05	II	Update on 802.15 mmWave PAR progress	-	Heile	5	05:18 PM
11.06	II	Liaison response to MEF	-	Jeffree	5	05:23 PM
11.07	II	802 Online Training Update	-	Ickowicz	5	05:28 PM
11.08	II	802 Task Force Update	-	Ickowicz	5	05:33 PM
11.09	II	Names in Front Matter status update	-	Nikolich	5	05:38 PM
11.10	II	Liaison to China	-	Nikolich	5	05:43 PM
11.11	MI	P&P -related activities review	-	Sherman	10	05:48 PM
11.12	II	Network Services Update	-	IDEAL	5	05:58 PM
11.13			-			06:03 PM
		ADJOURN SEC MEETING	-	Nikolich		06:00 PM
		ME - Motion, External		MI - Motion, Internal		
		DT- Discussion Topic		II - Information Item		
		Special Orders				

Motion: to approve the agenda

Moved: Stevenson/Hawkins

Result: 15/0/0 Passes

4.00	II	TREASURER'S REPORT	-	Hawkins	10	01:13 PM
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IEEE Project 802
Estimated Statement of Operations
November 2004 Plenary Session
San Antonio, TX
As of Nov 14, 2004

Meeting Income	<i>Estimate</i>	<i>Budget</i>	<i>Variance</i>
Registrations	1,579	1,250	329
Registration income	507,500	400,000	107,500
Deadbeat collections	0	0	0
Bank interest	75	60	15
Other income	0	0	0
TOTAL Meeting Income	507,575	400,060	107,515
Meeting Expenses	<i>Estimate</i>	<i>Budget</i>	<i>Variance</i>
Audio Visual Rentals	23,500	15,000	(8,500)
Audit	0	0	0
Bank Charges	70	278	208
Copying	3,600	3,500	(100)
Credit Card Discount	13,703	10,800	(2,903)
Equipment Expenses	16,000	9,000	(7,000)
Get IEEE 802 Contribution	118,425	93,750	(24,675)
Insurance	0	0	0
Meeting Administration	80,000	76,838	(3,162)
Misc Expenses	12,000	8,500	(3,500)
Network	110,450	66,388	(44,062)
Phone & Electrical	9,000	2,100	(6,900)
Refreshments	140,000	100,000	(40,000)
Shipping	4,500	4,500	0
Social	54,633	40,000	(14,633)
Supplies	500	500	0
TOTAL Meeting Expense	586,381	431,154	(155,227)
NET Meeting Income/Expense	(78,806)	(31,094)	(47,712)
Analysis			
Refreshments per registration	89	80	(9)
Social per registration	35	32	(3)
Meeting Administration per registration	51	61	11
Networking per registration	70	53	(17)
Get IEEE 802 Contribution per registration	75	75	0
Surplus/Deficit per registration	(50)	(25)	(25)
Pre-registration rate	0.572	0.600	
Estimated Other Liabilities	0		
Nov 2004 Operating Reserve	359,565		
Projected March 2005 Operating Reserve	280,760		

John indicated that he believes the projected operating reserve is still adequate for upcoming expenses. Pat asked that any significant committed expense (such as the education program) be subtracted from the reserve. John agreed that this is a good idea.

4.01 II Announcements from the Chair - Nikolich 5 01:16 PM

Paul announced that Tony Jeffree is now in his 20th year in service to IEEE 802. Paul presented Tony with a card and a bottle of Lagavullin Single Malt Scotch and the thanks of the EC for his work and contributions.

Geoff presented Paul with an honorary San Antonio Sheriff badge.

Category (* = consent agenda)		-	
5.00	IEEE Standards Board Items	-	01:20 PM
5.01	ME 802.3REVam to sponsor ballot	- Grow	10 01:20 PM

MyBallot

- Beta Test using P802.3REVam
- Invitation closed
 - IEEE Web Account issues like problems getting password reset/reminder
 - No ability to add an individual to the ballot group
 - Had to extend the ballot to minimize the probability of an appeal
 - No explicit approval of the ballot group, implicit in initiating the ballot
- Next comes an actual ballot -- concerns
 - Comment tool limitations?
 - No redundancy in indexing
 - Sort challenges
- Plan ahead for 2005
 - Recommended a myBallot playground
 - Recommended training preference to those with imminent ballots
 - Encourage members to get web accounts activated

802.3 MOTION #4 (REVam)

IEEE 802.3 accepts the resolution to all comments received in the Working Group recirculation ballot of IEEE P802.3REVam Draft 1.1, and authorises the editor to generate Draft 2.0.

IEEE 802.3 requests that the IEEE 802 SEC forwards IEEE P802.3REVam Draft D2.0 for Sponsor Ballot.

IEEE 802.3 authorises the IEEE P802.3REVam Task Force to conduct meetings and recirculation ballots as necessary to resolve comments received during the Sponsor Ballot.

IEEE 802.3 requests that the Working Group Chair to presubmit IEEE P802.3REVam draft to REVCOM for the March 2005 Standards Board meeting or subsequent continuous processing at discretion of the IEEE 802.3 Chair. The Sponsor ballot results will be reviewed at the March IEEE 802 plenary meeting.

M: D.Law

S: G.Thompson Tech 75%

Y: 58 N: 0 A: 4

PASSED Date: 18-Nov-2004 1:55PM

P802.3REVam WG Ballot

- Initial ballot passed and met abstain ratio
- Recirculation ballot passed
 - Some out of scope comments
 - All in scope comments withdrawn to be resubmitted at SB

P802.3REVam to SB

The LMSC EC authorizes forwarding of P802.3REVam/D2.0 to sponsor ballot

M: Bob Grow

S: Tony Jeffree

Y: 15 N: 0 A: 0

Motion: to authorize 802.3REVam to be forwarded to NESCOM

Moved: Grow/Jeffree

Result: 15/0/0 Passes

5.02 ME 802.3ar Congestion Management PAR to NESCOM

- Grow

10

01:27 PM

802.3 MOTION #12 (P802.3ar)

Move that 802.3 approve the congestion management PAR, per par_0904.pdf and as modified in response to 802.1 and 802.17 comments, and forward the PAR and 5 Criteria to the 802 SEC and NesCom for approval

M: Ben Brown

S: Richard Brand

Y: 36 N: 1 A: 15 MOTION PASSES

Date: 18-Nov-2004 4:00PM Technical 75%

Approve P802.3ar

The LMSC approves P802.3ar
Congestion management PAR and Five
Criteria for consideration at the
December Standards Board meetings.

M: Bob Grow

S: Tony Jeffree

Y: 15 N: 0 A: 0

Motion: to approve P802.3ar PAR and 5 criteria for consideration at the December Standards Board meetings.

Moved: Grow/Jeffree

Result: 15/0/0 Passes

5.03 ME 802.3as Frame Extension PAR to NESCOM - Grow 5 01:30 PM

802.3 MOTION #12(P802.3as)

Move that 802.3 WG forward the Frame Expansion five criteria and PAR, per FESG_5_criteria_0411.pdf and FESG_PAR_0411.pdf to 802 SEC for approval

M: K. Daines on behalf of the Frame Expansion Study Group

- Y: 29 N: 0 A: 6 MOTION PASSES
Date: 18-Nov-2004 5:14PM Technical 75%

Motion: To approve the PAR and 5 Criteria for consideration at the December Standards Board meetings.

Moved: Grow/Jeffree

Result: 15/0/0 Passes

5.04 ME 802.15.1REVa to REVCOM

- Heile

10

01:35 PM

Sponsor Ballot Results on 802.15.1-REVa-D5

1. This ballot has met the 75% returned ballot requirement.

67 eligible people in this ballot group.

48 affirmative votes

1 negative votes with comments

0 negative votes without comments

5 abstention votes

=====

54 votes received = 80% returned

9% abstention

2. The 75% affirmation requirement is being met.

48 affirmative votes

1 negative votes with comments

=====

49 votes = 97% affirmative

Negative Vote Comments

- 1 Voter maintained two comments of his negative vote, all other comments were satisfied.

Recirculated Unsatisfied Comments

- **Comment:**
Using the Bluetooth core v.12 as a normative reference is an issue because the draft is largely a copy of this document. If the Bluetooth core v1.2 specification is a normative reference then most of this document can be deleted.
- **Proposed Resolution:**
Either a) delete all portions of the draft standard that are copied from BT core v1.2 and replace them with a reference to the specification or b) Remove the listing of BT core v1.2 from the normative references. Rebuttal: The fact that there parts of the normative references are an exact duplicates of the present specification is one reason why this standard does not belong in the 802 process.
- **Reason for Decline:**
Those Bluetooth Documents are referenced and they contain information that is not contained in this standard. There are some instances of replicating (or amending) the text and other instances of referencing the text. The BRC believes that this is a reasonable approach which improves upon the Bluetooth Spec.
- **Comment:**
This standard does not conform to the IEEE 802 procedure where the WG is empowered to make changes. For this standard, the WG can only suggest changes, the Bluetooth SIG is the only body that can authorize normative changes.
- **Proposed Resolution:**
Move this activity to a more appropriate group, e.g., the IEEE CAG would be the correct home for this activity. Without the right of the WG to make changes to the draft standard, this document does not belong in IEEE 802. Rebuttal: The fact that the group approved this process initially does not mean that it is required to continue with it when it is clear that this process is not appropriate for IEEE 802 group.
- **Reason for Decline:**
We agree, but this should have been raised and resolved when 802 agreed on the terms on which they would create this standard. There is now a commitment which the TG and WG must fulfill.

Sponsor Ballot Recirculation Results on 802.15.1-REVa-D6

- **This ballot has met the 75% returned ballot requirement.**

67 eligible people in this ballot group.

50 affirmative votes

1 negative votes with comments

0 negative votes without comments

6 abstention votes

=====

57 votes received = **85% returned**

10% abstention

- **The 75% affirmation requirement is being met.**

50 affirmative votes

1 negative votes with comments

=====

51 votes = **98% affirmative**

Motion to Forward to RevCom

- Move that the 802 EC forward 802.15.1-REVa-D6 to RevCom for final action

Moved: Heile

Second: Kerry

Motion: to forward 802.15.1-REVa-D6 to REVCOM for final action

Moved: Heile/Kerry

Result: 15/0/0 Passes

5.05 ME 802.1ah PAR to NESCOM

- Jeffrey

5

01:38 PM

MOTION

- 802.1 requests permission from the SEC to forward the P802.1ah “Provider Backbone Bridges” PAR to NesCom.
- 802.1 Proposed: bottorff Second: wright
 - For: 20 Against: 0 Abstain:4
- SEC Proposed: Jeffree, Second:
 - For: Against: Abstain:

Motion: to forward the 802.1ah Provider Backbone Bridge PAR to NESCOM

Moved: Jeffree/Sherman

Result: 15/0/0 Passes

5.06 ME 802.1aj PAR to NESCOM

- Jeffree

5

01:41 PM

MOTION

- 802.1 requests permission from the SEC to forward the P802.1aj “Two port MAC Relay” PAR to NesCom.
- 802.1 Proposed: finn
Second:bottorff
 - For: 23 Against: 0 Abstain:0
- SEC Proposed: Jeffree, Second:
 - For: Against: Abstain:

P802.1aj Supporting Information

- Draft PAR has been updated from text precirculated under 30-day rule:
<http://www.ieee802.org/1/files/public/docs2004/802-1aj-draft-par-for-30-day-rule-revised.htm>
- 5C's unchanged from text precirculated under 30-day rule:
<http://www.ieee802.org/1/files/public/docs2004/802-1-aj-5c.pdf>
- Comments received, from 802.17 and Pat Thaler, and 802.1 responses, have been circulated to the SEC exploder
- Minor editorial changes made

Motion: To forward the 802.1aj “Two Port MAC Relay” PAR to NESCOM
Moved: Jeffree/Sherman

Pat would like to see something done to allow people to find the material, such as updating the keywords in the .1Q revision. Tony agreed that this is done in the revision process. Geoff asked whether there is a layer violation in either the .17 or .1 standards that would not allow it to take advantage of this item. Tony indicates that this is intended to link two point to point media, not a point to point medium to a shared medium. Geoff maintained that this is exemplifying his concern. Bob Grow indicated that he believes that this should be a bridge.

Mike reported that .17 does accept the response from .1. He said that .17 believes that it has some work to do to explain to .1 how a subset of its MAC would be applicable.

Result: 13/1/1 Passes

5.07 ME 802.1ak PAR to NESCOM

- Jeffree

5

01:46 PM

MOTION

- 802.1 requests permission from the SEC to forward the P802.1ak “MRP” PAR to NesCom.
- 802.1 Proposed: finn
Second:wright
 - For: 22 Against: 0 Abstain:1
- SEC Proposed: Jeffree, Second:
 - For: Against: Abstain:

P802.1ak Supporting Information

- Formerly labelled as P802.1ai; label changed as per Pat Thaler's comment
- Draft PAR has been updated from text precirculated under 30-day rule:
<http://www.ieee802.org/1/files/public/docs2004/802-1ak-draft-par-for-30-day-rule-revised.htm>
- 5C's unchanged from text precirculated under 30-day rule:
<http://www.ieee802.org/1/files/public/docs2004/802-1ak-5c.pdf>
- Comments received from Pat Thaler and 802.1 responses have been circulated to the SEC exploder
- Minor editorial changes made

Motion: To forward the 802.1ak "MRP" PAR to NESCOM

Moved: Jeffree/Thaler

Result: 14/0/0 Passes

5.08 ME Conditional forwarding of 802.1AB to REVCOM

- Jeffree

5

01:50 PM

MOTION

- 802.1 requests conditional approval from the SEC, as per current P&P, to forward the P802.1AB draft to RevCom following completion of recirculation balloting
- 802.1 Proposed: wright Second: bell
 - For: 22 Against: 0 Abstain:0
- SEC Proposed: Jeffree, Second:
 - For: Against: Abstain:

P802.1AB: Supporting Information

- Second Sponsor Ballot recirc closes 19th November (today)
- Voting:
 - First recirc results were:
 - 81% response
 - 45 Yes, 1 No, 2 Abstain (= 97% approval)
- No outstanding “No” votes/comments at present:
 - The one remaining “NO” voter has voted “YES” on the 2nd recirc; no further “NO” votes have been received so far.
- Resolution plan:
 - Third recirculation ballot in November timeframe
 - Comment resolution (if necessary) in January Interim meeting

Motion: To conditionally forward the 802.1AB PAR to REVCOM following completion of recirculation balloting.

Moved: Jeffree/Grow

The report of the second recirculation will be sent to the EC reflector.

Result: 15/0/0

5.09 ME 802.11u PAR to NESCOM

- Kerry

5

01:54 PM

Agenda#:

Date:

Time:

IEEE 802 LMSC RESOLUTION

Motion By: KERRY

Seconded By: HEILE

**Request the IEEE 802 Executive Committee approve the IEEE 802.11u
(*Interworking with External Networks*) PAR (11-04-506r11) and forward to
NESCOM; and approve 5 Criteria (11-04-507r4) documents.**

802.11 WIEN SG Results

SG: Stephen McCann/Charles Wright

Result: (11-1-14) Approved

Stephen McCann/David Hunter

Result: (11-0-16) Approved

WG: Moved by Stephen McCann on behalf of the Study Group

802.11 WG Results

– Result: (106-1-5) Approved

Approve:

Do Not Approve:

Abstain:

Motion: To approve the 802.11u PAR and 5 criteria and forward to NESCOM

Moved: Kerry/Heile

Ajay related that 802.21 originally thought there may be an overlap in the work with this proposal. After discussion, it was felt that the formal interaction between .21 and this task group would allow any concerns to be dealt with. He speaks in favor of this motion.

“It is worth noting that an agreement has been made between IEEE 802.21 and IEEE 802.11 WIEN SG and resultant Task Group for an ongoing formal coordination in order to avoid any overlap in their scopes.” This text is in section 16 of the PAR.

A point was made that this statement indicates there is a problem with the architecture and 802.11.

802.11 will work closely with the architecture group on its standards and its amendments.

Results: 15/0/0

Motion: to approve that there is an assumption that with the approval of all of the previous PARs in this meeting, the five criteria are also approved.

Moved: Stevenson/Jeffree

Result: 14/0/0

Agenda#:

Date:

Time:

IEEE 802 LMSC RESOLUTION

Motion By: KERRY

Seconded By: HEILE

**Request the IEEE 802 Executive Committee approve the IEEE 802.11v
(*Wireless Network Management*) PAR (11-04-0537-08-0wnm) and
forward to NESCOM; and approve 5 Criteria (11-04-0684r1) documents.**

802.11 WNM SG Results

SG: Richard Pain/Joe Kwak

Result: (14-1-1) Approved

SG: Richard Kennedy/Clint Walker

Result: (23-0-4) Approved

WG: Moved by Harry Worstell on behalf of the Study Group

802.11 WG 40 Day Letter Ballot 72 Results

– Result: (253-42-25) Approved

Approve:

Do Not Approve:

Abstain:

Motion: To approve the 802.11v PAR and 5 criteria and forward to NESCOM
Moved: Kerry/Heile

802.11 conducted a 40-day letter ballot with the result of 253-42-25 of a membership of 412 voting members. On the floor of 802.11 a motion to withdraw the PAR was made. It failed 36-36-40. There were no changes to the PAR during the 40-day ballot or this week.

Tony related that the feeling in the 802.1 plenary was that it is odd that definition of an AP MIB while the AP architecture is still being developed. Bob O'Hara, chair of 802.11m, responded that the AP functional chair's ad hoc committee will be providing description text of the AP functionality to TGM by March for inclusion in the 802.11 revision draft, scheduled to go to sponsor ballot out of the March session.

From the floor, Roger Durand, a member of 802.11, read the following statement:

“ This PAR is not mature and is extremely broad or vague to the point that it is quite possible that the group could be “hijacked” to do just about anything within it that was not within its original purview. This is similar to the 802.11e PAR and 5 criteria that at one point had many different and diverse efforts going on within it, I fear history is about to repeat itself. The Study Group little more then one week ago passed an email ballot at 86%. Yet this week the Study Group spent the vast majority of its time trying to “correct”, “fix” and “rewrite” the PAR and 5 criteria. Already efforts have appeared that were not within its original scope. We need a more focused PAR to guide the chair to a successful conclusion relative to scope. This morning I made a motion to withdraw the PAR and 5 criteria. That motion yielded 50% support, indicating the support for this PAR and 5 criteria no longer have 75% support within the working group. ”

There was discussion in the study group during the week, some supporting the rewriting of the PAR, some narrowing the PAR, and some to leave it alone. There were two presentations made, individual positions on changes desired to be made to the PAR. There were no votes taken in the study group. Characterizing the study group as “rewriting” the PAR during the week is not correct.

There was considerable concern expressed about the procedure used by the WG to conduct this electronic ballot, particularly whether there was debate and ability to address comments. It was pointed out that there was a technical problem at the Berlin interim that prevented addressing the PAR, a meeting at which there was a quorum. That quorum approved the conduct of an electronic ballot on the email reflector. It was pointed out that this is not a draft and that it is not clear that the requirements of comment resolution apply.

Result: 6/4/4 Passes

Get file from Roger

Motion: to approve the submittal to NESCOM of the 802.16h PAR and approve the associated five criteria.

Moved: Marks/Shellhammer

Result: 14/0/0

5.12 ME 802.17b PAR to NESCOM

- Takefman

5

02:45 PM



802.17 WG Motions



- Move to request the 802 EC to forward the PAR for 802.17b to NESCOM.

11/18/2004 9:56am

- M: Holness S: Turner

Y: 10 N:0 A:0



EC Motion

- Move to approve the 5 Criteria, and forward the PAR for P802.17b (as previously distributed) to NESCOM.

M: Takefman S:

Y: N: A:

IEEE-SA STANDARDS BOARD

PROJECT AUTHORIZATION REQUEST (PAR) FORM (2004)

The submittal deadlines for the year **2004** are available.

Prior to submitting your PAR, please review the [NesCom Conventions](#).

1. **ASSIGNED PROJECT NUMBER** P (Please leave blank if not available)

2. **SPONSOR DATE OF REQUEST** Day: Month: Year: 2004

3. **TYPE OF DOCUMENT** (Please check one)

- Standard for** {document stressing the verb "shall"}
- Recommended Practice for** {document stressing the verb "should"}
- Guide for** {document in which good practices are suggested, stressing the verb "may"}

4. **TITLE OF DOCUMENT:**

Draft Information Technology - Telecommunications and information exchange between systems - Local and metropolitan area networks - Specific requirements - Resilient Packet Ring Access Method & Physical Layer Specifications - Amendment 1 - Spatially Aware Sublayer

5. **LIFE CYCLE**

- Full-Use**
- Trial-Use**

6. **TYPE OF PROJECT**

- New document
- Revision of an existing document (indicate Number and year existing document was published in box to the right):
- Amendment to an existing document (indicate Number and year existing document was published in box to the right): (####-YYYY)
- Corrigendum to an existing document (indicate Number and year existing document was published in box to the right):

Modified PAR (indicate PAR Number and Approval Date here: P - Day: Month: Year:)

Is this project in ballot now? Yes No

State reason for modifying the PAR in [Item #19](#).

7. **WORKING GROUP INFORMATION:**

Name of Working Group:

Approximate Number of Expected Working Group Members:

8. CONTACT INFORMATION FOR WORKING GROUP CHAIR (must be an SA member as well as an IEEE and/or Affiliate Member)

Name of Working Group Chair: First Name: Last Name:
 Telephone: FAX: E-mail:

9. CONTACT INFORMATION FOR CO-CHAIR/OFFICIAL REPORTER, Project Editor or Document Custodian if different from the Working Group Chair (must be an SA member as well as an IEEE and/or Affiliate Member)

Name of Co-Chair/Official Reporter (if different than Working Group Chair): First Name:
 Last Name:
 Telephone: FAX: E-mail:

10. CONTACT INFORMATION FOR SPONSORING SOCIETY OR STANDARDS COORDINATING COMMITTEE

Sponsoring Society and Committee: (Please choose the correct acronym for your Sponsor Society/Technical Committee or SCC. [For an acronym list, please click here.](#))

Sponsor Committee Chair: First Name: Last Name:
 Telephone: FAX: E-mail:

Standards Coordinator (Power Engineering Society Only):

Standards Coordinator: First Name: Last Name:
 Telephone: FAX: E-mail:

IF THIS PROJECT IS BEING SPONSORED BY TWO SPONSORS, PLEASE COMPLETE THE INFORMATION BELOW

Sponsoring Society and Committee: (Please choose the correct acronym for your Sponsor Society/Technical Committee or SCC. [For an acronym list, please click here.](#))
 Sponsor Committee Chair: First Name: Last Name:
 Telephone: FAX: E-mail:

Standards Coordinator (Power Engineering Society Only):

Standards Coordinator: First Name: Last Name:

Telephone:

FAX:

E-mail:

11. SPONSOR BALLOTING INFORMATION (Please choose one of the following):

- Individual Balloting
 Entity Balloting
 Mixed Balloting (combination of Individual and Entity Balloting)

Expected Date of Submission for Initial Sponsor Ballot: Month: Day: Year:)

Please review the PAR form three months prior to submitting your draft for ballot to ensure that the title, scope and purpose on the PAR form match the title, scope and purpose on the draft. If they do not match, you will need to submit a modified PAR.

Additional communication and input from other organizations or other IEEE Standards Sponsors should be encouraged through participation in the working group or the invitation pool.

12. PROJECTED COMPLETION DATE FOR SUBMITTAL TO REVCOM Day: Month: Year:

If this is a MODIFIED PAR and the completion date is being extended past the original four-year life of the PAR, please answer the following questions. **If this is not a modified PAR, please go to question #13**

a. Statement of why the extension is required:

b. When did work on the first draft begin?

Day: Month: Year:

c. How many people are actively working on the project?:

d. How many times a year does the working group meet in person?:

e. How many times a year does the working group meet using electronic means (i.e. teleconference, e-mail, web-based meetings)?:

f. How frequently is a draft version circulated to the working group?:

g. How much of the Draft is stable
(Format: NN%)?: %

h. How many significant working
revisions has the Draft been through?:

i. Briefly describe what the
development group has already
accomplished, and what remains to be
done:

13. SCOPE OF PROPOSED PROJECT

Please detail the projected output including technical boundaries. Please be brief (less than 5 lines).

FOR REVISED DOCUMENTS ONLY - Please detail the projected output including the scope of the original document, amendments and additions.

This project amends 802.17-2004 adding one or more new clauses defining optional extensions to support increased spatial reuse on the media. 802.17-2004 allows spatial reuse for ring local unicast transmissions, this amendment adds support for spatial reuse of other frame transmissions (e.g. remote bridging as seen in 802.1 D/Q). Changes to existing clauses of 802.17-2004 are permitted if required to support the new clauses.

Is the completion of this document contingent upon the completion of another document?

Yes (with detailed explanation below) No

14. PURPOSE OF PROPOSED PROJECT

Please clearly and concisely define "why" the document is being done. Please be brief (less than 5 lines).

FOR REVISED DOCUMENTS ONLY - Please detail the projected output including the scope of the original document, amendments and additions.

802.17-2004 provides spatial reuse for ring-local unicast transmissions. This limits spatial reuse to host stations (e.g. routers) attached to the ring and precludes other devices that(eg. bridges). The amendment will extend the class of frame types and device types that can achieve spatial reuse to significantly improve bandwidth efficiency on Resilient Packet Rings.

14a. Please give the specific reason for the standardization project, with particular emphasis on the problem being solved, the benefit to be received and target users or industries.

Spatial Reuse is achieved by stations stripping a frame from the media once it has reached its destination. This differs from previous 802 ring technologies where the frame was required to circulate around the entire ring. Destination stripping increases overall ring efficiency as bandwidth is not wasted with continued circulation of the frame.

15. INTELLECTUAL PROPERTY (Answer each of the questions below.)

Sponsor has reviewed the [IEEE-SA patent material](#) with the working group? Yes No

Sponsor is aware of [copyright](#) permissions needed for this project? Yes No

If yes, please explain:

Sponsor is aware of [trademarks](#) that apply to this project? Yes No

If yes, please explain:

Sponsor is aware of possible [registration of objects](#) or numbers to be included in or used by this project?

Yes No

If yes, please explain:

A 48-bit multicast address to be used for control may be required from the IEEE RAC.

16. ARE THERE OTHER DOCUMENTS OR PROJECTS WITH A [SIMILAR SCOPE](#)?

Yes (with detailed explanation below) No

If Yes, please answer the following:

Sponsor Organization:

Project Number:

Project Date: Day: Month: 01 Year:

Project Title:

17. FUTURE ADOPTIONS

Is there potential for this document (in part or in whole) to be adopted by another national, regional or international organization?

If Yes, the following questions must be answered:

Technical Committee Name and Number: TC SC WG

Other Organization Contact Information:

Contact Name: First Name: Last Name:

Contact Telephone Number:

Contact FAX Number:

Contact E-mail address:

18. IF THE PROJECT WILL RESULT IN ANY HEALTH, SAFETY, OR ENVIRONMENTAL GUIDANCE THAT AFFECTS OR APPLIES TO HUMAN HEALTH OR SAFETY, PLEASE EXPLAIN, IN FIVE SENTENCES OR LESS.

19. ADDITIONAL EXPLANATORY NOTES {Item Number and Explanation}

I acknowledge having read and understood the [IEEE Code of Ethics](#). I agree to conduct myself in a manner which adheres to the IEEE Code of Ethics when engaged in official IEEE business.

The [PAR Copyright Release and Signature Page](#) must be submitted by FAX to +1 732-875-0695 to the [NesCom Administrator](#) before this PAR will be sent on for NesCom and Standards Board approval.



802.17b

Spatially aware sublayer on RPR

5 Criteria

IEEE 802.17 WG—SABSG
Ottawa, Ontario
October, 2004



Broad market potential

- Target market for RPR are service providers and network operators offering Ethernet services
 - In particular, service providers and network operators with a strong drive for bandwidth efficiency on the media in that market
- Efficiency improvements of RPR ring BW utilization widens the adoption of RPR for LAN/MAN networks
 - “Bridging in RPR Networks” – Amund Kvalbein (University of Oslo) shows the improvement in network performance when using an approach equivalent to the Spatially aware sublayer is used
 - Comparable savings/benefits when moving from a hub (un-switched) network to a switched network
- Spatially aware bridging was originally part of the draft standard and the WG chose to defer the work in order to maintain schedule



Compatibility

- Compatible/consistent with base 802.17 and 802.17a standards
- Makes no changes to 802.1 sub layer service interfaces (802.1D ISS, 802.1Q E-ISS)



Distinct identity

- There is are no other standards specifying enhancements to spatial reuse over RPR



Technical feasibility

- Proprietary implementations of RPR provide spatial reuse for non ring-local traffic (e.g., 802.1D/Q bridging) and are currently deployed by major service providers



Economic feasibility

- The optional RPR MAC sublayer that provides spatially aware bridging can be reasonably implemented in network processor, FPGA or ASIC technologies
- By not changing base 802.17 specification and maintaining compatibility with 802.1 specifications, existing implementations can be leveraged, minimizing the overall solution cost
- Existing deployment of proprietary implementations of this technology demonstrates economic viability for service providers

Motion: to forward the 802.17b PAR and five criteria to NESCOM

Moved: Takefman/Jeffree

Result: 13/0/0

5.13		-			02:40 PM	
6.00	<table border="1"><tr><td>Executive Committee Study Groups & Working Groups</td></tr></table>	Executive Committee Study Groups & Working Groups	-			02:40 PM
Executive Committee Study Groups & Working Groups						
6.01		-			02:40 PM	
6.02		-			02:40 PM	
6.03		-			02:40 PM	
6.04		-			02:40 PM	
6.05		-			02:40 PM	
6.06		-			02:40 PM	
6.07		-			02:40 PM	
6.08		-			02:45 PM	
7.00	Break	-		15	02:45 PM	
8.00	<table border="1"><tr><td>IEEE-SA Items</td></tr></table>	IEEE-SA Items	-			02:55 PM
IEEE-SA Items						
8.01	MI Get IEEE802 Budget approval	-	Hawkins	10	02:55 PM	

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Update 11

For LMSC November Plenary

Karen Kenney, Assoc. Managing Director,
Business Administration

16 November 2004, San Antonio, TX



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Downloads (as of 7 Nov 2004)

- **Program to date** 1,748,936
- **Year to date** 430,834
- **Weekly average** 2,367
- **Most requested**
 - **802.11™-1999, .11b-1999, .11a-1999, .11G-2003**
 - **802.3™-2002**

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Downloads

Standard	2004	2003	2002	2001	Grand
	Totals	Totals	Totals	Totals	Total
802.11-1999.pdf	41,205	61,285	33,689	29,093	165,272
802.11b-1999.pdf	21,108	33,466	54,478	30,309	139,361
802.11a-1999.pdf	18,974	30,540	22,364	28,732	100,610
802.3-2002.pdf	35,535	39,767	6,478	-	81,780
802.1Q-1998.pdf	8,439	19,852	14,230	23,744	66,265
802.1D-1998.pdf	9,952	15,336	12,593	18,783	56,664
802.3-2002_part1.pdf	16,869	29,831	4,505	-	51,205
802.2-1998.pdf	8,535	11,615	10,492	19,045	49,687
802-1990.pdf	8	2	5,029	43,971	49,010
802.1X-2001.pdf	14,516	19,515	11,328	-	45,359
802-2001.pdf	14,745	25,927	2,952	-	43,624

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User Type

USER	YTD Total	PTD Total	Monthly Avg
Academic/Student:	191,613	363,047	18,949
Other:	73,458	142,948	7,544
Network equipment manufacturer:	52,665	102,085	5,430
Public network service provider:	33,775	62,900	3,318
Network Software Developer/Manufacturer	36,056	57,292	3,327
Systems Administrator:	30,542	49,708	2,962
Standards Developer:	17,479	33,531	1,753
Private network service provider:	16,142	32,008	1,706
Network silicon manufacturer:	12,968	29,482	1,602
Government:	14,852	28,656	1,540
Journalist/Analyst/Author	6,575	10,694	641
Curious Citizen	74	74	74
Total	486,199	912,425	47,909

YTD=Year to date PTD=Program to date

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Program Entries

Jul 2004 – Nov 2004

- | <u>Std</u> | <u>On or about</u> |
|-------------------|--------------------|
| • 802b™ | 21 Oct |
| • 802.3ak™ | 1 Sep |
| • 802.16™ Conf 02 | 25 Aug |
| • 802.16.2™ | 17 Sep |

Dec 2004 – Mar 2005

- | <u>Std</u> | <u>On or about</u> |
|-------------------|--------------------|
| • 802.1D™ | 9 Dec |
| • 802.3ah™ | 7 Mar |
| • 802.11i™ | 24 Jan |
| • 802.16™ Conf 03 | 25 Dec |
| • 802.17™ | 24 Mar |

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September Approvals

- | <u>IEEE Std</u> | <u>Tentative Pub Date</u> |
|----------------------|---------------------------|
| • 802.17a | 29 Oct |
| • 802.11j | 29 Oct |
| • Also | |
| • June - 802.16 | 1 Oct |
| • (December - 802.1x | 11 Dec) |

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Reminders/Updates

- **Drafts Delivery Service**

<http://www.ili-info.com/ieee802drafts/>

Looking to take back

- **Shop IEEE improvements --> instant access**
- **Check out the new website**
- **SEC continuing commitment to provide drafts thru ballot upload function**
- **Plenary support for corporate sponsors**

Motion

- To approve the budget as reviewed at the Nov 19 closing EC meeting for the continuation of the Get 802 program for the FY 2006 period (covering Nov, 2005, Mar 2006 and July 2006 plenary sessions).

Motion: To approve the budget as reviewed at the Nov 19 closing EC meeting for the continuation of the Get 802 program for the FY 2006 period (covering Nov, 2005, Mar 2006 and July 2006 plenary sessions).

Moved: Hawkins/Rigsbee

What is being proposed is a modest increase (3%) in the bottom line of the program and a more significant increased contribution to the program from 802. This is due to the decrease of the corporate contributions. John indicated that as long as our attendance remains high, as it is now, the increased funding will not be a problem. John expressed a concern about this program for the long term. He is concerned that, at some point in the future, our attendance will go down, putting this level of funding for the program in jeopardy.

A question was asked about what happens if we are unable to meet the financial obligations. The answer was that this triggers a renegotiation of the program.

Result: 14/0/1 Passes

8.02		-				03:05 PM
8.03		-				03:05 PM
8.04		-				03:05 PM
9.00		-				03:05 PM
9.01	ME	Approval of 802 filing with FCC on TV Band NPRM	-	Stevenson	5	03:08 PM

802.18 Motion to the EC

Date: 11/19/2004

Motion by: 802.18 – Stevenson

Seconded by:

Moved:

To approve document 18-04-0056-00-00 (TV Band NPRM Comments) as an 802 Document, authorizing Carl Stevenson to make necessary non-substantive editorial cleanups and formatting changes, and to file the document with the FCC on behalf of IEEE 802 in a timely fashion.

Information: This document was approved unanimously by 802.18. And reviewed by an ad hoc group from 802.11 (none of the other Wireless WG Chairs responded to an invitation for review).

Approve: Do Not Approve: Abstain: Motion:

Motion: to approve document 18-04-0056-00-00 as an 802 Document, authorizing Carl Stevenson to make necessary non-substantive editorial cleanups and formatting changes, and to file the document with the FCC on behalf of IEEE 802 in a timely fashion.

Moved: Stevenson/Rigsbee

Two objections to the inclusion of additional restrictions on our own wireless operations were expressed and asked that these additional restrictions be removed.

Another objection was raised that the document under consideration was not distributed to the EC members.

Paul asked that the motion be withdrawn and that a 10-day EC email ballot be conducted on the motion.

Carl indicated that he does not believe there are any additional restrictions being placed on 802 devices beyond what is in the NPRM, ITU-R regulations.

Paul removes the motion from the floor and declares that it will be submitted to a 5-day EC email ballot.

There was no objection by the EC to this action.

Pat Thaler asked that in the future all items from 802.18 be indicated on the Monday EC agenda.

Project	IEEE 802.16 Broadband Wireless Access Working Group < http://ieee802.org/16 >
Title	802.16 response to ITU-R WP 8F Questionnaire on the services and market for the future development of IMT-2000 and systems beyond IMT-2000
Date Submitted	2004-11-18
Source(s)	IEEE 802.16 ad hoc group on ITU-R liaisons (Session #34)
Re:	In response to 802.16 call for input in the Chair's email on November 8, 2004.
Abstract	To facilitate the development of the Service/Market Analysis Report in preparation of WRC-07, ITU-R WP 8F has issued a Questionnaire containing survey questions to gather information on the analysis and forecast of services and market aspects from a range of organizations including organizations outside the ITU. This is a proposal in response to Question 4 of the above-mentioned Questionnaire on service and market forecast for other radio systems that might interwork with IMT-2000 and systems beyond IMT-2000.
Purpose	Approve and submit to ITU-R WP 8F
Notice	This document has been prepared to assist IEEE 802.16. It is offered as a basis for discussion and is not binding on the contributing individual(s) or organization(s). The material in this document is subject to change in form and content after further study. The contributor(s) reserve(s) the right to add, amend or withdraw material contained herein.
Release	The contributor grants a free, irrevocable license to the IEEE to incorporate material contained in this contribution, and any modifications thereof, in the creation of an IEEE Standards publication; to copyright in the IEEE's name any IEEE Standards publication even though it may include portions of this contribution; and at the IEEE's sole discretion to permit others to reproduce in whole or in part the resulting IEEE Standards publication. The contributor also acknowledges and accepts that this contribution may be made public by IEEE 802.16.
Patent Policy and Procedures	The contributor is familiar with the IEEE 802.16 Patent Policy and Procedures < http://ieee802.org/16/ipr/patents/policy.html >, including the statement "IEEE standards may include the known use of patent(s), including patent applications, provided the IEEE receives assurance from the patent holder or applicant with respect to patents essential for compliance with both mandatory and optional portions of the standard." Early disclosure to the Working Group of patent information that might be relevant to the standard is essential to reduce the possibility for delays in the development process and increase the likelihood that the draft publication will be approved for publication. Please notify the Chair < mailto:chair@wirelessman.org > as early as possible, in written or electronic form, if patented technology (or technology under patent application) might be incorporated into a draft standard being developed within the IEEE 802.16 Working Group. The Chair will disclose this notification via the IEEE 802.16 web site < http://ieee802.org/16/ipr/patents/notices >.

Response to ITU-R WP 8F Questionnaire on the Services and Market for the Future Development of IMT-2000 and Systems Beyond IMT-2000

IEEE 802.16 ad hoc group on ITU-R liaisons

Introduction

It is our understanding that the Questionnaire's purpose is to gather information on analyses and forecasts of services and markets that will be used to estimate the spectrum requirements for the future development of IMT-2000 and systems beyond IMT-2000. Data wireless access traffic includes not only IMT-2000 traffic, but also other traffic from applications such as RLAN in hotspots and wireless metropolitan area networks (MAN).

This response addresses the question¹ on "other radio systems", from the point of view of fixed and nomadic data traffic, with which IMT-2000 systems and beyond are envisaged to interwork. IEEE 802 systems are an integral part of broadband wireless services, delivered to fixed indoor and outdoor devices as well as nomadic devices and will thus contribute to the overall amount of data traffic.

This response is focused only on services and applications provided by IEEE 802.16 systems and it is expected to lead to a more accurate spectrum estimation by WP 8F. More precise knowledge of future spectrum requirements for fixed, nomadic and mobile broadband wireless services will benefit administrations, spectrum license holders, and equipment manufacturers with vested interests in broadband wireless access throughout the world.

Note that IEEE expertise is not in developing market forecasts. However, in order to be responsive to the specific questions posed in the WP 8F questionnaire, we have extracted forecast data from available research reports.

Service and market forecast for IEEE 802.16 systems

IEEE 802.16 response to Question 4 of the above-mentioned Questionnaire is included in an appendix to this contribution.

It should be stated that service descriptions and market forecast contained in the appendix is based on industry market research data for IEEE 802.16 fixed and nomadic systems up to 2009 and does not include forecast for mobile systems. In this document, fixed and nomadic wireless access systems are as defined in Recommendation ITU-R F.1399.

¹ Question 4

Appendix

Response to questionnaire on the services and market for the future development of IMT-2000 and systems beyond IMT-2000

Q4. Service and market forecast for other radio systems

The future development of IMT-2000 and systems beyond IMT-2000 are envisaged to interwork with other radio systems such as wireless LAN and broadcasting systems. Please list any radio systems that might interwork with the future development of IMT-2000 and systems beyond IMT-2000, and forecast the future status of the parameters from Q3. Please indicate the percentage of users that subscribe to multiple systems/operators.

Fixed and Nomadic broadband access based on the IEEE 802.16-2004² standard will be a significant part of future broadband wireless services delivered to a variety of user devices including fixed outdoor modems, indoor modems, laptops and other nomadic devices. Systems based on 802.16-2004 standard are considered for deployments in several countries. These deployments first start by serving medium and small businesses but will expand into the greater residential market³. Lack of access to an affordable wired broadband solution around the world provides the potential for 802.16 to serve in the “last mile.” Given the current and projected interest in 802.16-based broadband wireless access systems and their complementary nature to IMT-2000 systems, it is foreseeable that the interworking between the two systems will be achieved in the near future. Therefore, contribution of 802.16-based services to the overall demand for data services needs to be taken into account in the overall calculations for the spectrum requirements of future development of IMT-2000 systems, their enhancements, and systems beyond IMT-2000 because they may augment or diminish the spectrum requirements for IMT-2000 systems.

As requested in Q4, therefore, future status of the parameters in Q3 is being described below for 802.16 systems.

1 – Service issues

A wireless Metropolitan Area Network (MAN) based on the 802.16 air interface standard is configured in much the same way as a traditional cellular network with strategically located base stations using a point-to-multipoint architecture to deliver services over a radius up to several kilometers depending on frequency, transmit power and receiver sensitivity. The base stations are typically backhauled to the core network by means of fiber or point-to-point microwave links to available fiber nodes or via leased lines from an incumbent wire-line operator. The range and NLOS capability are two important parameters in deployments in a variety of environments. The technology was envisioned from the beginning as a means to provide wireless “last mile” broadband access with performance and services comparable to or better than traditional DSL, Cable or T1/E1 leased line services. The 802.16-2004 standard supports fixed/nomadic applications, providing a variety of services to fixed outdoor as well as nomadic indoor users. Work is underway on a mobile extension (802.16e) supporting new capabilities needed for the mobile environment.

The services that will be delivered by fixed and nomadic 802.16 deployments include⁴:

1. Residential and SOHO High Speed Internet Access: Today this market segment is primarily dependent on the availability of DSL or cable. In some areas the available DSL or cable services may not meet customer expectations for performance or reliability and/or are too expensive. In many rural areas residential customers are limited to low speed dial-up services. In developing countries there are many regions with no available means for internet access. 802.16-based technology will help operators address this market segment.

² Doc. 9B/83 (Annex 6), “Preliminary Draft New Recommendation ITU-R F.[9B/BWA] “Radio interface standards for broadband wireless access (BWA) systems in the fixed service operating below 66 GHz”.

³ ABI Research. © 2004. All Rights Reserved.

⁴ Business case models for fixed broadband wireless access based on WiMAX technology and the 802.16 standard, WiMAX Forum, 2004

2. *Small and Medium Business:* This market segment is very often underserved in areas other than the highly competitive urban environments. The 802.16-based technology can potentially meet the requirements of small and medium size businesses in low density environments and can also provide an alternative in urban areas competing with DSL and leased line services.
3. *Wi-Fi Hot Spot Backhaul:* Wi-Fi hot spots are being installed worldwide at a rapid pace. One of the obstacles for continued hot spot growth, however, is the availability of high capacity, cost-effective backhaul solutions. This application can also be addressed with the 802.16-based technologies. Nomadicity would also allow 802.16 to fill in the coverage gaps between Wi-Fi hot spot coverage areas.
4. *Cellular Backhaul:* In the U.S. the majority of backhaul is done by leasing T1 services from incumbent wire-line operators. With 802.16, cellular operators will have the opportunity to lessen their independence on backhaul facilities leased from their competitors. Outside the US, the use of point-to-point microwave is more prevalent for mobile backhaul, but 802.16 can still play a role in enabling mobile operators to cost-effectively increase backhaul capacity using 802.16 as an overlay network. This overlay approach will enable mobile operators to add the capacity required to support the wide range of new mobile services they plan to offer without the risk of disrupting existing services. In many cases this application will be best addressed through the use of 802.16 based point-to-point links sharing the Point-to-Multipoint infrastructure.
5. *Public Safety Services and Private Networks:* Support for nomadic services and the ability to provide ubiquitous coverage in a metropolitan area provides a tool for law enforcement, fire protection and other public safety organizations enabling them to maintain critical communications under a variety of adverse conditions. Private networks for industrial complexes, universities and other campus type environments (e.g., large enterprise) also represent a potential application for 802.16 as do applications for vertical markets such as medicine, transportation, construction and real estate. Some examples of medical applications would include high resolution medical imaging for information sharing between hospitals and for remote diagnosis and physician collaboration.
6. *Nomadic broadband access services:* nomadic devices such as laptops enabled with 802.16 will enable users to connect to the Internet even when they are outside the range of a traditional Wireless LAN. This capability will open the door to many new services and usage models for users across many of the segments previously listed.

2 – Market issues

Demand for Internet services will continue to increase throughout the world at a fast pace. On the other hand, current and emerging applications such as the ones described above are leading to a growing demand for wireless broadband services and hence the number of 802.16 subscribers is expected to grow considerably by the year 2009 in all regions of the world⁵.

It is important to note that the following tables containing subscriber forecasts do not include highly-mobile applications. These tables reflect the incremental growth in 802.16 fixed and nomadic services traffic some of which would interwork with IMT-2000 systems and beyond

Table 1 shows the growth forecast for 802.16 subscribers by region. This table includes not only subscriber forecasts of systems based on the IEEE 802.16-2004 standard, but also subscriber forecasts for nomadic applications of systems based on the future 802.16 standard addressing new mobile capabilities.

Table 1: 802.16 Subscriber Growth by Region (in millions)⁶

	2005	2006	2007	2008	2009	CAGR ⁷ (05-09)
Asia Pacific	0.00879	0.11617	0.68555	2.19263	6.73813	426%
North America	0.00429	0.05547	0.34170	1.03860	2.84755	408%
Latin America	0.00199	0.01688	0.12112	0.35376	0.97843	371%
Europe	0.00437	0.06044	0.42981	1.37477	3.59235	435%
Rest of World	0.00150	0.01347	0.10902	0.35053	1.06323	416%
Total	0.02093	0.26243	1.68719	5.31028	15.21969	419%

This subscriber growth is not uniform among various environments or market segments. Residential/SOHO users are expected to grow at a much faster pace than other segments.

Tables 2 through 4 contain subscriber growth forecast information on various market segments for IEEE 802.16-2004.

Table 2: IEEE 802.16-2004 Residential/SOHO Subscriber Growth by Region (in millions)

	2005	2006	2007	2008	2009	CAGR (05-09)
Asia Pacific	0.00242	0.02080	0.23235	0.64774	1.71812	416%
North America	0.00140	0.01258	0.15546	0.46941	0.99099	415%
Latin America	0.00129	0.00645	0.06394	0.16439	0.37658	313%
Europe	0.00187	0.02268	0.24657	0.75308	1.55050	437%
Rest of World	0.00092	0.00302	0.04330	0.11175	0.27765	317%
Total	0.00791	0.06552	0.74162	2.14637	4.91385	399%

⁵ ABI Research. © 2004 All Rights Reserved.

⁶ The numbers reflected in Table 1 through Table 5 are based on aggressive forecasts. Moderate forecast data was not available for all tables.

⁷ Compound Annual Growth Rate

Table 3: IEEE 802.16-2004 Small Medium Business (SMB) subscriber growth by region (in millions)

	2005	2006	2007	2008	2009	CAGR (05-09)
Asia Pacific	0.00587	0.04940	0.11235	0.22319	0.40459	188%
North America	0.00283	0.02127	0.04446	0.08259	0.15029	170%
Latin America	0.00064	0.00548	0.01654	0.03252	0.05414	203%
Europe	0.00239	0.01902	0.04147	0.07952	0.14353	178%
Rest of World	0.00048	0.00418	0.01287	0.02569	0.04437	210%
Total	0.01222	0.09935	0.22769	0.44351	0.79692	184%

Table 4: IEEE 802.16-2004 Enterprise Subscriber Growth by Region (in millions)

	2005	2006	2007	2008	2009	CAGR (05-09)
Asia Pacific	0.00050	0.00270	0.00659	0.01259	0.02147	157%
North America	0.00005	0.00022	0.00044	0.00074	0.00130	126%
Latin America	0.00005	0.00030	0.00079	0.00159	0.00288	176%
Europe	0.00011	0.00055	0.00128	0.00233	0.00391	145%
Rest of World	0.00009	0.00068	0.00197	0.00419	0.00817	205%
Total	0.00080	0.00446	0.01107	0.02144	0.03773	162%

Table 5 contains subscriber growth forecast information across various market segments for nomadic applications of systems based on the future 802.16 standard addressing new mobile capabilities, referred to as 802.16e.

Table 5: 802.16e Subscriber Growth by Region (in millions)

	2005	2006	2007	2008	2009	CAGR (06-09)
Asia Pacific	-	0.02	0.17	0.65	2.30	374%
North America	-	0.01	0.07	0.24	0.85	330%
Latin America	-	0.00	0.02	0.08	0.27	389%
Europe	-	0.01	0.07	0.27	0.95	371%
Rest of World	-	0.00	0.03	0.10	0.37	408%
Total	-	0.05	0.35	1.35	4.74	367%

In addition to the growth rate, subscriber penetration among various market segments is certainly not the same. Tables 6 contains subscriber penetration data for residential/SOHO, business subscribers using a fixed CPE station, as well as stand-alone laptops with their own embedded station⁸. The following data is based on observations in the United States.

Table 5: Subscriber Penetration for 802.16 Services

penetration	2006	2007	2008	2009
Residential/SOHO	3.94%	8.74%	14.13%	19.56%
SMB	0.75%	1.62%	2.56%	3.52%
Laptops	-	0.34%	0.78%	1.26%

3 – Preliminary traffic forecast

Tables 6 and 7 simply describe the capacity of an 802.16 base station for various channel bandwidths and coding/modulation schemes. By assuming a deployment scenario – e.g., available bandwidth and MHz per cell, distribution of various user types, and application breakdown -- it is then possible to calculate the total traffic volume of a base station.

⁸ LCC International, Inc. © 2004 All Rights Reserved.

It should be noted that the numbers reported in Table 6 and Table 7 are raw, theoretical data rates, assuming a cyclic prefix ratio of 1/32. Reporting raw data rates has the advantage of not making any deployment-specific assumptions. Actual data rates, namely the throughput provided by the base station throughout the cell and experienced by users, are a function of several factors including user distribution and propagation conditions and pilot distribution, will need to be taken into account according to agreed methodologies.

Table 6: Transmitter Raw Bit Rate of 802.16 OFDM⁹ (in Mbps)*

Modulation / Code Rate	QPSK 1/2	QPSK 3/4	16 QAM 1/2	16 QAM 3/4	64 QAM 2/3	64 QAM -
1.75 MHz	1.45	2.18	2.91	4.36	5.94	6.55
3.5 MHz	2.91	4.37	5.82	8.73	11.88	13.09
7.0 MHz	5.82	8.73	11.64	17.45	23.75	26.18
10.0 MHz	8.38	12.57	16.76	25.13	33.51	37.70
20.0 MHz	16.76	25.14	33.52	50.26	67.02	75.40

* Note: This is the PHY raw bit rate only. MAC and frame (preamble, pilots, MAP, etc.) overhead are not included in calculation.

Table 7: Transmitter Raw Bit Rate of 802.16 OFDMA (in Mbps)*

Modulation / Code Rate MHz	QPSK 1/2	QPSK -	16QAM 1/2	16QAM 3/4	64QAM 1/2	64 QAM 2/3	64 QAM -
1.25 MHz	1.14	1.71	2.28	3.42	3.42	4.55	5.13
1.75 MHz	1.59	2.39	3.18	4.78	4.77	6.37	7.17
3.5 MHz	3.17	4.77	6.34	9.54	9.51	12.74	14.31
5.0 MHz	4.55	6.82	9.10	13.64	13.65	18.20	20.46
7.0 MHz	6.35	9.56	12.70	19.12	19.05	25.48	28.68
10.0 MHz	9.10	13.65	18.20	27.30	27.30	36.39	40.95
20.0 MHz	18.20	27.30	36.40	54.60	54.60	72.79	81.89

* Note: This is the PHY raw bit rate only. MAC and frame (preamble, pilots, MAP etc.) overhead are not included in calculation. Mandatory subcarrier allocation modes are used for the numbers.

⁹ FFT 256

Motion: to approve L80216-04_37r1.PDF with the intent to submit to ITU-R as an IEEE contribution, subject to editorial revision.

Moved: Marks/Hawkins

The intent is to have this submitted through IEEE's sector membership.

A question was raised as to whether it is in scope of 802 to comment on market sizes and growth.

Result: 14/0/1 Passes

9.03			-			03:15 PM
9.04			-			03:15 PM
9.05			-			03:15 PM
9.06			-			03:15 PM
10.00		LMSC Internal Business	-			03:15 PM
10.01	MI*	Continuation of 802.3 Residential Ethernet SG	-	Grow	0	03:15 PM
10.02	MI*	Continuation of 802.3 Congestion Management SG	-	Grow	0	03:15 PM
10.03	MI*	Continuation of 802.3 Frame Expansion SG	-	Grow	0	03:15 PM
10.04	MI	Authorization of 802.3 Power Over Ethernet Plus SG	-	Grow	2	03:30 PM

POE Plus SG

Authorize IEEE 802.3 Study Group
on Power Over Ethernet Plus (PoE
Plus)

M: Bob Grow

S: Tony Jeffree

Y: 14 N: 0 A: 0

Motion: to authorize IEEE 802.3 study group on Power Over Ethernet Plus.

Moved: Grow/Jeffree

Result: 14/0/0

10.05 MI Authorization of 802.3 to Operate with Treasury

- Grow

3

03:32 PM

802.3 MOTION #3 (Treasury)

To enable timely preparation for the May 2005 IEEE 802.3 interim session the IEEE 802.3 Working Group suspends IEEE 802.3 Operating rule 2.5 (Treasurer) and authorise the IEEE 802.3WG Chair to open a treasury with permission of the SEC for the purpose of funding IEEE 802.3 Interim Sessions.

M: D. Law

S:B. Booth

Tech 75%

Y:56 N:0 A:7

MOTION PASSES 18-Nov-2004

802.3 Operation with Treasury

The EC authorizes IEEE 802.3 to operate with treasury per LMSC P&P.

M: Bob Grow

S: John Hawkins

Y: 15 N: 0 A: 0

Motion: To authorize IEEE 802.3 to operate with treasury per LMSC P&P
Moved: Grow/Hawkins

Bob Grow will act as treasurer for the time being, until the position can be created and filled in the working group.

Result: 15/0/0

10.06 MI P&P Change for Coexistence

- Shellhammer 10 03:46 PM

**IEEE P802.19
Wireless Coexistence**

Project IEEE P802.19 Coexistence TAG

Title **Revised Text for Coexistence P&P Changes**

Date Submitted [September 14, 2004]

Source	[Stephen J. Shellhammer]	Voice:	[(858) 391-4570]
	[Intel Corporation]	Fax:	[(858) 391-1795]
	[13290 Evening Creek Drive]	E-mail:	[shellhammer@ieee.org]
	[San Diego, CA 92128]		

Re: []

Abstract [This document contains the text for Coexistence P&P as modified by comment resolution by 802.19 TAG for the executive committee letter ballot.]

Purpose []

Notice This document has been prepared to assist the IEEE P802.19. It is offered as a basis for discussion and is not binding on the contributing individual(s) or organization(s). The material in this document is subject to change in form and content after further study. The contributor(s) reserve(s) the right to add, amend or withdraw material contained herein.

Release The contributor acknowledges and accepts that this contribution becomes the property of IEEE and may be made publicly available by P802.19.

1 Text of Executive Committee Letter Ballot

IEEE 802 LMSC Policy and Procedure Revision Ballot On Coexistence Assurance

Purpose: Assure coexistence of new wireless standards with current standards

Rationale for proposed text:

The introduction of a new or amended wireless standard creates the possibility of interference between the new standard and present standards. The purpose of these proposed changes to the LMSC policies and procedures is to establish a process in IEEE 802 to assure that the proposed standard and existing standards will coexist.

A Coexistence Assurance (CA) document is used as a tool to assess coexistence with other users of the medium. The 802.19 TAG shall advise working groups in the creation of the CA document at the request of the working group.

Coexistence is in the domain of MAC/PHY interactions between dissimilar systems. The criteria for a system resiliency to interference is ultimately dependent on the expected application of the proposed standard or amendment.

Proposed Text:

Proposed addition to PAR process (procedure 2):

6.4 Technical Feasibility addition

- d) *Coexistence of 802 wireless standards specifying devices for unlicensed operation.*
The working group proposing a wireless project is required to demonstrate Coexistence through the preparation of a Coexistence Assurance (CA) document unless it is not applicable.

- Working Group will create a CA document as part of the balloting process.
- Working Group will not create a CA document
Reason it is not applicable: _____

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- Deleted: in
- Deleted: bands
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- Deleted: produce

Proposed addition to LMSC standard procedures:

Procedure 11

PROCEDURE FOR COEXISTENCE ASSURANCE

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If indicated in the five criteria, the wireless working group shall produce a coexistence assurance (CA) document in the process of preparing for working group letter ballot and sponsor ballot. The CA document shall accompany the draft on all wireless working group letter ballots.

Deleted: PAR and

The CA document shall address coexistence with all relevant approved 802 wireless standards specifying devices for unlicensed operation. The working group should consider other specifications in their identified target band(s) in the CA document.

Deleted: and sponsor ballots.

Inserted:

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Deleted: analysis

The 802.19 TAG shall have one vote in working group letter ballots that include CA documents. As part of their ballot comments, the 802.19 TAG will verify the CA methodology was applied appropriately and reported correctly.

Deleted: and sponsor ballots

Deleted: working

The ballot group makes the determination on whether the coexistence necessary for the standard or amendment has been met if the ballot passes.

Deleted: (either working group or sponsor)

Inserted: or sponsor)

A representative of the 802.19 TAG should vote in all wireless sponsor ballots that are in the scope of the 802.19 coexistence TAG.

Deleted: reaches the 75% approval threshold.

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Motion: to amend the 802 P&P by applying document 19-04/0032r3 to the 802 P&P.

Moved: Shellhammer/Sherman

Result: 8/2/5 Passes

10.07 MI Confirmation of Officers of 802.22 - Stevenson 10 03:49 PM

Motion: to confirm the elected slate of officers of 802.22:

Chair: Carl Stevenson, WK3C Wireless LLC

Vice Chair: Gerald Chouinard, CRC

Moved: Stevenson/Rigsbee

The required support letter for the chair from his employer was provided.

Result: 15/0/0 Passes

10.08 MI Confirmation of appointment of interim chair of 802.18 - Nikolich 10 03:55 PM

Motion: to confirm the appointment of Mike Lynch as the interim chair of 802.18.

Moved: Stevenson/Hawkins

Result: 14/0/0 Passes

10.09	MI*	Continuation of 802.15 mmWave SG	-	Heile	0	03:50 PM
10.10	MI*	Continuation of 802.15.1b enhanced data rate SG	-	Heile	0	03:50 PM
10.11	ME	802.11j Press Release	-	Kerry	5	03:50 PM

Get file from Stuart

Motion: to approve the press release on 802.11j.

Moved: Kerry/Heile

Result: 14/0/0 Passes

10.12	MI*	Continuation of 802.11 WEIN SG	-	Kerry	0	03:55 PM
10.13	MI*	Continuation of 802.11 WNG SG	-	Kerry	0	03:55 PM
10.14	MI*	Continuation of 802.11 ADS SG	-	Kerry	0	03:55 PM
10.15	MI	Member Emeritus	-	Nikolich	10	03:55 PM

Get file from Paul

Motion: To approve the creation of a EC member emeritus position with the following conditions:

- based on long years of prior distinguished service on EC
- non voting participant of EC (cannot make or second motions)
- a person must be nominated and elected by the EC to fill the position
- limited to a single position
- position expires at the March 2006 plenary session

Moved: Grow/Sherman

Stuart reported that the 802.11 working group voted at 71% to direct him to vote against the establishment of this position. He indicated that even though this does not meet the requirement of a working group directed position, he would abide by this direction.

A point of order was raised, asking the motion to be ruled out of order because the motion would create a new EC position and as such would require to be created by a change to the 802 LMSC Policies and Procedures. The chair ruled that the motion is in order.

A question was asked if a P&P change would be undertaken to create this position. The chair indicated that he would not make a P&P change.

Result: 7/4/3 Passes

Mat Sherman nominates Geoff Thompson for the position of EC member Emeritus.

Motion: to confirm Geoff Thompson to occupy the position of EC Member Emeritus.

Result: 12/0/0 Passes

10.16 MI Equipment purchase approval - Rigsbee 10 04:15 PM

Motion: Whereas we have 4 projectors which are >7 years old and 9 that can only support SVGA (800x600) resolution, and whereas these units are becoming regular maintenance problems, therefore moved that the EC approve \$18k for replacement of 9 projectors before the March 2005 plenary, leaving only 6 more for next time.

Moved: Rigsbee/Stevenson

Result: 13/0/0

10.17 II Meeting site selection - Rigsbee 15 04:20 PM

Get file from Buzz
Equippurchase....ppt

Poll: To pursue use of the Caribe Royale Hotel & Conference Center for March 2007
11/0

Poll: Hyatt Regency New Orleans for March 2008
4/6

Poll: Hyatt Regency Hotel & Conference Center, Denver for July 2008
7/3

Do we want to return to Hyatt Regency San Antonio?
Interim site?
Other suggestions?
Salt Lake City

10.18 MI Adopt "SA & CS Conformance" P&P change

- Sherman

5

04:36 PM

Get file from Mat

Motion: To approve the proposed P&P revision titled “Compliance with IEEE-SA and CS Governance” as described in the document titled: draft_041114 LMSC_PandP_changes_for_SAandCS_Conformance.doc

Moved: Sherman/Jeffree

Results: 14/0/0 Passes

10.19 MI Ballot "P&P Revision Process" P&P change

- Sherman

10

04:38 PM

Get file from Mat

Motion: To approve for distribution and executive committee ballot the P&P Revision titled "LMSC P&P Revision Process" as described in the document titled: 802.0-P&P_Revision_Process-Proposed_P&P_Revision_ballot.doc

Moved: Sherman/Jeffree

Result: 12/0/1 Passes

10.20 MI Ballot "EC Voting" P&P change

- Sherman

5

04:50 PM

Get file form Mat

Motion: To approve for distribution and executive committee ballot the P&P Revision titled "EC Voting Procedures" as described in the document titled: 802.0-EC_Voting_Rules-Proposed_P&P_Revision_ballot_r1.doc

Moved: Sherman/Jeffree

Result: 13/0/0

10.21 MI Ballot "WG Voting" P&P change

- Sherman

5

04:50 PM

Get file from Mat

Motion: To approve for distribution and executive committee ballot the P&P Revision titled "EC Voting Procedures" as described in the document titled: 802.0-WG_Voting_Rules-Proposed_P&P_Revision_ballot.doc
Moved: Sherman/Jeffree
Result: 13/0/1 Passes

10.22 MI Ballot "EC Membership" P&P change

- Sherman

5

04:56 PM

Get file from Mat

Motion: To approve for distribution and executive committee ballot the P&P Revision titled "EC Membership & Meeting Policies and Procedures" as described in the document titled: 802.0-EC_Membership_&_Meetings-Proposed_P&P_Revision_ballot_r1.doc

**Moved: Sherman/Jeffree
Result: 14/0/0**

10.23 MI Ballot "WG Membership" P&P change - Sherman 5 05:00 PM

This item withdrawn.

10.24			-			05:05 PM
10.25			-			05:05 PM
10.26			-			05:05 PM
10.27			-			05:05 PM
10.28			-			05:05 PM
10.29			-			05:05 PM
10.30			-			05:05 PM
10.31			-			05:05 PM
10.32			-			05:05 PM
10.33			-			05:05 PM
10.34			-			05:05 PM
11.00			-			05:05 PM
11.01	II	Viewpoint regarding plenaries	-	Kerry	1	05:00 PM

Get file from Stuart
Straw poll #1

Straw poll #2

Straw poll #3

The chair solicited interest from the EC to address the structure of the master meeting schedule. Several members volunteered to participate. Stuart will coordinate this effort.

11.02 II Interchange with other WGs - Kerry 1 05:06 PM

Stuart presented Tony Jeffree an IEEE award for his participation in the development of 802.11i.

11.03 II Responsibilities and guidelines for interim meeting hosts - Hawkins 10 05:07 PM

Get file from John Hawkins

11.04 II 802.3 Change in Officers - Grow 1 05:10 PM

Bob Grow reported that 802.3 confirmed the following officers: Steve Carlson as Executive Secretary and Wael Diab as Recording Secretary.

11.05 II Update on 802.15 mmWave PAR progress - Heile 5 05:12 PM

The WG completed a PAR at this session and asked if the EC would entertain a letter ballot to forward this PAR. The chair recommended that it be held until the next (March 2005) plenary.

11.06 II Liaison response to MEF - Jeffree 5 05:13 PM

Get file from Tony

Get file from Andy

Paul thanked Pat Thaler for stepping in and picking this item up and getting it back on track.

A question was raised about how quickly each module may become obsolete, given the slate of rule changes contemplated. Pat responded that a generic IEEE module is the first one on tap. It will not be affected by our P&P changes. Subsequent modules may be impacted, but the contemplated changes would show up in an “802 process 102” module rather than an “802 process 101” module.

Get file from Andy

An opinion was expressed that the original assignment of the P&P changes for alignment of model P&P for entity balloting by the task force to persons outside the EC was “shocking”, making it appear as if some decision had been made on this issue. The opinion was further expressed that this work should be assigned to someone who will not be able to “get to it”.

Paul asked if anyone on the EC would volunteer to gain an understanding of the work at the SA on entity balloting. Mat Sherman volunteered.

One member asked that a motion be taken to not consider entity balloting. An objection was raised to spending any money on IEEE staff to work on entity balloting for 802, until the EC has made a decision.

11.09 II Names in Front Matter status update - Nikolich 5 05:38 PM

Paul reported that a telecon was held with Susan Tatinger, Yvette Ho Sang and a number of EC members to discuss the inclusion of names in the front matter of standards, including revisions. The SA proposal is to not allow the inclusion of historical names in revisions of a standard.

Karen Kenney took an action item to go to SA and explain how vigorously we oppose this concept and to bring it up at the January Standards Board meeting in New York City.

Roger raised an issue on the removal of names of members credited with important contributions.

11.10 II Liaison to China - Nikolich 5 05:43 PM

Paul reported that 24 people attended a meeting to discuss the issue related to the China proposal to JTC1 SC6 WG1.

Get file from Paul

Roger described his responsibility as the 802 “China ambassador”. He said that the key focus is to bring China into the 802 process for developing standards. He would prefer to describe it a “China Liaison”.

A suggestion was made to have a China liaison committee with volunteers from those working groups that desire improved relationships with Chinese standards development organizations.

Roger suggested that an informative letter be sent to Mr. Wen Ku. Roger will draft this and send it to the EC reflector.

11.11 MI P&P -related activities review

- Sherman

5

03:36 PM

This item taken up out of order at 3:36pm.

Get file from Mat Sherman
P and P update – closing.ppt

Motion: to allow comment resolution meetings on LMSC P&P Revision ballots by telecon with 30 day notice on EC Reflectors
Moved: Sherman/Jeffree

Result: 15/0/0 Passes

11.12 II Network Services Update

- IDEAL

5

05:46 PM

Get file from IDEAL

11.13

ADJOURN SEC MEETING

ME - Motion, External MI - Motion, Internal

DT- Discussion Topic II - Information Item

Special Orders

-

- **Nikolich**

05:58 PM

06:00 PM

Respectfully submitted,

Bob O'Hara

Recording Secretary, 802 LMSC