

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

Friday July 22, 2005 1:00 PM – 6:00 PM

San Francisco, CA

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
- John Hawkins - 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
- Mike Lynch - 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
- Geoff Thompson - Member Emeritus (non-voting)

2.00 MI APPROVE OR MODIFY AGENDA - Nikolich 9 01:12 PM

r02 AGENDA - IEEE 802 LMSC EXECUTIVE COMMITTEE MEETING
Friday, July 22, 2005 – 1:00PM -6:00PM
San Francisco, CA

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	MI* Approve March 2005 minutes	-	Nikolich	0	01:10 PM
3.02		-			01:10 PM
4.00	II TREASURER'S REPORT	-	Hawkins	5	01:10 PM
4.01	II Announcements from the Chair	-	Nikolich	5	01:15 PM
	Category (* = consent agenda)	-			
5.00	IEEE Standards Board Items	-			01:20 PM
5.01	ME 802.15.3b to sponsor ballot	-	Heile	5	01:20 PM
5.02	ME 802.11e to REVCOM	-	Kerry	5	01:25 PM
5.03	ME 802.11REV-ma conditional approval to sponsor ballot	-	Kerry	5	01:30 PM
5.04	ME 802.1am PAR to NesCom	-	Jeffree	5	01:35 PM
5.05	ME 802.1ar PAR to NesCom	-	Jeffree	5	01:40 PM
5.06	ME 802.1aq PAR to NesCom	-	Jeffree	5	01:45 PM

5.07	ME	802.1ap PAR to NesCom	-	Jeffree	5	01:50 PM
5.08	ME	802.1ac PAR to NesCom	-	Jeffree	5	01:55 PM
5.09	ME	Conditional approval for P802.1Q-REV to REVCOM	-	Jeffree	5	02:00 PM
5.10	ME	Conditional approval for P802.1ad to RevCom	-	Jeffree	5	02:05 PM
5.11	ME	Conditional approval for P802.1ae to Sponsor Ballot	-	Jeffree	5	02:10 PM
5.12	ME	802.3at PAR to NesCom	-	Grow	5	02:15 PM
5.13	ME	P802.3auCorr1 PAR to NesCom	-	Grow	5	02:20 PM
5.14	ME	Conditional approval for 802.16e to REVCOM	-	Marks	5	02:25 PM
5.15	ME	Conditional approval for 802.16f to REVCOM	-	Marks	5	02:30 PM
5.16	ME	Conditional approval for 802.16-2004/Cor1 to REVCOM	-	Marks	5	02:35 PM
5.17						02:40 PM
6.00		Executive Committee Study Groups & Working Groups	-			02:40 PM
6.01			-			02:40 PM
6.02			-			02:40 PM
7.00		Break	-		10	02:40 PM
8.00		IEEE-SA Items	-			02:50 PM
8.01	II	802 Task Force update	-	Ickowitz	5	02:50 PM
8.02	DT	follow up on anti-trust panel discussion	-	Nikolich	5	02:55 PM
8.03	II	Fianancial audit requirements	-	Kenney	2	03:00 PM
9.00		LMSC Liaisons & External Interface	-			03:02 PM
9.01	ME	FCC Ex Parte on WRANs	-	Lynch	5	03:02 PM
9.02	ME	FCC response opposing WCA comments	-	Lynch	5	03:07 PM
9.03	ME	Industry Canada Spectrum Framework Consultation	-	Lynch	5	03:12 PM
9.04	ME	Contribution to ITU-R Working Party 8A	-	Lynch	5	03:17 PM
9.05	ME	Contribution to ITU-R JTG 6-8-9	-	Lynch	5	03:22 PM
9.06	ME	Delegation to ISO/IEC "Special Group Meeting" in Beijing	-	Marks	10	03:27 PM
9.07	ME	Contributions to ISO/IEC "Special Group Meeting" in Beijing	-	Marks	10	03:37 PM
10.24	ME*	authorize RR-TAG chair to make ex parte and other presentations	-	Lynch	0	03:47 PM
10.00		LMSC Internal Business	-			03:47 PM
10.01	MI*	CBP SG extension	-	Kerry	0	03:47 PM
10.02	MI*	Residential Ethernet SG extension	-	Grow	0	03:47 PM
10.03	MI*	POE Plus SG extension	-	Grow	0	03:47 PM
10.04	MI	802.16 Mobile Multi-hop Relay Study Group	-	Marks	2	03:47 PM
10.05	MI*		-			03:49 PM
10.06	MI	Clause 17 – Procedure for PARs rule change motion	-	Jeffree	10	03:49 PM
10.07			-			03:59 PM
10.08	MI	Motion to include LMSC officer titles on name badges	-	Sherman	5	03:59 PM
10.09	MI	Motion to approve P&P Revision titled "Working Group Membership and Meetings"	-	Sherman	5	04:04 PM
10.10	MI	Motion to approve P&P Revision titled "LMSC Organization"	-	Sherman	5	04:09 PM
10.11	MI	Motion to approve P&P Revision titled "LMSC Procedures and Process"	-	Sherman	5	04:14 PM
10.12	MI	Motion to approve P&P Revision titled "Miscellaneous Issues"	-	Sherman	5	04:19 PM
10.13	MI	Motion for discretion in combing P&P Revision Ballots	-	Sherman	5	04:24 PM
10.14	MI	Motion to ballot P&P Revision titled "WG Structure"	-	Sherman	3	04:29 PM
10.15	MI	Motion to ballot P&P Revision titled "Study Group Processes"	-	Sherman	3	04:32 PM
10.16	MI	Motion to ballot P&P Revision titled "Establishing a Directed Position"	-	Sherman	3	04:35 PM
10.17	MI	Motion to ballot P&P Revision titled "WG Ballot Recirculations"	-	Sherman	3	04:38 PM
10.18	MI	Motion to ballot P&P Revision titled "Restrictive Notices"	-	Sherman	3	04:41 PM
10.19	MI	Motion to ballot P&P Revision titled "WG Membership"	-	Sherman	5	04:44 PM
10.20	MI	Formation of Wireless Architecture EC SG	-	Stevenson	5	04:49 PM

10.21	MI	Formation of 802.22 SG on "Means to enhance the ability of 802.22 systems to detect and avoid Part 74 licensed devices"	- Stevenson	5	04:54 PM
10.22	MI	formation of 802.11 SG to receive input from SC6	- Kerry	1	04:59 PM
10.23	ME	Liaison Statement to JTC1/SC6/WG1	- Marks	10	05:00 PM
11.00		Information Items	-		05:10 PM
11.01	II	Open office hours feedback	- Nikolich	5	05:10 PM
11.02	II	Network services report	- Verilan	10	05:15 PM
11.03	II	update on attendance/doc rfp for use by 11/15/18/19/20/21/22	- Heile	3	05:25 PM
11.04	II	Network RFQ Status Report and Action Items(2)	- Rigsbee	15	05:28 PM
11.05	II	Non-North-American Venues Report and Action Item	- Rigsbee	10	05:43 PM
11.06	II	Future Plenary Session Venue Options	- Rigsbee	10	05:53 PM
11.07	II	TGv and TGw coexistence statement in the 5C	- Kerry	1	06:03 PM
11.08	DT	Standards and patent searches	- Thaler	10	06:04 PM
11.09	II	Report on education contract	- Thaler	10	06:14 PM
11.10	MI	Tracking motions between meetings	- Thaler	10	06:24 PM
11.11	II	802.18 summary	- Lynch	5	06:34 PM
11.12	II	IETF Jumbo Frame discussions	- Grow	2	06:39 PM
11.13	DT	Discussion on SA Support for P&P Revisions	- Sherman	5	06:41 PM
11.14	II	Appeal status and next steps	- O'Hara	1	06:46 PM
11.15					06:47 PM
11.16					06:47 PM
11.17	II	interactive opening plenary meeting format proposal	- Nikolich	5	06:47 PM
11.18	II	Liaisons to ITU-T SG13 Q5 and MEF	- Jeffree	1	06:52 PM
11.19			-		06:53 PM
11.20	II	BPL Sponsor Ballot	- Shellhammer	1	06:53 PM
11.21	II	History of IEEE/ITU-R relationship	- Marks	10	06:54 PM
		ADJOURN SEC MEETING	- Nikolich		06:00 PM
		ME – Motion, External MI – Motion, Internal			
		DT- Discussion Topic II – Information Item			

Moved: To adopt the agenda as modified.

Moved: Kerry/Shellhammer

Passes: 15/0/0

3.00			-		01:15 PM
3.01	MI*	Approve March 2005 minutes	- Nikolich	0	01:15 PM
3.02			-		01:15 PM
4.00	II	TREASURER'S REPORT	- Hawkins	10	01:15 PM

IEEE Project 802
Estimated Statement of Operations
July 2005 Plenary Session
San Francisco, CA
As of July 22, 2005

Meeting Income	<i>Estimate</i>	<i>Budget</i>	<i>Variance</i>
Registrations	1,692	1,200	492
Registration income	529,050	384,000	145,050
Cancellation refunds	(10,900)		
Deadbeat collections	0	0	0
Bank interest	150	150	0
Other income	0	0	0
TOTAL Meeting Income	518,300	384,150	134,150
Meeting Expenses	<i>Estimate</i>	<i>Budget</i>	<i>Variance</i>
Audio Visual Rentals	20,000	15,000	(5,000)
Audit	6,000	6,000	0
Bank Charges	450	230	(220)
Copying	4,000	5,500	1,500
Credit Card Discount	14,813	10,752	(4,061)
Equipment Expenses	9,000	9,000	0
Get IEEE 802 Contribution	126,900	90,000	(36,900)
Insurance	0	0	0
Meeting Administration	85,000	75,064	(9,936)
Misc Expenses	5,547	500	(5,047)
Network	64,038	34,388	(29,650)
Phone & Electrical	7,000	2,100	(4,900)
Refreshments	142,092	91,200	(50,892)
Shipping	3,100	3,100	0
Social	110,979	66,000	(44,979)
Supplies	0	500	500
Other Discounts	(57,000)	0	57,000
TOTAL Meeting Expense	541,919	409,334	(132,585)
NET Meeting Income/Expense	(23,619)	(25,184)	1,565
Analysis			
Refreshments per registration	84	76	(8)
Social per registration	66	55	(11)
Meeting Administration per registration	50	63	12
Networking per registration	38	29	(9)
Get IEEE 802 Contribution per registrator	75	75	0
Surplus/Deficit per registration	(14)	(21)	7
Pre-registration rate	0.746	0.600	
Previous operating reserve	312,854		
NET Meeting Income/Expense	(23,619)		
Projected operating reserve	289,235		
Contracted commitments	45,000		(P&P contract, online education)
Projected uncommitted reserve	244,235		

A request was made to indicate in the budget the actual liabilities for future meetings, rather than only the value of the reserve.

5.00				-			
			IEEE Standards Board Items	-			01:20 PM
5.01	ME	802.15.3b to sponsor ballot		-	Heile	5	01:20 PM

Project: IEEE P802.15 Working Group for Wireless Personal Area Networks (WPANs)

Submission Title: [Sponsor ballot submission]

Date Submitted: [20 July, 2005]

Source: [James Gilb] Company [SiBeam]

Address [840 W. California, Suite 110, Sunnyvale, CA 94086]

Voice:[858-484-4339], FAX: [858-484-4339], E-Mail:[last name at ieee dot org]

Re: [P802-15-3_D02_Draft_Amendment.pdf]

Abstract: [A summary of the results of the working group letter ballots for Draft Ammendment P802.15.3b.]

Purpose: [Inform the 802 executive committee of results of the working group ballot to request that the draft be forwarded to Sponsor Ballot.]

Notice: This document has been prepared to assist the IEEE P802.15. 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 P802.15.

Overview of 802.15.3b

- Amendment to IEEE Std 802.15.3-2003
 - Improve implementation and interoperability.
 - Includes minor optimizations while preserving backward compatibility.
 - Correct errors, clarify ambiguities, and add editorial clarifications.

Accomplishments of 802.15.3b

- Correct MLME SAP definition
- Support multicast using group addresses
- Optimize ACK policy with implied-ACK
- Allow bi-directional use of allocated channel time
- Allow allocated contention periods in the superframe

Summary of letter ballot results

- Initial letter ballot, LB29
 - 170 approve, 14 disapprove, 27 abstain
 - 347 comments, 193 technical, 154 editorial
 - Results: 94% return rate, abstains < 13%, approval > 92%
- Recirculation, LB30
 - 192 approve, 4 disapprove, 18 abstain
 - No new disapprove voters
 - Results: abstains < 8%, approval ~ 98%

Summary of disapprove voters

<i>Name</i>	<i># Editorial</i>	<i># Technical</i>	<i># Rejected</i>
Jaiganesh Balakrishnan	1	3*	0
Jennifer Bray	8	4	0
Peter Johansson	6	11	3
Hirohisa Yamaguchi	0	9	2

* Balakishnan's comments are subset of Yamaguchi's comments.

Rejected comment: Peter Johansson

Comment ID 179

Comment summary: Revise the security model so as to base it upon independent authentication and key exchange between pairs of devices.

Reponse: Broadcast frames, e.g., the beacon, require group security. Peer-to-peer security is explicitly allowed as well. Changing the model would break backward compatibility

Rejected comment: Peter Johansson

Comment ID 181

Comment summary: Delete MLME primitive for ServiceData as it is redundant.

Reponse: The ASIE and Piconet Services MLME primitives initiate different frames exchange sequences with different command frames and so different MLME primitives are appropriate.

Rejected comment: Peter Johansson

Comment ID 182

Comment summary: Remove the service primitives that change the BSID while the piconet is operating.

Reponse: The standard has a procedure for changing the BSID without affecting network connections. The BSID is a string that provides an user friendly name for the piconet. The intention is that the user will be able to change it without affecting the piconet's operations.

Rejected comment: Hirohisa Yamaguchi

Comment ID 331

Comment summary: New bits in the header are outside the scope of the PAR, they are neither a correction nor a clarification.

Reponse: The implied ACK process is an minor optimization to improve throughput for some applications, e.g., TCP/IP. The bits used were reserved and so the are ignored by devices compliant only to IEEE Std 802.15.3-2003.

Rejected comment: Hirohisa Yamaguchi

Comment ID 332

Comment summary: The ASIE request and response commands should be replaced with Vendor Specific request and response commands

Reponse: The ASIE commands initiate specific MAC behavior that is defined in the standard. Vendor specific commands do not have a specific defined behavior in the standard and so different commands are required.

Motion from the Working Group

- Motion: *to forward D02 to the LMSC for submission to Sponsor Ballot* moved by James Gilb and seconded by Ian Gifford. Following no discussion the vote result was: 52/0/5; the motion carries.

Motion to the EC

- Move to forward P802-15-3-D02_Draft_Amendment.pdf to Sponsor Ballot.

Move: Bob Heile

Second:

Moved: Bob Heile/Stuart Kerry
Passes: 15/0/0

5.02 ME 802.11e to REVCOM

- Kerry 5 01:25 PM

IEEE 802 LMSC RESOLUTION

Motion By: KERRY

Seconded By: Heile

- *Believing that comment responses in 11-04/0546r9, 11-04/0988r4, 11-04/1155r2, 11-04/1394r5, 11-05/1580r4, 11-05/0131r2, 11-05/0376r0 and the draft mentioned below demonstrate that the IEEE-SA rules for sponsor ballot have reached an orderly endpoint,*
- **Move: Request that approval of 802.11e draft 13.0 be placed on the next available RevCom agenda.**
- Movers:
TGe: Andrei K/Bob Miller TG Result: 9-0-0 (14 members present)
- WG: Results: Approved (110-0-3)
- Excom Results: Approved (16.0.0)

Approve: 16

Do Not Approve:0

Abstain:0

Moved: Stuart Kerry/Bob Heile
Passes: 16/0/0

5.03 ME 802.11REV-ma conditional approval to sponsor ballot - Kerry 5 01:29 PM

IEEE 802 LMSC RESOLUTION

Motion By: KERRY

Seconded By: Heile

- Moved: To request conditional approval to send 802.11REV-ma to sponsor ballot upon conclusion of a working group recirculation ballot that meets all requirements in the LMSC Policies and Procedures.
 - Dates:
 - Recirculation ballot: August 8 (Sept 5)
 - Comment resolution meeting: August 23 (Sept 19)

Moved on behalf of Task Group m; Bob O'Hara

WG Results: Approved: (76:8:16)

- Number of voting members present: 104
- Excom Results: (16.0.0)

Approve: 16

Do Not Approve:0

Abstain:0

Moved: Stuart Kerry/Bob Heile
Passes: 16/0/0

5.04 ME 802.1am PAR to NesCom

- Jeffrey 5 01:32 PM

MOTION

- 802.1 requests permission from the EC to forward the P802.1AM Wireless Management draft PAR to NesCom.
- 802.1 Proposed: Seaman Second: stefani
 - For: 13 Against: 3 Abstain: 9
- SEC Proposed: Jeffree, Second:
 - For: Against: Abstain:

Moved: Tony Jeffree/Pat Thaler

A number of positions were expressed by the members of the EC, to which Tony responded.

Fails: 3/11/2

5.05 ME 802.1ar PAR to NesCom

- Jeffree 5 02:02 PM

MOTION

- 802.1 requests permission from the EC to forward the P802.1AR Secure Device Identifier draft PAR to NesCom.
- 802.1 Proposed: Seaman Second: congdon
 - For: 21 Against: 0 Abstain: 5
- SEC Proposed: Jeffree, Second:
 - For: Against: Abstain:
 -

Moved: Tony Jeffree/Stuart Kerry
Passes: 16/0/0

5.06 ME 802.1aq PAR to NesCom

- Jeffree 5 02:02 PM

MOTION

- 802.1 requests permission from the EC to forward the P802.1aq Shortest Path Bridging draft PAR to NesCom.
- 802.1 Proposed: Seaman Second: finn
 - For: 23 Against:0 Abstain: 3
- SEC Proposed: Jeffree, Second:
 - For: Against: Abstain:

Moved: Tony Jeffree/Carl Stevenson
Passes: 15/0/0

5.07 ME 802.1ap PAR to NesCom

- Jeffree 5 02:05 PM

MOTION

- 802.1 requests permission from the EC to forward the P802.1ap VLAN Bridge MIBs draft PAR to NesCom.
- 802.1 Proposed: Seaman Second: congdon
 - For: 25 Against: 0 Abstain: 2
- SEC Proposed: Jeffree, Second:
 - For: Against: Abstain:

Comments received:

- Only comments received by deadline were from 802.15:

As you are aware, there has been lot of interest in architecture issues related to wireless. There have already been a couple of well attended ad hoc meetings. We were told in 802.15 that there will be a request by this group to form an EC Study Group to see if it makes sense to set up some formal projects. If this happens, 802.1am would potentially be a logical subset of these activities. It was the opinion of the 802.15WG that action on the proposed 802.1am project be postponed until pending discussion and action on the Study Group.

- 802.1 response:

We consider that waiting to start this work on the basis of establishing an EC study group to see whether there might be some projects to do is a lengthy and indeterminate process; we would therefore be reluctant for this work to be dependent upon the outcome of such a study group.

Moved: Tony Jeffree/Bob O'Hara
Passes: 14/0/1

5.08 ME 802.1ac PAR to NesCom

- Jeffree 5 02:06 PM

MOTION

- 802.1 requests permission from the EC to forward the revised P802.1AC MAC Service draft PAR to NesCom.
- 802.1 Proposed: Seaman Second: congdon
 - For: 23 Against: 0 Abstain: 3
- SEC Proposed: Jeffree, Second:
 - For: Against: Abstain:

Moved: Tony Jeffree/Carl Stevenson
Passes: 15/0/0

5.09 ME Conditional approval for P802.1Q-REV to REVCOM

- Jeffree

5

02:07 PM

MOTION

- 802.1 requests conditional approval from the EC, as per current P&P, to forward P802.1Q-REV to RevCom following completion of Sponsor balloting
- 802.1 Proposed: Seaman Second: haddock
 - For: 25 Against: 0 Abstain: 1
- SEC Proposed: Jeffree, Second:
 - For: Against: Abstain:

Supporting material – Q-REV

- Sponsor ballot closed 17th July
- Voting: 82% returned, 3% abstention, 98% approve, 1 Disapprove
- One disapprove voter has indicated that he is satisfied with the resolution of his comments
- No outstanding negatives or comments
- Recirc in August timeframe with ballot resolution if needed in Sept interim

Moved: Tony Jeffree/Stuart Kerry
Passes: 15/0/0

5.10 ME Conditional approval for P802.1ad to RevCom

- Jeffree 5 02:09 PM

MOTION

- 802.1 requests conditional approval from the SEC, as per current P&P, to forward P802.1ad to RevCom following completion of Sponsor balloting
- 802.1 Proposed: Haddock Second: patton
 - For: 25 Against: 0 Abstain: 1
- SEC Proposed: Jeffree, Second:
 - For: Against: Abstain:
 -

Supporting material – ad

- Sponsor ballot closed 17th July
- Voting: 81% returned, 7% abstention, 93% approve, 4 Disapproves
- Three disapprove voters have indicated that they are satisfied with the resolution of their comments; fourth (Mr Geipel) has been emailed but no response as yet
- Outstanding comments/dispositions attached (P802-1ad-D5-1_Geipel_resolution.xls)
- Recirc in August timeframe with ballot resolution if needed in Sept interim

Moved: Tony Jeffree/Carl Stevenson
Passes: 15/0/0

5.11 ME Conditional approval for P802.1ae to Sponsor Ballot - Jeffree 5 02:11 PM

MOTION

- 802.1 requests conditional approval from the SEC, as per current P&P, to forward P802.1AE to Sponsor ballot following completion of Working Group balloting
- 802.1 Proposed: Romanow Second: finn
 - For: 23 Against: 0 Abstain: 4
- SEC Proposed: Jeffree, Second:
 - For: Against: Abstain:
 -

Supporting material – AE

- WG ballot closed 17th July
- Voting: 87% returned, 38% abstention, 92% approve, 2 Disapproves
- The two disapprove voters have indicated that they are satisfied with the resolution of their comments.
- No outstanding comments
- Recirc in August timeframe with ballot resolution if needed in Sept interim

Moved: Tony Jeffree/Roger Marks
Passes: 16/0/0

5.12 ME 802.3at PAR to NesCom

- Grow 5 02:12 PM

P802.3at DTE Power via the MDI Enhancements

- Five Criteria motions:
 - 1: Y: 48, N: 1, A: 7 (Passes)
 - 2: Y: 52, N: 0, A: 2 (Passes)
 - 3: Y: 52, N: 1, A: 3 (Passes)
 - 4: Y: 48, N: 0, A: 7 (Passes)
 - 5: Y: 49, N: 1, A: 4 (Passes)
- Move that 802.3 approve the PoE Plus PAR, per 802_3_poep_par.pdf
 - Y: 48, N: 1, A: 7 (Passes)

Moved: Bob Grow/Carl Stevenson
Passes: 16/0/0

5.13 ME P802.3auCorr1 PAR to NesCom

- Grow 5 02:13 PM

P802.3auCorr1 MDI isolation

IEEE 802.3 approves the PAR as submitted for IEEE P802.3auCorr1 Isolation Corrigendum.

IEEE 802.3 requests the IEEE 802 LMSC Executive Committee to submit the IEEE P802.3auCorr1 Isolation Corrigendum PAR to NESCOM.

– Y: 83, N: 0, A: 10 (Passes)

Moved: Bob Grow/Jerry Upton
Passes: 16/0/0

5.14 ME Conditional approval for 802.16e to REVCOM

- Marks 5 02:15 PM

P802.16e to RevCom: Conditional Approval

22 July 2005

Rules

Motions requesting conditional approval to forward where the prior ballot has closed shall be accompanied by:

- Date the ballot closed
- Vote tally including Approve, Disapprove and Abstain votes
- Comments that support the remaining disapprove votes and Working Group responses.
- Schedule for confirmation ballot and resolution meeting.

Date the ballot closed: **14 July 2005**

Stage		Open	Close	
Ballot	D5	5 Oct	4 Nov	2004
Recirc 1	D6	22 Feb	9 Mar	2005
Recirc 2	D7	12 Apr	28 Apr	2005
Recirc 3	D8	24 May	8 Jun	2005
Recirc 4	D9	29 Jun	14 Jul	2005

Vote tally including Approve, Disapprove and Abstain votes

- 132 Approve 95.0%
 - 7 Disapprove
 - 10 Abstain
 - 36 not voting
-
- Notes:
 - Awaiting responses of 2 Disapprove voters

Comments that support the remaining disapprove votes and Working Group responses

- One unresolved Binding comment from most recent recirc
- 33 unresolved “Technical, Binding” comments from prior rounds
 - 12 were accepted verbatim, but without response
 - 9 were accepted with modifications, without reply

Schedule for confirmation ballot and resolution meeting.

- Aug 2: Issue P802.16e/D10
- Aug 5-20: 15 day recirc
- Aug 25: comment resolution complete

802.16 WG Motions

802.16 Closing Plenary: 22 July 2005:

Motion 15: To accept IEEE 802.16-05/45r2 as the Sponsor ballot recirculation comment resolutions, develop Draft P802.16e/D10 based on those resolutions, and initiate Confirmation Recirculation

- Approved 92-1-1

Motion 16: To request 802 EC conditional approval to forward 802.16e to RevCom

- Approved 70-10-3.

Motion

To grant conditional approval, under Clause 21,
to forward P802.16e to RevCom

Moved: Marks

Seconded: Lynch

Approve:

Disapprove:

Abstain:

Moved: Roger Marks/Mike Lynch
Passes: 13/0/3

5.15 ME Conditional approval for 802.16f to REVCOM

- Marks 5 02:23 PM

P802.16f to RevCom: Conditional Approval

22 July 2005

Rules

Motions requesting conditional approval to forward where the prior ballot has closed shall be accompanied by:

- Date the ballot closed
- Vote tally including Approve, Disapprove and Abstain votes
- Comments that support the remaining disapprove votes and Working Group responses.
- Schedule for confirmation ballot and resolution meeting.

Date the ballot closed: **14 July 2005**

Stage		Open	Close	
Ballot	D3	28 Mar	27 Apr	2005
Recirc 1	D4	31 May	15 Jun	2005
Recirc 2	D5	29 Jun	14 Jul	2005

Vote tally including Approve, Disapprove and Abstain votes

- 81 Approve 97.6%
- 2 Disapprove
- 5 Abstain
- 22 not voting

Comments that support the remaining disapprove votes and Working Group responses

- Two outstanding Binding comments
 - One from each of two voters
- Both accepted with modification
 - Have not received responses from either voter

Schedule for confirmation ballot and resolution meeting

- Jul 26: Issue P802.16f/D6
- Jul 28: 15 day recirc opens
- Aug 12 : 15 day recirc closes
- Sep 12-16: comment resolution

802.16 WG Motions

802.16 Closing Plenary: 22 July 2005:

To submit P802.16f/D6 to the 802 Executive Committee for forward to RevCom for final approval, contingent upon successful completion of a Sponsor Ballot Confirmation Recirculation.

- Approved 68-0-1

Motion

To grant conditional approval, under Clause 21,
to forward P802.16f to RevCom

Moved: Marks

Seconded:

Approve:

Disapprove:

Abstain:

Moved: Roger Marks/Mike Lynch
Passes: 16/0/0

5.16 ME Conditional approval for 802.16-2004/Cor1 to REVCOM - Marks 5 02:27 PM

P802.16/Cor1 to RevCom: Conditional Approval

22 July 2005

Rules

Motions requesting conditional approval to forward where the prior ballot has closed shall be accompanied by:

- Date the ballot closed
- Vote tally including Approve, Disapprove and Abstain votes
- Comments that support the remaining disapprove votes and Working Group responses.
- Schedule for confirmation ballot and resolution meeting.

Date the ballot closed:
10 July 2005

Stage		Open	Close	
Ballot	D3	10 Jun	10 Jul	2005

Vote tally including Approve, Disapprove and Abstain votes

- 147 Approve 91.3%
- 14 Disapprove
- 7 Abstain
- 52 not voting

Comments that support the remaining disapprove votes and Working Group responses

- 56 outstanding Binding comments after ballot
- 43 comments resolved to voters' satisfaction
- 5 other comments accepted or accepted-modified
- 7 comments rejected
- 1 comment superseded

Disapprove votes

- One voter submitted 293 editorial binding comments (not included in attached list)
- Two voters are satisfied with their comments but choose to retain their disapprove vote
- One voter not present to indicate satisfaction (1 rejected, 1 accepted-modified, 1 superceded)
- 2 rejected comments were both submitted in identical form by 5 voters
- Three voters have 1 rejected comment apiece
- One voter has 1 accepted-modified
- One voter has 1 rejected and one accepted-modified

Schedule for confirmation ballot and resolution meeting

- Aug 5: Issue 802.16-2004/Cor1/D4
- Aug 8-23: 15 day recirc
- Aug 27: comment resolution complete

802.16 WG Motions

802.16 Closing Plenary: 22 July 2005:

Motion 11: To request conditional approval from the LMSC EC to forward P802.16-2004/Cor1/D4 to RevCom

- Approved 62-0-7.

Motion

To grant conditional approval, under Clause 21, to forward P802.16-2004/Cor1 to RevCom

Moved: Marks

Seconded: Lynch

Approve:

Disapprove:

Abstain:

Moved: Roger Marks/Mike Lynch

Passes: 15/0/1

5.17

6.00

Executive Committee Study Groups & Working Groups

 -

6.01 -

6.02 -

7.00 Break (deferred until after item 8.03) - 10 02:40 PM

8.00

IEEE-SA Items

 - 02:50 PM

8.01 II 802 Task Force update - Ickowitz 5 02:37 PM

Agenda

- 802/International Standards
- 802 Speaker at CAG Conference in Munich
- Alternative to Complimentary Print Copies
- Funded Services Project Update
 - IEEE 802 P&P
 - IEEE 802 Online Training
- Entity Balloting: Status Update
- myBallot Update
- Font Changes to 802.3 Standard

802/International Standards

- 802 to address tactical and strategic impact of submitting 802 documents to ISO/IEC
 - Geoff Thompson gave presentation to 802.3 and 802.11; no feedback as of yet
- Action Item: Paul Nikolich to work with 802.3 and 802.11 Chairs to get their feedback from their WGs on importance of taking 802 docs through SC6
- Strong renewed consensus that a project TAG for SC6 should be formed
 - Geoff Thompson, Bob Grow to hold meeting to nurture formation of SC6 TAG

802 Speaker at CAG Conference in Munich

- CAG will hold meeting in Munich in September, would like 802 to be represented so 802 can discuss their procedures
 - Low interest from EC
 - Jim Carlo volunteered to speak on behalf of 802
 - Other possibilities (David Law)?
- Action Item: IEEE-SA Staff (Terry deCourcelle) will follow up

Complimentary Copies

- Discussion of alternative options to print comp. copies
- Geoff Thompson, Andy Ickowicz to collaborate on suggestions for suitable alternative recognition; if no new suggestions are introduced by November 2005 Plenary, item will be dropped from TF agenda

802 Funded Services

- **IEEE 802 P&P**
 - 802 will complete deliverables with IEEE-SA at the end of this round of ballots. No additional funded services work items are planned at this time.
 - Plan to have finalized P&P (final deliverable) by approx. 1 month after Plenary (this would complete item 3.3 of SOW).

802 Funded Services (cont'd)

- **IEEE 802 Online Training**
 - **Next milestones**
 - Contract with Avilar to be finalized by 1 September 2005
 - Content delivery to vendor by 1 September 2005
 - **Comprehensive SOW (including vendor, SA Staff, legal requirements) to be completed by 30 August 2005 (will be greater than 30K previously approved by EC)**
 - **First module completion October 2005 (tentative—to be verified by Avilar)**

Entity Balloting: Status Update

- David Law looking into what P&P would be needed to support entity balloting
- Problem: IEEE 802 WGs differ dynamically from other IEEE WGs
- Discussion on the matter to continue between IEEE 802 and IEEE-SA

myBallot Update

- **802 issues w/system**
 - Needs more refinement to be mandated
 - Policy issues; mechanism is a particular interpretation of IEEE process
 - Restrictive relative to how 802 WGs have operated in past
- **Action Item: 802 leadership (GT, BG) to coordinate interaction on myBallot/myProject with IEEE-SA Staff Project Manager Bob LaBelle**

Font Changes to 802.3 Standard

- Font issues with IEL; IEL receives unlocked PDF from Publishing Staff, uses substitute fonts that affect the PDF if Staff doesn't adhere to their guidelines
- Action Item: Staff to discuss with Publishing Management, have additional info by Closing EC meeting

Geoff reported that he believes there is sufficient interest in the formation of the TAG to begin. The first meeting will be August 12th. There is an annual TAG fee of \$750.

The issue of 802.11i complimentary copies from Monday's meeting was indicated by IEEE staff to be in process at the IEEE.

Paul indicated that he would be requesting approval of the EC for a new ceiling funding amount, once that figure is determined. This will be greater than the original \$30k approved by the EC.

Geoff pointed out that when another project uses entity balloting, there is no method for 802 to participate in that project, when it is materially relevant to that project. That is not acceptable.

8.02 DT follow up on anti-trust panel discussion (taken out of order) - Nikolich 5 02:31 PM

Paul reported that he thought the antitrust presentation was well received. A more specific proposal to address concerns on this subject is expected to be brought by IEEE staff.

Jerry Upton notes that he disagrees that the presentation was "well received", though it was well attended.

8.03 II Financial audit requirements (taken out of order) - Kenney 2 02:34 PM

Karen Kenney reported that each working group chair will be receiving a questionnaire for each active project, asking if the project maintains a bank account.

9.00 LMSC Liaisons & External Interface - 03:02 PM
9.01 ME FCC Ex Parte on WRANs - Lynch 5 03:05 PM

[DRAFT] FCC ex parte presentation on WRAN

IEEE P802.22 Wireless RANs

Date: 2005-06-28

Authors:

Name	Company	Address	Phone	email
Carl R. Stevenson	WK3C Wireless LLC	4991 Shimerville Rd., Emmaus, PA 18049-4955	610-841-6180	wk3c@wk3c.com

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>

Abstract

This is a DRAFT outline of a proposed ex parte presentation to the FCC, explaining 802.22's charter, studies and conclusions to date, goals, etc.

This document is intended for WG approval, review and approval by 802.18, and review and approval by the 802 EC before being formally presented to the FCC.

IEEE 802.22 WG Scope and Purpose

- **The IEEE 802.22 WG on Wireless Regional Area Networks (“WRANs”) has the following charter, per its approved PAR:**
 - To develop “Cognitive Wireless RAN Medium Access Control (MAC) and Physical Layer (PHY) specifications” ... “(specifying) the air interface, including the medium access control layer (MAC) and physical layer (PHY), of fixed point-to-multipoint wireless regional area networks operating in the VHF/UHF TV broadcast bands between 54MHz and 862 MHz.”
 - “This standard is intended to enable deployment of interoperable 802 multivendor wireless regional area network products, to facilitate competition in broadband access by providing alternatives to wireline broadband access and extending the deployability of such systems into diverse geographic areas, including sparsely populated rural areas, while preventing harmful interference to incumbent licensed services in the TV broadcast bands.”
 - Goal is a global standard, capable of use in different regulatory domains where other TV technologies are used (DVB, PAL, SECAM, etc.)

Background

- **The IEEE 802.22 WG started as a Study Group in the IEEE 802.18 RR-TAG (approved November 2003)**
 - We noted the Commission’s interest in the possibility of making unused TV spectrum available for use by license-exempt devices, starting with the Spectrum Policy Task Force, NOI ET Docket No. 02-380, etc.)
 - We thought it prudent to begin studies on how this spectrum might best be put to use, should it become available.
 - We wanted to explore the issues surrounding coexistence/non-interference with the licensed incumbents.
 - All interested stakeholder communities were represented in the Study Group and are actively participating in the 802.22 WG (MSTV, NAB, CEA, wireless microphone interests, PLMRS interests, and “traditional” IEEE 802 participants)
- **The PAR for the 802.22 WG was approved in September 2004, the WG held its first meeting in November 2004, and has been meeting regularly since then.**

802.22 Standard Project Timeline

- **Requirements definition** **July 05**
- **Rcv/eval proposals/contributions** **Sept/Nov 05**
- **Consolidation of Proposals** **Jan 06**
- **WG Draft Process Start** **Jan 06**
- **To Sponsor Ballot** **Jan 07**
- **Final Approval** **July 07**
- **Publication** **Sept 07**

802.22 Progress to Date

- **The following slides will summarize the results of our studies and discussions to date – many of which have resulted in broad agreement and point to the need for somewhat different requirements and methodologies than were outlined by the Commission in its NPRM ET Docket No. 04-186 in order to provide reliable protection to licensed services.**

WRAN System Modelling and Analysis

1. For the purposes of deriving WRAN system Requirements, a model for CPE operation within the Grade B/noise-limited contour was agreed upon:
 - a. For TV, the analysis for sensing a DTV signal is the worst case (harder to detect than NTSC)
 - b. WRAN operation on N and N+/-1 within the Grade B/noise-limited contour was excluded for TV, Wireless microphone operations, and channels 14-20 for PLMRS where authorized
 - c. The DTV analysis must include receiver saturation as well as adjacent channel interference at N+/-2 and beyond
 - d. The criteria for DTV “interference” is to not reduce the sensitivity of the receiver by more than 1 dB
 - e. The CPE antenna is located outdoors, at least 10 meters above ground and 10 meters from the nearest DTV receiving antenna. (Agreement on an indoor-to-outdoor absorption ratio was not necessary since both CPE and DTV antennas were located outdoors.)
 - f. The DTV antenna is oriented toward the CPE antenna and there is 14 dB of polarization discrimination.
 - g. The CPE has 4 Watts of maximum EIRP
 - h. The CPE has an outdoor sensing antenna with a minimum gain of 0 dBi in all azimuthal directions and polarizations
2. It was agreed to impose the WRAN Requirements derived from the CPE model above onto Base Stations operating within the Grade B/noise-limited contour with the exception that the Base Station was assumed to be professionally installed.
3. Even though the sensing range of the WRAN system for wireless microphones is much smaller than the interference range, it was felt that the use of distributed sensing by CPEs would help mitigate the range disparity. Therefore, it was agreed that the CPE Requirements derived for DTV, other than the sensing threshold, would be acceptable for the case of the wireless microphones.

Fundamental requirements for WRAN systems to protect TV broadcasting

- **Fixed outdoor P-MP System with base station professionally installed at known location**
- **Base Station pre-programmed with disallowed channels based on pre-installation site survey/system engineering and with access to channel usage databases and manual over-ride for special temporary channel exclusion**
- **Customer Premises Equipment (“CPE”s) should include fixed outdoor antennas (RX, TX, and sensing), and be user-installable, though some operators may opt to require professional installation of CPEs**
- **Master/Slave relationship between base station and CPEs - Base Station controls CPE frequency of operation, TX power, modulation, timing, etc.**
- **Centralized cognitive radio approach to sensing/avoiding (protecting) incumbents to make system adaptive to changes in incumbent usage, environment, etc. (i.e., distributed sensing by all CPEs across the entire network cell w/centralized intelligence/control at the base station)**

Fundamental requirements for WRAN systems to protect TV broadcasting

- **Systems should not be allowed to operate on N or $N\pm 1$ within the protected contour of a DTV station**
- **Need to consider DTV D/U's and DTV receiver saturation for $N\pm 2$ channels and beyond and resulting possible need for an "EIRP profile" for WRAN devices**
- **Our studies indicate that Part 15.209(a) out-of-band emission levels are insufficient to protect DTV receivers for $N\pm 2$ and beyond (by some 33 dB for 1 dB desensitization of DTV receivers)**
- **IEEE 802.22 anticipates recommending an out-of-band emission mask to the Commission, based on an agreed deployment scenario once D/U's are agreed for $N\pm 2$ channels and beyond and an EIRP profile is specified**

Distributed sensing and Master/Slave control (for TV protection)

- **Base station initially programmed with “keep out” channels, based on site survey/system engineering**
- **During operation, base station has access to channel usage databases and the operator has manual over-ride for dynamic temporary channel exclusions**
- **Cognitive radio sensing threshold of -116 dBm in 6 MHz bw (based on sensing DTV pilot at 11.3 dB below total power in the channel), with sensing done by ALL CPEs and centralized intelligence/control at the base station (analog TV sensing requirements are less stringent)**
- **CPE antennas outside, sense antennas omni with 0dBi minimum gain at any sense of polarization**
- **CPEs may NOT transmit, absent receipt of a control signal from a base station**
- **Base station totally controls RF operation of CPEs**
 - Frequencies that may be used
 - Modulation, Timing, TX power control
 - Commands to perform sensing on used channel [during quiet periods?] or to scan other channels and report results
- **Adaptive ability of cognitive radio with distributed sensing and centralized control will help to preclude interference despite future changes in incumbent locations and channel assignments**

Fundamental requirements for WRAN systems to protect Part 74 licensed operations such as wireless microphones

- **OOB emissions requirements agreed in 802.22 to be the same as required to protect DTV (15.209(a) not adequate)**
- **Cognitive radio sensing threshold of -107 dBm in 200 kHz bw for sensing wireless microphones recommended by IEEE 802 in its comments in the NPRM is a *best effort*, but is not sufficient to fully protect Part 74 wireless microphone operation since the interference range of the CPEs into wireless microphone receivers would be larger than their sensing range for wireless microphone transmitters**
 - Can't differentiate between licensed Part 74 users and unlicensed users with current wireless microphone technology
 - Likelihood of false alarms from unlicensed wireless microphones would render WRAN operation susceptible to potential unintentional (and/or intentional) interference or “denial of service”
 - Use of beacons by the Part 74 wireless microphone operators could alleviate problems with sensing and detection of licensed microphones as well as the identification and differentiation from unlicensed microphones. There exists a desire to distribute these devices in a manner familiar to the existing microphone manufacturers infrastructure while still providing strong mechanisms that ensure beacon operation by legitimate license holders in an authorized manner. We advocate that the Commission treat such beacons as devices licensed under Part 74.
- **The Commission should consider designating a limited number of TV channels per market that would not be available for unlicensed operation**
 - Part 74 users should be required by rule to use these preferentially
 - Fewer channels needed in more rural areas/smaller markets where WRAN is most needed
 - In unusual cases (major event in rural area), use of other than reserved channels allowable, but Part 74 users should coordinate to minimize avoidable impact on WRAN capacity

Additional Topics/Unresolved Issues

- **The Commission should avoid creating another “food-fight band,” - more order is required than “traditional Part 15 environment” – especially in bands where licensed incumbents exist**
- **Base station registration/light licensing???**
- **Any technology allowed to share in the TV bands must**
 1. Protect licensed incumbents to a very high degree of reliability
 2. Demonstrably coexist well with any other license-exempt technology allowed
 - Anything less will result in inefficiency, interference, and devalue the public value of license-exempt sharing in the TV bands – for example, possibility of (proprietary, stand-alone) DTV retransmission equipment (DVD player to monitor, etc.) or similar devices (outdoor security cameras) could VERY seriously compromise WRAN channel availability/system capacity and ability to provide broadband services to the public
- **There is a likelihood that IEEE 802.22 will develop a Recommended Practice for installation/deployment of .22 WRAN systems.**

802.18 Motion to SEC

Agenda: 9.01

Date: 07/22/2005

Time: 3:02 P.M.

Motion by: 802.18 – Lynch

Seconded by: Stevenson

Moved: To approve document

18-05-0028-00-0000_FCC_Ex_Parte_on_WRANs.ppt as an 802 document, authorizing the Chair of 802.18 to do necessary editorial and formatting changes and, using the document as a “template,” and to present it to the FCC..

Informative: This document was generated by 802.22 and provides an overview of 802.22 and the work to be done by that group.

Approve: Do Not Approve: Abstain: Motion:

Moved: Mike Lynch/Carl Stevenson

This document does not establish any positions, only describes the work of 802.22.

Passes: 15/0/0

9.02 ME FCC response opposing WCA comments

- Lynch

5

03:09 PM

IEEE P802.18
Radio Regulatory - TAG

**[Comments on the Petition for Rulemaking – Amendment of Part
15 Rules for License-Exempt 57-64 GHz Band]**

Date: 2005-06-09

Author(s):

Name	Company	Address	Phone	Email
James Gilb	SiBeam	San Diego, CA	858-484-4339	Last name at ieee dot org
Gary Baldwin	SiBeam	Sunnyvale, CA	510-745-7334	First initial, Last name at sibeam dot com

Abstract

Re: [IEEE P802.15-04/0250r5 (PAR), IEEE P802.15-05/0054r0, etc.]

Abstract: [FCC OET RM-11104 opposing comments.]

Purpose: [On 30Sep04 the Wireless Communications Association (WCA) filed a petition for rulemaking with the FCC RM-11104. These are opposing comments for your consideration and request that the IEEE review and approve this as our IEEE802 filing to the FCC as well. This is in support of Project 802.15.3c PAR <http://standards.ieee.org/board/nes/projects/802-15-3c.pdf>.]

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June 9, 2005

Mr. Bruce Franca
Acting Chief
Office of Engineering and Technology
Federal Communications Commission
445 Twelfth Street, S.W.
Washington, D.C. 20054 USA

Subject:	Comments on the Petition for Rulemaking – Amendment of Part 15 Rules for License-Exempt 57-64 GHz Band
Re:	RM-11104

Dear Mr. Franca:

The Institute of Electrical and Electronics Engineers, Inc. (“IEEE”) is a non-profit organization with over 365,000 members in over 150 countries. One of its activities is to develop consensus based standards for a wide range of technologies and applications. The 802.15.3c (“the Standard”) is a project that was formed in March 2005 and has the charter of developing a 60 GHz Wireless Personal Area Network (“PAN”) alternate Physical Layer standard based on the IEEE Std 802.15.3-2003.

The past decade has seen considerable success in increasing the bandwidth from the core of a network to the home and the enterprise. However, the bandwidth in the home and the enterprise is inadequate or non-existent to support the new generation of applications such as high definition television (“HDTV”) connectivity, video gaming and file transfer. These applications will require data rate from 500 Mbps to over 2 Gbps. The Standard, which will be in full compliance with the Part 15.255 rules, will foster the development of semiconductor devices, software and equipment to fill this need.

The market for the Standard based product will be vast. Consider the market for HDTV, which is a good indicator of the potential market for the Standard based product. According to the market research firm InStat¹, about 10 million households currently have HDTV sets. This number is expected to soar to 52 million by 2009. The market driver for the Standard is to provide an inter-operable, scalable, low cost and high data rate mobile wireless solution.

The existing rules under Part 15.255 are designed to accommodate both indoor and outdoor applications.

The petition RM-11104 filed by the WCA effectively creates two rules, one for the outdoor and the other for the indoor. They are incompatible and unfair to the indoor product. The petition, if approved, will disrupt the performance of the WPAN. Therefore, the IEEE strongly opposes the Petition for Rulemaking filed by the Wireless Communications Association International (“WCA”) on the following grounds:

- (a) The market for the Standard based product will be considerably larger than that for the outdoor point-to-point equipment. The effort by the IEEE and the industry to develop a standard is a testament to the market potential. The ratification of the standard will drive the development of new technologies at 60 GHz and at higher millimeter wave frequencies. WCA’s petition will hinder the development of the P803.15.3c consensus based standard.
- (b) The WCA states that “the main limiter to the widespread usage of this valuable spectrum is the limited link distances that can be achieved under the current operating rules.”² This problem has been addressed with the FCC opening the 70 GHz and 80 GHz bands³. Therefore, the WCA should consider moving to 70 GHz and 80 GHz, which provides 10 GHz of aggregated spectrum and longer link distance than at 60 GHz. The non-exclusive licensing approach for the 70 GHz and

¹ March 28, 2005, press release titled *High Definition TV Service Now in 10 Million Homes*.

² See Reply Comments of the Wireless Communications Association Inc., RM-11105 (filed November 29, 2004).

³ See Allocations and Service Rules for the 71–76 GHz, 81–86 GHz, and 92–95 GHz Bands.

80 GHz bands make them more attractive to the service providers than the unlicensed 60 GHz band. The Commission adopted Part 15.255 rules in August 1998 for indoor and outdoor wireless applications. Admittedly, it has taken some time, but the IEEE and the industry have responded to the Commission's action by taking the first step – create a standard based on the rules under Part 15.255.

- (c) The WCA also states that the petition will not cause significant “potential for interference between links.” On the contrary, the petition will cause significant interference as the window links will reflect energy and interfere with the Standard based product. Commercial windows have high power reflectivity at millimeter wave frequencies as they are designed for energy efficiency. The reflected power from a window link will disrupt a network based on Part 15.255 compliant product.
- (d) The WCA's petition requests that “should the Commission determine that enforcement of section 15.255(i) continues to be in the public interest, it should treat window links as it would any outdoor link under the rule, and clarify that the transmitter ID requirement does not apply to point-to-point transmissions that are directed through a window.” This request is problematic because, as stated in the previous paragraph, a significant portion of the transmitter power of a window link will reflect and cause interference with Part 15.255 compliant product. This is less likely to occur with an outdoor link. The transmitter ID is a powerful tool in identifying the interferer and expeditiously resolving the problem. As a WPAN network is closely identified with a user, the ease with which the user can resolve the interference defines the user's positive experience with the technology.
- (e) The WCA's request to increase the power level⁴ is very disturbing. As stated earlier, the reflected power from a window link will affect the performance of the window link. With the increased EIRP, the reflected power will increase considerably and could potentially damage the Part 15.255 compliant product.
- (f) The Commission must note that if the WCA's petition is approved, there is no safe guard to ensure that an unlicensed point-to-point transmitter with an EIRP of 77.3 dBm⁵ (54 kW) is pointing through a window. This raises the possibility of exposing the general population to RF radiation.

In conclusion, the Commission must reject the WCA's petition for rulemaking. When the P802.15.3c standard is ratified, currently slated for 2H 2007⁶, it will foster competition, create new technologies and develop new applications for the first mass market for the millimeter wave technology. This will occur only if the rules under Part 15.255 are protected.

I would be glad to provide the Commission with more information regarding this matter.

Sincerely yours,

⁴ According to the petition, “users of high gain, point-to-point antennas the 57-64 GHz band will be deemed in compliance with the rule if they transmit an average EIRP of no more than 82 dBm, with a reduction of 2 dB for every dB that the transmitting antenna gain is below 51 dBi.”

⁵ As per WCA's petition, an antenna with an aperture diameter of 24 inches (61 centimeters) can have a maximum EIRP of 77.3 dBm.

⁶ IEEE PAR 802.15.3c: <http://standards.ieee.org/board/nes/projects/802-15-3c.pdf>

802.18 Motion to SEC

Agenda: 9.02

Date: 07/22/2005

Time: 3:07 P.M.

Motion by: 802.18 – Lynch

Seconded by: Heile

Moved: To approve document

18-05-0023-02-0000_RR-TAG_Letter-Opposing-WCA-comments.doc as an 802 document,

authorizing the Chair of 802.18 to do necessary editorial and formatting changes and, using the document as a “template,” create the appropriate input to the FCC.

Informative: This document is in support of 802.15 SG 3c and addresses the potential impact of the WCAI FCC petition for changes in Part 15.255 which deals with the 60 GHz ISM band.

Approve: Do Not Approve: Abstain: Motion:

This will be sent to EC email ballot.

9.03 ME Industry Canada Spectrum Framework Consultation - Lynch 5 03:15 PM

IEEE P802.18
Radio Regulatory - TAG

Industry Canada Consultation DGTP-001-05 Renewal Spectrum Policy Framework				
Date: 2005-07-21				
Author(s):				
Name	Company	Address	Phone	Email
Michael Lynch	Nortel	Richardson, TX	972-684-7518	mjlynch@nortel.com

Abstract

These are the comments of IEEE 802 on the Industry Canada consultation on a renewed Spectrum Policy Framework for Canada and Continued Advancements in Spectrum Management.

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IEEE 802.18 comments to: Industry Canada “Consultation on a Renewed Spectrum Policy Framework for Canada and Continued Advancements in Spectrum Management”

Questions

(1) What steps can Canada take to further harmonize spectrum allocations, policies, standards and regulations to the greatest extent possible?

(1) Due to logistical conditions, harmonization within North America is beneficial, greatest economic benefits to Canadian users will occur with global harmonization. Canadian regulators should continue to promote technology neutrality internationally. Promote mutual recognition of certification processes.

(2) How can Canadian interests be further advanced in the international fora responsible for developing standards and regulations for new wireless technologies and services?

(2). IEEE applauds ICs participation throughout the ITU. While the world still looks at ITU-R as providing the global regulatory framework, additional standards development work is done in other organizations. For example, the ISO/IEEE 802 standards organization provides numerous rapid technological innovations that have benefited consumers worldwide. We encourage IC to promote these innovations through the ITU process. Additionally, IC should continue to encourage industry participation in standards development groups such as IEEE.

(3) What additional spectrum should the Department make available for licence-exempt devices and what regulatory and technical provisions should be adopted for their use? Does this include consideration of currently licensed spectrum, and if so, what provisions could be adopted to facilitate transition to licence-exempt operation or band sharing between licensed and licence-exempt operation? Would a device registration process provide sufficient safeguards to licensed operations?

(3) IC should consider allocating license-exempt status to the current “white spaces”. In terms of license registration process we believe that low power mass marketed consumer products should be exempt from licensing requirements. Higher power commercial operations might be required to register using a device registration process

(4) Would it be realistic to open some of the FCFS fixed microwave spectrum as licence-exempt operations where it may not align with the US market (e.g. some of the reserved 23 GHz band)? How could these installations be controlled so they do not interfere with US-licensed services along the border?

(4) IEEE does not have a comment.

(5) What means could be developed to ensure that licence-exempt consumer equipment in the field operates within established limits (e.g. e.i.r.p, antenna directivity, channel bandwidth, out-of-band emissions) and what flexibility should be permitted?

(5) In the short-term, we believe the current certification processes are sufficient. In the longer term however, Industry Canada will need to adopt more flexible testing requirements to keep pace with rapid technological innovations, such as cognitive technologies and software-defined radios. There are many methods that can be used to have the radios monitor their “health” and cease operation if certain parameters exceed predefined limits. Looking forward, it is assumed that future radio designs will be software based, and thus be capable of implementing various monitoring methods which can be used to verify correct radio operation. One methodology being advanced that is popular is the use of a policy engine. This technique allows manufacturers to have a single location where radio regulatory policies are stored and from this central location control the radio’s functionality. If various combinations of transmit power, frequency of operation and modulation type are not within predefined limits, the policy engine would not allow the radio to transmit.

(6) Should the Department consider existing or new licence-exempt bands with a view to facilitating longer communications ranges for licence-free devices or system applications unique to the Canadian environment, such as rural and remote broadband fixed wireless access?

(6) IEEE does not have a comment.

(7) For which services and in which situations should greater flexibility of spectrum use be afforded?

(8) Under what situations and criteria would it be appropriate to consider extending this greater flexibility to existing licences?

(7) IEEE does not have a comment.

(8) IEEE does not have a comment.

(9) Should the Department extend transferability and divisibility privileges to other licensees? If so, which should be considered the highest priority and what timing would be appropriate?

(10) Are the current privileges associated with both spectrum and site licences sufficiently defined (this may include technical and operation parameters) to facilitate access to spectrum, the ease of trading the spectrum and the flexibility to offer a range of advanced wireless services?

(9) IEEE does not have a comment.

(10) IEEE does not have a comment.

(11) In which areas do you see the Department further improving the FCFS process?

(12) Are there other principles such as non-exclusivity, which can be applied to the FCFS process for authorization of spectrum on an area basis in situations where it would be normally anticipated that a competitive process would be required?

(11) IEEE does not have a comment.

(12) IEEE does not have a comment.

(13) Is there a need to review and improve the current practice of placing roll-out requirements on licensees?

(14) Should the Department expand the use of mechanisms to make available unused spectrum, like it did with the new party cellular policy given in RP-019, which enables an entity to obtain a licence for otherwise unserved or underserved areas?

(15) Given the increased usage privileges offered to licensees, should the Department continue to include deployment requirements as a condition of licence or, alternatively, rely on market forces to ensure that the spectrum moves to the highest valued use and user?

(13) IEEE does not have a comment.

(14) IEEE does not have a comment.

(15) IEEE does not have a comment.

(16) Which technologies have the most promise of facilitating the use and management of the radiofrequency spectrum?

(16) All of the technologies identified may have great potential. Embedded computing capabilities within radio systems have the potential for improving spectrum sharing. Spectrum management policies need to be adopted that facilitate efficient spectrum utilization without impacting the incumbent users. Cognitive technologies can provide those mechanisms to dynamically implement predetermined policies offering the potential for improved performance.

(17) Are there other technologies or technical issues that the Department should be investigating?

(17) The fundamental grounds for spectrum regulations may need to be redefined to consider new alternatives. Technical issues include how to take advantage of these new cognitive capabilities. For example, geographic based licensing may not be as relevant in a dynamic radio environment. Thus we recommend that IC develop and implement policies and regulations that take advantage of these new technological capabilities expeditiously. Regulations that provide reasonable protection of incumbent users by use of cognitive techniques need to be enacted.

(18) Which technologies seem the most appropriate in meeting the challenge of accommodating additional mobile and wireless access users in the VHF/UHF bands?

(18) Cognitive Radio offers the communications agility to most efficiently share the spectrum, and adapting to the available RF environment in the current land mobile bands. Some modulation

technologies are more efficient than others permitting shorter channel occupancy. Adaptive antenna technology may also enhance spectrum reuse.

(19) Should the definition of “rural” (and “remote”) to describe areas with unserved or underserved communications, be based on population density as measured by Statistics Canada? What would be a practical approach for implementation?

(19) While population density, as measured by Statistics Canada, does adequately define rural and remote locations, in regards to broadband services, it is unclear as to whether or not the greatest numbers of “underserved” Canadians live in rural or remote locations. IC should also diligently monitor suburban environments that are beyond the reach of traditional broadband service areas (e.g. outside the loop reach of dsl service). Anecdotal evidence suggests that greatest number of underserved households may lie in these areas.

Some rural and remote areas may be well served because of demand for high speed communications that support a competitive marketplace. In these cases, subsidies and relaxed policy rules on spectrum usage would be unnecessary.

More important to increasing national connectivity is additional granularity in the definitions and policies that describe un-served or underserved areas. A practical approach to implementation that IC may want to consider is to develop a classification that does not define unserved or underserved based solely on geographic considerations. Among the factors that IC may want to consider in developing a new definition are the following:

- throughput (e.g. 1.5 Mbps or greater),
- number of homes/ businesses passed by broadband (rather than postal codes or less granular geographies)
- competitive environment (more than 1 service provider)

We believe that policies based upon a more stringent classification would be beneficial.

(20) What policy and regulatory treatment would create conditions that best promote the extension of modern communication services to rural (and remote) areas?

(a) For example, should spectrum policies vary by geographic area according to the relative level of spectrum congestion or the demand for spectrum?

(20a) Yes to both proposed methods.

(b) In what manner should the technical and/or operational parameters for spectrum management policies and standards for wireless installations be relaxed in rural (and remote) areas?

(20b) In remote areas there are situations with very limited incumbent services which may allow relaxed standards or higher powers in those areas for fixed devices.

(21) Should the Department require that the licensing process for public safety systems consider the needs of the broader public safety community over larger geographical areas?

(21) IEEE does not have a comment.

(22) Should the Department adopt standards which include the aspect of interoperability of public safety mobile systems?

(22) Interoperability is very important to us. An installed interoperable set of communication devices can be planned to become part of the the public mobility system in time of crisis. This is a principle recognized in Canadian laws on radio stations.

(a) Should these standards be open standards to ensure that equipment from various vendors can operate on the same system?

(22a) Yes, the IEEE favors open standards and welcomes any participation by vendors, users and any other party, including designers of public safety systems. Devices complying to open standards could be used to extend the reach of the public safety systems as a pre-deployed element of these systems. For example, after a major disaster, allow authorities to disseminate directives and allow people to interact on such a system to communicate and find relatives, assistance and report situations to authorities.

(b) Should the Department, through its regulations or licensing process, ensure that interoperability is included as an aspect of the design of public safety systems?

(22b) Yes. Without planned interoperability, the deployment of devices has very limited value as an extension of the public safety system. With interoperability and connectivity, an open standards based set of devices can prove to be an efficient extension of the public safety system. In addition, interoperability can provide “emergency broadcasting” style connectivity to the public. Regulations and licensing are valuable means to ensure that goals are met.

(23) Should the Department identify common spectrum in the VHF and UHF bands (i.e. common to both Canada and the United States) to be used and shared in border areas for interoperability purposes, recognizing that currently spectrum in the VHF band is not aligned and that spectrum in both the VHF and the UHF bands is highly congested in densely populated areas?

(23) IEEE does not have comment.

802.18 Motion to SEC

Agenda: 9.03

Date: 07/22/2005

Time: 3:12 P.M.

Motion by: 802.18 – Lynch

Seconded by: Stevenson

Moved: To approve document

18-05-0014-00-0000_Industry_Canada_Spect_Frame_Consult(d1_21Jul05).doc as an 802 document, authorizing the Chair of 802.18 to do necessary editorial and formatting changes and, using the document as a “template,” create the appropriate input to Industry Canada.

Informative: Industry Canada issued a consultation regarding future spectrum management and policy matters. The RR-TAG developed this response with the goal of promoting spectrum policy/procedures that will be favorable to IEEE 802 technologies.

Approve: Do Not Approve: Abstain: Motion:

This will be sent to EC email ballot.

9.04 ME Contribution to ITU-R Working Party 8A - Lynch 5 03:17 PM

This will be sent to EC email ballot.

9.05 ME Contribution to ITU-R JTG 6-8-9 - Lynch 5 03:18 PM

This will be sent to EC email ballot.

9.06 ME Delegation to ISO/IEC "Special Group Meeting" in Beijing - Marks 10 03:18 PM

Paul thanked Roger and Jesse Walker, as well as all the other members that have participated in this effort for all the time they have spent on this item.

Moved: Roger Marks/Stuart Kerry (on approval of delegation)

Passes: 16/0/0

9.07 ME Contributions to ISO/IEC "Special Group Meeting" in Beijing - Marks 10 03:23 PM

Moved: Roger Marks/Stuart Kerry

Passes: 16/0/0

10.24	ME*	authorize RR-TAG chair to make ex parte and other presentations	-	Lynch	0	
10.00		LMSC Internal Business	-			
10.01	MI*	CBP SG extension	-	Kerry	0	
10.02	MI*	Residential Ethernet SG extension	-	Grow	0	
10.03	MI*	POE Plus SG extension	-	Grow	0	
10.04	MI	802.16 Mobile Multi-hop Relay Study Group	-	Marks	2	03:35 PM

Ad-hoc Meeting Report

Mobile Multi-hop Relay Networking in IEEE 802.16

Chair:	Mitsuo Nohara
Time:	08:00 – 12:00
Date:	Tuesday, July 19, 2005
Room:	Pacific A/Grand B

21 July, 2005

IEEE 802.16 WG Closing Plenary Meeting

Meeting Summary

Objectives, This time

- **To exchange the views on Mobile Multi-hop Relay Networking**
- **To have open comments and technical discussions**
- **To form new Study Group**
- **To plan future activity and schedule**

Agenda

- 1. Presentation on
Mobile Multi-hop Relay Networking in
IEEE802.16**
- 2. Open Comments and Technical Discussions
- Presentations**
- 3. New Study Group Forming**
- 4. Meeting Summary**
- 5. Future Activity and Schedule**

Mobile Multi-hop Relay Networking in IEEE 802.16

Keywords from Last Meeting:

- Mesh or Relay ?
- Maximum number of hops ?
- Licensed or LE band ?
- PHY, MAC ?
- Those covered in Ref.

Mobile Multi-hop Relay Networking in IEEE 802.16

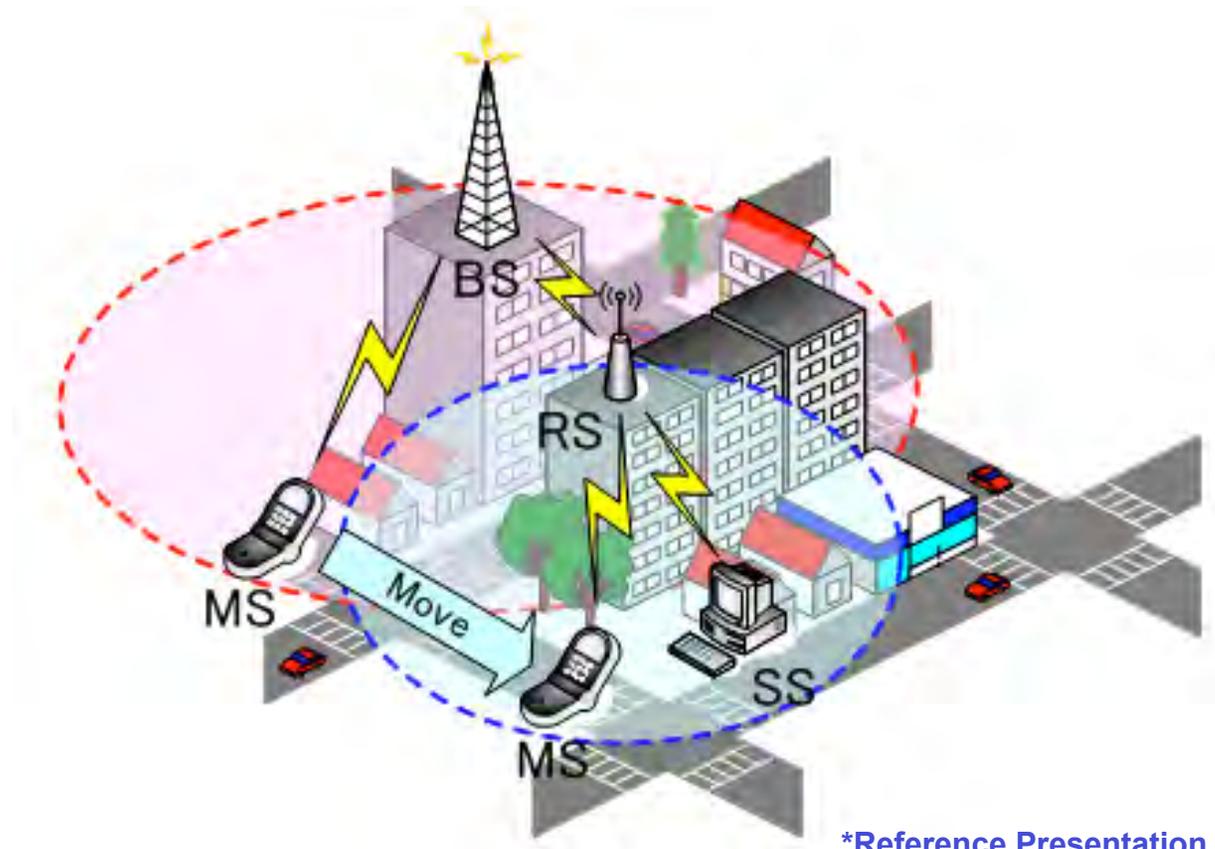
***Reference Presentation (C802.16-005/013)**

***Contribution Presentation:**

Masahito Asa, David T. Chen and Nat Natarajan, “Concepts for 802.16-based Mobile Multi-hop Relay Networking,” C802.16-05/015.

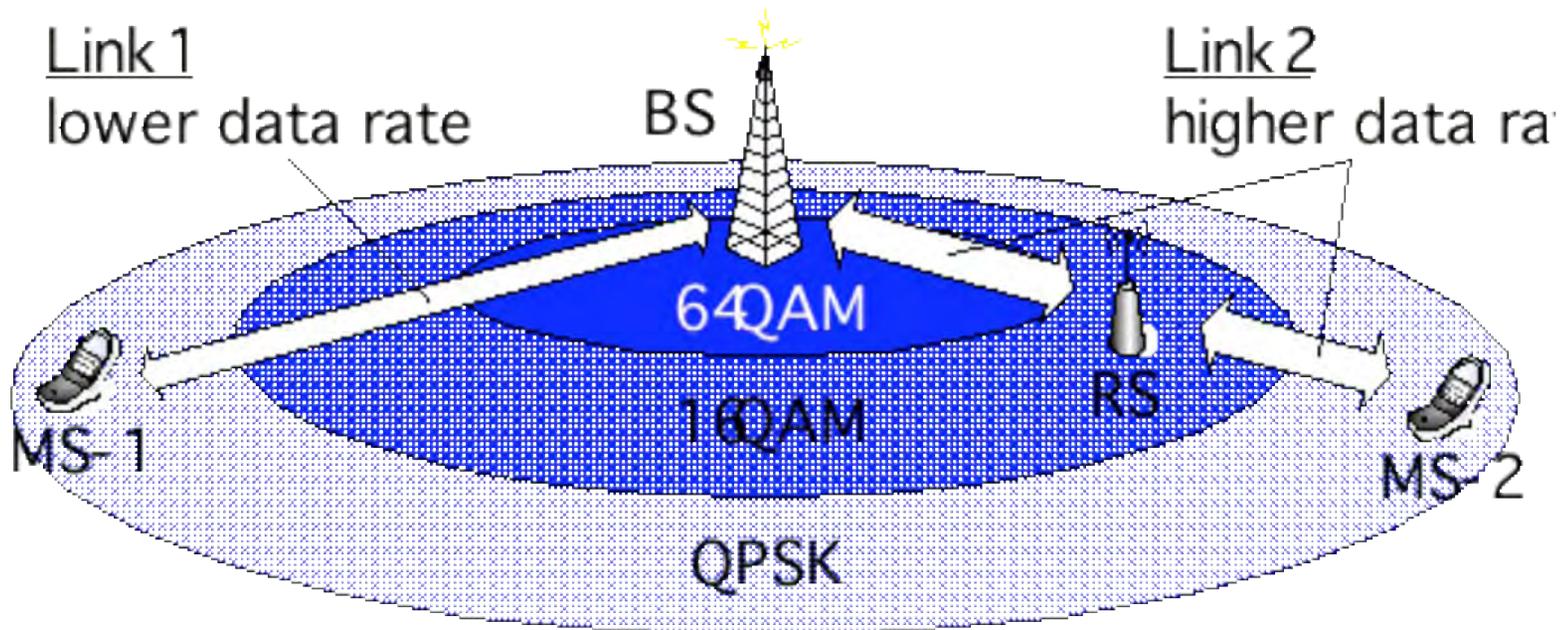
Scope of Proposed Relay Project

- **Develop Proposed Relay mode for fixed / mobile terminal**
 - **PHY:** Enhance normal frame structure
 - **MAC:** Add new protocols for the Relay networking



Purpose

- **Coverage extension**
 - Expansion for coverage area
- **Throughput enhancement**
 - Higher throughput over multi-hop paths



Main Features

- **Main features**
 - **Tree structure: one of the end of relayed data path should be at BS**
 - **Efficiently provide Relay connection to SS/MS (with small number of hops)**
 - **Support OFDMA as well as OFDM PHY mode**
 - **Backward compatible to PMP mode**
 - **PMP & Relay modes : share a same band, or use different but adjacent bands**
- **Considered RS types**
 - **Fixed Infra RS, Nomadic Infra/Client RS, Mobile Infra. RS**
- ❖ **dot16 “forum” website: <http://dot16.org/forum/>**

Notes to Reference

Reference: C802.16-05/013

Notes:

- **Relay mode may include multiple connectivity,**
- **Spectral Scenario will be studied at new SG,**
- **Interference coexistence and other relating things to be studied working with License-Exempt Task Group,**
- **Need activity watch on 802.1 bridge,**
- **Issues of Interest:**
 - **Hand over,**
 - **Technical Performance, and**
 - **Backward compatibility.**

Tentative Schedule

- Starting new Study Group / Task Group

Year	Month	802.16 session	Actions
2005	July	#38 Plenary	Propose to form SG – Approved
	Sept.	#39 Interim	SG: the 1st meeting
	Nov.	#40 Plenary	SG: the 2nd meeting
2006	Jan.	#41 Interim	SG: the 3rd meeting – Complete a PAR
	Mar.	#42 Plenary	802 EC endorses PAR approval
	May	#43 Interim	TG: the 1st meeting
	July	#44 Plenary	TG: the 2nd meeting
	Sept.	#45 Interim	TG: the 3rd meeting
	Nov.	#46 Plenary	TG: the 4th meeting

To Do List

- **At This Meeting**
 - Meeting Summary for Closing Plenary
 - Proposal to form New Study Group
 - C802.16-05/013 as Reference, including Schedule
 - Notes to the Reference
 - Supporter List to form New Study Group
 - New Study Group Organization
 - ◆ Mitsuo to Chair
 - ◆ Submission-form confirmed with WG Chair

Output from the Meeting

New Study Group Proposal

- **We, as listed on the supporter list attached on page 15, support the creation of a new study group on mobile multi-hop relay networking, which is:**
 - referring to C802.16-05/013 as its discussion base,
 - with the notes attached to the reference as shown on page 14,
 - aiming at preparing a new PAR and 5 criteria,
 - to start from next #39 meeting and
 - to be chaired by Mitsuo Nohara.

New Study Group Reference and Notes

as of 19 July, 2005

Reference: C802.16-05/013

Notes:

- **Relay mode may include multiple connectivity,**
- **Spectral Scenario will be studied at new SG,**
- **Interference coexistence and other relating things to be studied working with License-Exempt Task Group,**
- **Need activity watch on 802.1 bridge,**
- **Issues of Interest:**
 - **Hand over,**
 - **Technical Performance, and**
 - **Backward compatibility.**

New Study Group Supporter List

as of 21 July, 2005

Mitsuo Nohara

Kenji Saito

JaeWeon Cho

JungJe Son

PanYuh Joo

HyeonWoo Lee

Nat Natarajan

Masahito Asa

Jose P. Puthenkulam

Ofer Kelman

Guo Qiang

Geunhwi Lim

Naftali Chayat

KyungJoo Suh

Shyamal Ramachandran

Aik Chindapol

Maximilian Riegel

Aeran Youn

Avinash Joshi

Robin Zheng

Wu Xuyong

Chang-Lung Hsiao

Arther Wang

Matthew Sherman

Youngho Kim

JunHyung Kim

Mike Hart

Sunil Vadgama

Charlie Zhang

Gang Shen

Roland Muenzner

Eckard Bogenfeld

N.K. Shankaranarayanan

Yousuf Saifullah

Chenxi Zhu

Byoung-Jo "J" Kim

Kevin Baum

Roger Peterson

Meng Zhao

Paul Piggin

Hujun Yin

Mark Thomas

David Mc'Ginniss

Jorjeta Jetcheva

Yoko Kurosawa

Kazuki Tani

Wen Tong

Mo-han Fong

Bahareh Sadeghi*

Sumeet Sandhu*

*not listed under .16
attendance list

***This list contains the names of participants who showed their interests by signing their names on site/after the meeting and reference authors participating to the meeting. Their names have been confirmed referring to the participant-registration list. 15**

Motion

- **To create a new 802.16 WG study group on Mobile Multi-hop Relay.**

To Do List Cont.

- **After This Meeting towards Next #39 Meeting**
 - Feedback Comments Summary
 - Discussions @ dot16.org
 - Proposal Revision as the discussion Base
- **At the Next #39 Meeting**
 - New Study Group Kick-off
 - PAR and 5 Criteria Preparation
- **Reference Addition**
- **New SG Mailing List/Reflector Update**

Thank you and let's meet in Taipei!

Moved: Roger Marks/Mat Sherman

How does this differ from a bridge? The study group will have discussions on the issues of MAC bridging and two-port MAC relay, as well as other topics.

Passes: 14/0/2

10.05	MI*		-			
10.06	MI	Clause 17 - Procedure for PARs rule change motion	-	Jeffree	10	03:41 PM

MOTION

- EC approve the following rule change:
 17. PROCEDURE FOR PARS (Formerly “Procedure 2”)
Insert new numbered item 3 after existing item 2, renumbering the subsequent items accordingly, as follows:
“3. LMSC projects are balloted by individuals. No PAR sponsored solely by the LMSC may be submitted to NesCom specifying any other method of sponsor balloting.”
(Note: This was the version that was approved)

The background features a large, light gray watermark of the IEEE logo, which consists of a diamond shape containing a stylized white arrow pointing upwards and a circular arrow below it.

IEEE 802 Task Force Meeting Update

**IEEE 802 LAN/MAN Standards
Committee (LMSC) EC meeting**

20 July 2005



MOTION

- EC approve the following rule change:
 17. PROCEDURE FOR PARS (Formerly “Procedure 2”)

Insert new numbered item 3 after existing item 2, renumbering the subsequent items accordingly, as follows:

“3. LMSC projects are balloted by individuals. An LMSC PAR specifying a balloting method other than balloting by individuals may be submitted to NesCom only when approved by the EC in a separate vote taken in session at an 802 plenary to approve the exceptional balloting method.”

Straw Poll:

Prefer version 1 Mat Sherman: 14

Prefer version 2 Geoff Thompson: 3

Moved: to approve the rule change in version 1 (the text originally approved):

Moved: Tony Jeffree/Carl Stevenson

Passes: 14/0/1

10.07

10.08 MI Motion to include LMSC officer titles on name badges

-

- Sherman

5

03:49 PM

EC Motion

That EC Members and LMSC members confirmed by the EC have their LMSC titles included on their name badges for the November plenary sessions.

Moved: M. Sherman

For:

Against:

2nd:

Abstain:

Moved: Mat Sherman/Bob O'Hara

It was suggested that this could be handled directly with the meeting organizers.

Passes: 7/3/5

10.09	MI	Motion to approve P&P Revision titled "Working Group Membership and Meetings"	- Sherman	5	03:56 PM
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EC Motion

To approve the proposed P&P revision titled “WG Membership and Meetings” as described in the documents titled:

- 802.0-WG_Membership_&_Meetings_-_Proposed_Resolutions_050722.doc
- 802.0-WG_Term_Limits_-_Proposed_Resolutions_050722.doc

Moved: M. Sherman

For:

Against:

2nd:

Abstain:

Moved: Mat Sherman/Bob O'Hara

EC Motion

To divide the question of approving the P&P Revision titled “WG Membership and Meetings” into motions to approve the individual documents titled:

- 802.0-WG_Membership_&_Meetings_-_Proposed_Resolutions_050722.doc
- 802.0-WG_Term_Limits_-_Proposed_Resolutions_050722.doc

Moved: M. Sherman

2nd:

For:

Against:

Abstain:

Moved: to divide : Mat Sherman/Bob O'Hara
Passes: 16/0/0

EC Motion

To approve effective the end of the November 2005 LMSC Plenary session the proposed P&P revision titled “WG Membership and Meetings” as described in the document titled

➤ 802.0-WG_Membership_&_Meetings_-_Proposed_Resolutions_050722.doc

except replace the words ‘adjacent to’ with ‘within three months of’

Moved: M. Sherman

2nd:

For:

Against:

Abstain:

Moved: Mat Sherman/Bob O'Hara

Moved to postpone until the November plenary

Moved: Jerry Upton/Carl Stevenson

Passes: 11/2/3

10.10 MI Motion to approve P&P Revision titled "LMSC Organization" - Sherman 5 04:07 PM

The following item was presented out of order by Mat Sherman.

EC Motion

To approve the proposed P&P revision titled “WG Term Limits” as described in the document titled:

- 802.0-WG_Term_Limits_-_Proposed_Resolutions_050722.doc

Moved: M. Sherman

2nd:

For:

Against:

Abstain:

Moved: Mat Sherman/Bob O'Hara

Passes: 15/1/0

10.11 MI Motion to approve P&P Revision titled "LMSC Procedures and Process" - Sherman 5 04:09 PM

The following item was presented out of order by Mat Sherman.

EC Motion

To approve the proposed P&P revision titled “LMSC Organization” as described in the documents titled:

- 802.0-WG_LMSC_Organization_-_Proposed_Resolutions_050722.doc
- 802.0-LMSC_Org_when_appropriate_-_Proposed_Resolutions_050722.doc

Moved: M. Sherman

For:

Against:

2nd:

Abstain:

Moved: Mat Sherman/Bob O'Hara

EC Motion

To divide the question of approving the P&P Revision titled “LMSC Organization” into motions to approve the individual documents titled:

- 802.0-WG_LMSC_Organization_-_Proposed_Resolutions_050722.doc
- 802.0-LMSC_Org_when_appropriate_-_Proposed_Resolutions_050722.doc

Moved: M. Sherman

2nd:

For:

Against:

Abstain:

Moved: Mat Sherman/Bob O'Hara (to divide)

Passes: 13/0/2

EC Motion

To approve the proposed P&P revision titled “LMSC Organization” as described in the documents titled:

- 802.0-WG_LMSC_Organization_-_Proposed_Resolutions_050722.doc

Moved: M. Sherman

For:

Against:

2nd:

Abstain:

Moved: Mat Sherman/Bob O'Hara

Moved to postpone until following consideration on the other divided question.

Moved: Bob Grow/Stuart Kerry

Passes: 11/1/0

EC Motion

To approve the proposed P&P revision titled “When Appropriate” as described in the documents titled:

- 802.0-LMSC_Org_when_appropriate_-_Proposed_Resolutions_050722.doc

Moved: M. Sherman

For:

Against:

2nd:

Abstain:

Moved: Mat Sherman/Bob O'Hara
Without objection, this motion is withdrawn

Moved to reconsider the motion to postpone consideration of the first question.
Pat/Carl
Approved without objection

The motion being reconsidered: Moved to postpone until following consideration on the other divided question.
Fails: 3/4/8

The Chair rules that the motion to divide is invalid, as the parts cannot stand on their own.

Moved to postpone consideration of the motion until November.
Moved: Carl Stevenson/Buzz Rigsbee
Passes: 6/2/7

10.12 MI Motion to approve P&P Revision titled "Miscellaneous Issues" - Sherman 5 04:32 PM

The following item was presented out of order by Mat Sherman.

EC Motion

To approve the proposed P&P revision titled “LMSC Procedures and Process” as described in the documents titled:

- 802_0_LMSC_Procedures_and_Process_-_Proposed_Resolutions_050722.doc
- 802_0_LMSC_PandP_Recinded_-_Proposed_Resolutions_050722.doc

Moved: M. Sherman

For:

2nd:

Against:

Abstain:

Moved: Mat Sherman/Bob O'Hara

EC Motion

To divide the question of approving the P&P Revision titled “LMSC Procedures and Process” into motions to approve the individual documents titled:

- 802 0_LMSC_Procedures_and_Process_-_Proposed_Resolutions_050722.doc
- 802 0_LMSC_PandP_Rescinded_-_Proposed_Resolutions_050722.doc

Moved: M. Sherman

2nd:

For:

Against:

Abstain:

Moved: Mat Sherman/Bob O'Hara

Passes: unanimously

EC Motion

To approve the proposed P&P revision titled “LMSC Procedures and Process” as described in the document titled:

➤ 802_0_LMSC_Procedures_and_Process_-_Proposed_Resolutions_050722.doc

Except replace the term ‘LMSC letter ballot’ with ‘EC electronic ballot’ throughout

Moved: M. Sherman

For:

2nd:

Against:

Abstain:

Moved: Mat Sherman/Bob O'Hara
Passes: 16/0/0

EC Motion

To approve the proposed P&P revision titled “Rescinded’ Text” as described in the document titled:

802 0_LMSC_PandP_Rescinded_-
_Proposed_Resolutions_050722.doc

Moved: M. Sherman

2nd:

For:

Against:

Abstain:

Moved: Mat Sherman/Bob O'Hara
Fails: 16/0/0

EC Motion

To approve the proposed P&P revision titled “Miscellaneous Issues” as described in the document titled:

802.0-LMSC_Miscellaneous Issue_-
_Proposed_Resolutions_050722.doc

Amended to remove clause 13

Moved: M. Sherman

2nd:

For:

Against:

Abstain:

Moved: Mat Sherman/Bob/O'Hara

Moved to amend the changed text by deleting clause 13.

Moved: Jerry Upton/Pat Thaler

Passes: 13/1/1

On the main motion:

Passes: 12/1/2

10.13 MI Motion for discretion in combing P&P Revision Ballots

- Sherman

5

04:50 PM

EC Motion

To allow the LMSC 1st Vice Chair discretion in combining P&P revisions approved for balloting at this meeting.

Moved: M. Sherman

2nd:

For:

Against:

Abstain:

What does this motion mean?

- LMSC 1st VC will present and have separately approved for EC ballot several P&P Revisions
- For administrative convenience, the LMSC 1st VC may combine some or all these ballots for purposes of simplifying the balloting process

Moved: Mat Sherman/Buzz Rigsbee

Fails: 1/6/7

10.14 MI Motion to ballot P&P Revision titled "WG Structure" - Sherman 3 04:59 PM

Straw Poll

Defer further rules changes to a future time

12/0/2

Withdrawn without objection

10.15 MI Motion to ballot P&P Revision titled "Study Group Processes" - Sherman 3

Withdrawn without objection

10.16 MI Motion to ballot P&P Revision titled "Establishing a Directed Position" - Sherman 3

Withdrawn without objection

10.17 MI Motion to ballot P&P Revision titled "WG Ballot Recirculations" - Sherman 3

Withdrawn without objection

10.18 MI Motion to ballot P&P Revision titled "Restrictive Notices" - Sherman 3

Withdrawn without objection

10.19 MI Motion to ballot P&P Revision titled "WG Membership" - Sherman 5

Withdrawn without objection

10.20 MI Formation of Wireless Architecture EC SG - Stevenson 5 05:06 PM

Moved: Carl Stevenson/Jerry Upton

A point was made that there is already a working group responsible for architecture in 802.

Fails: 1/9/3

Moved: the chair of the 802 architecture committee be allowed to authorize subcommittee meetings when appropriate.

Moved: Bob Grow/Tony Jeffree

Passes: 14/0/2

10.21 MI Formation of 802.22 SG on "Means to enhance the ability of 802.22 systems to detect and avoid Part 74 licensed devices - Stevenson 5 05:16 PM

802.22 EC Motions – July 2005 Plenary

- **Move that the EC approve the formation of a Study Group within 802.22 to explore means to improve 802.22 devices' ability to detect and protect Part 74 licensed devices**
 - Moved – Stevenson
 - Seconded – Upton
 - Approve Disapprove Abstain

Moved: Carl Stevenson/Jerry Upton
Passes: 11/0/2

10.22 MI Formation of 802.11 SG to receive input from SC6

- Kerry

1

04:59 PM

IEEE 802 LMSC RESOLUTION

Motion By: KERRY

Seconded By:

- **Move To form an IEEE 802.11 Study Group to *receive WLAN requirements from JTC1/SC6 for co-developing an amendment to IEEE Std 802.11, in accordance with ISO/IEC TR 8802-1:2001, with the intent to create a PAR and five criteria to form a new Task Group.***
- **Mover:** Jesse Walker **2nd:** Clint Chaplin
- **WG Results: Approved Pass (72:0:0)**

Approve:

Do Not Approve:

Abstain:

802.22 EC Motions – July 2005 Plenary

- **Move that the EC establish an EC Study Group on wireless architectural issues**
 - Moved – Stevenson
 - Seconded – Upton
 - Approve Disapprove Abstain

Moved: Stuart Kerry/Roger Marks
Passes: 12/0/0

10.23 ME Liaison Statement to JTC1/SC6/WG1

- Marks 10 05:22 PM

To: Prof. Ho-in Jeon
Convenor, JTC1/SC6/WG1

From: IEEE 802 LAN/MAN Standards Committee

Subject: Statement from IEEE 802

Date: 25 July 2005

The IEEE 802 LAN/MAN Standards Committee has noted that the JTC1/SC6 "Business Plan" of October 2004 specifies a strategic focus to optimize "coordination between IEEE 802 LMSC and SC6/WG1." IEEE 802 would like to offer its assistance in this goal. To this end:

* IEEE 802 would like to clearly state its offer to participate actively with SC6/WG1, per the JTC1 program for the development of LAN standards collaboratively with IEEE 802 as specified in ISO/IEC TR 8802-1:2001. This offer applies to the IEEE 802.3 and 802.11 standards and amendments that have been previously adopted as ISO/IEC standards. Upon your request, other IEEE 802 standards will also be considered for inclusion in this arrangement.

* IEEE 802 calls the attention of SC6/WG1 to the attached list of current projects and active standards that may be of interest to SC6/WG1.

* IEEE 802 invites SC6 National Bodies to review and comment on drafts under development. Comments will be addressed as a part of the IEEE 802 Working Group ballot resolution process for Observer comments.

* IEEE 802 informs SC6/WG1 of the creation of a new Study Group, within the 802.11 Working Group, to receive WLAN requirements from JTC1/SC6 for co-developing an amendment, in accordance with ISO/IEC Std 8802-1:2001, to IEEE Std 802.11 (ISO/IEC 8802-11). This Study Group is scheduled to meet during 14-18 November at the IEEE 802 Plenary Session in Vancouver, Canada. Please provide any contributions to us by 1 November 2005. Since IEEE 802 Study Groups have no membership roster, any registered individual in attendance is entitled to vote in the meeting.

Get file from Roger

Moved: Roger Marks/Stuart Kerry
Passes: 15/0/0

11.00		<table border="1"><tr><td>Information Items</td></tr></table>	Information Items	-			
Information Items							
11.01	II	Open office hours feedback	-	Nikolich	5	05:59 PM	

Open Office Hour and dot11 Feedback to Chair

- Participation:
 - 6 members participated in Open Office with me, Mills, Kenney
 - 802 Chair received feedback at the dot11 WG midweek plenary
- Improve the quality of network services
 - 99.99% uptime, eliminate NAT, eliminate internal servers
- Make opening plenary meeting interactive
- Uniform ‘document tools’ across WGs
- Individual vs Entity ballot value proposition
- Can 802 report directly to SASB?
- Proposed rules make memberships in two groups difficult
- Is 802 too big? Should 802 reorganize?
- Some members feel they don’t have sufficient input to the EC
- Define anti-trust for those that may not understand
- Improve timing of break food and drink service
- Architecture group does not have authority.

11.02 II Network services report - Verilan 10

Combined with item 11.04.

11.03 II update on attendance/doc rfp for use by 11/15/18/19/20/21/22 - Heile 3 05:25 PM

11.04 MI Network RFQ Status Report and Action Items(2) - Rigsbee 15 05:38 PM

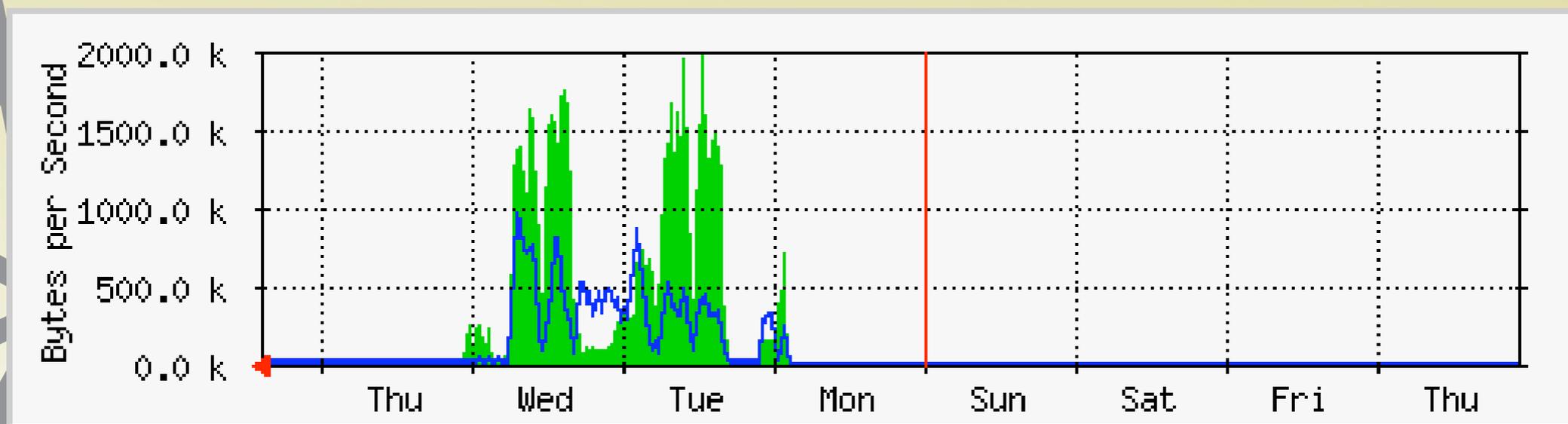


IEEE 802 July 2005 San Francisco

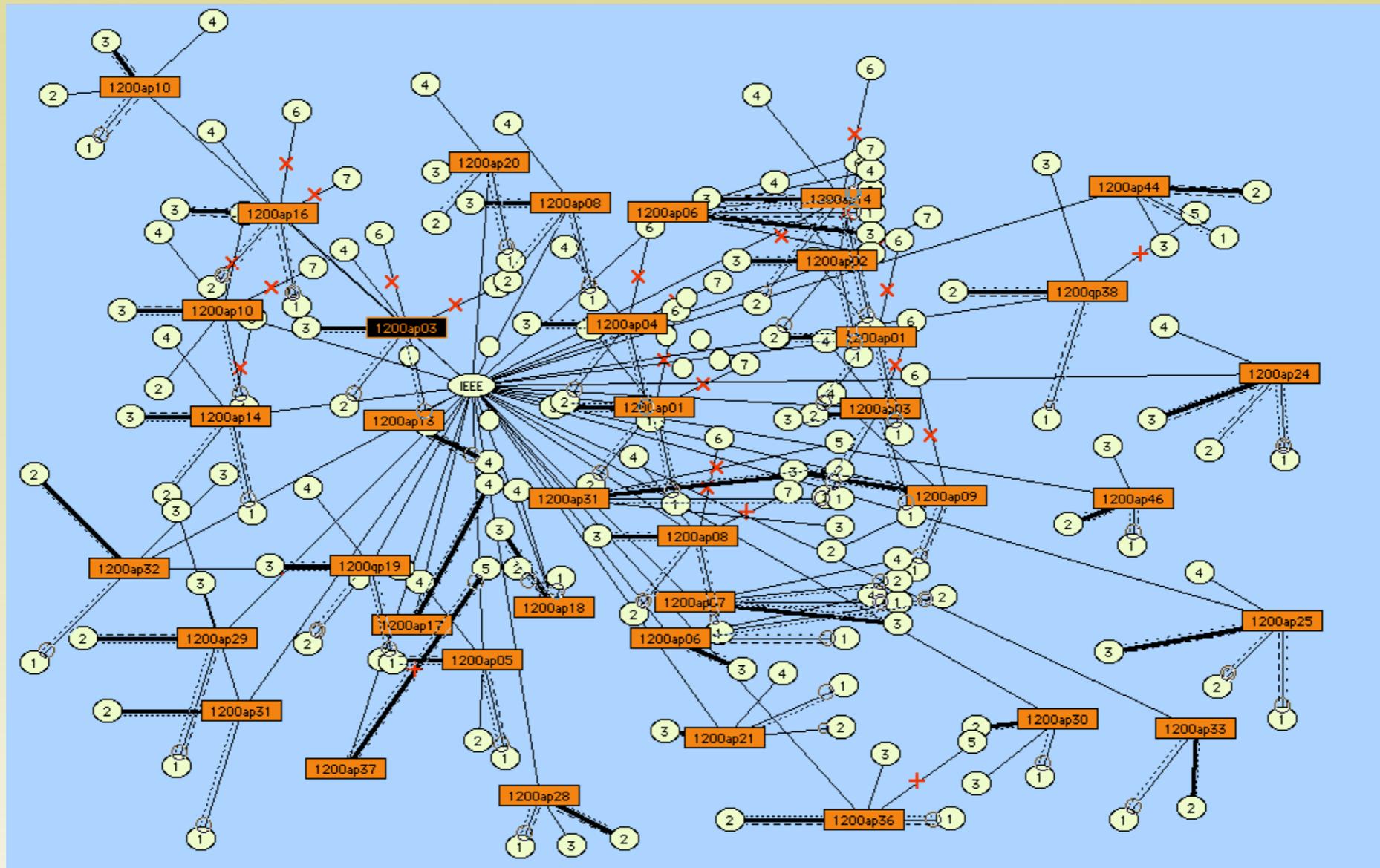
Presented by Steven Schroedl

Black IP Monday

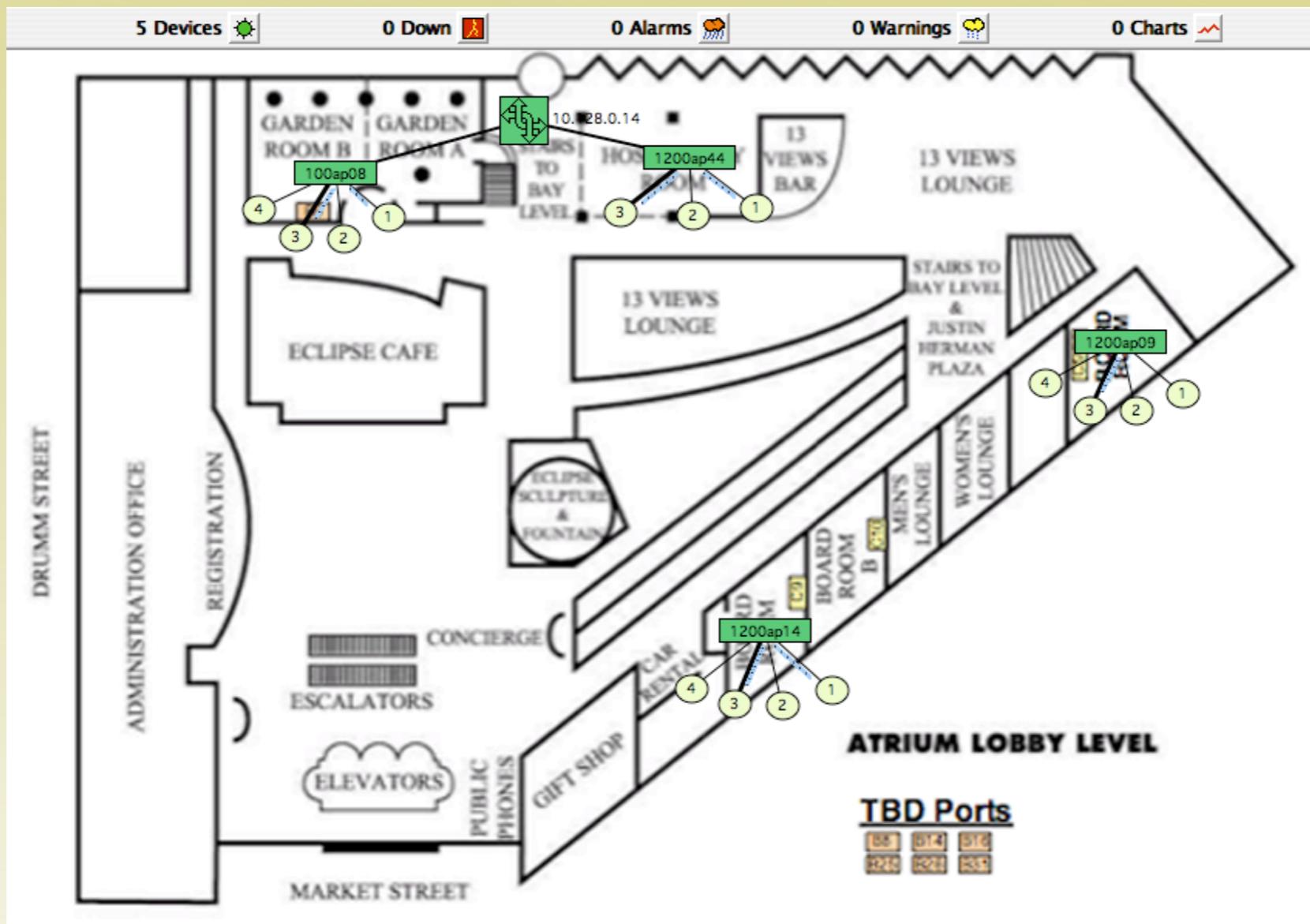
- Hotel HSIA
- Hardware reconfiguration



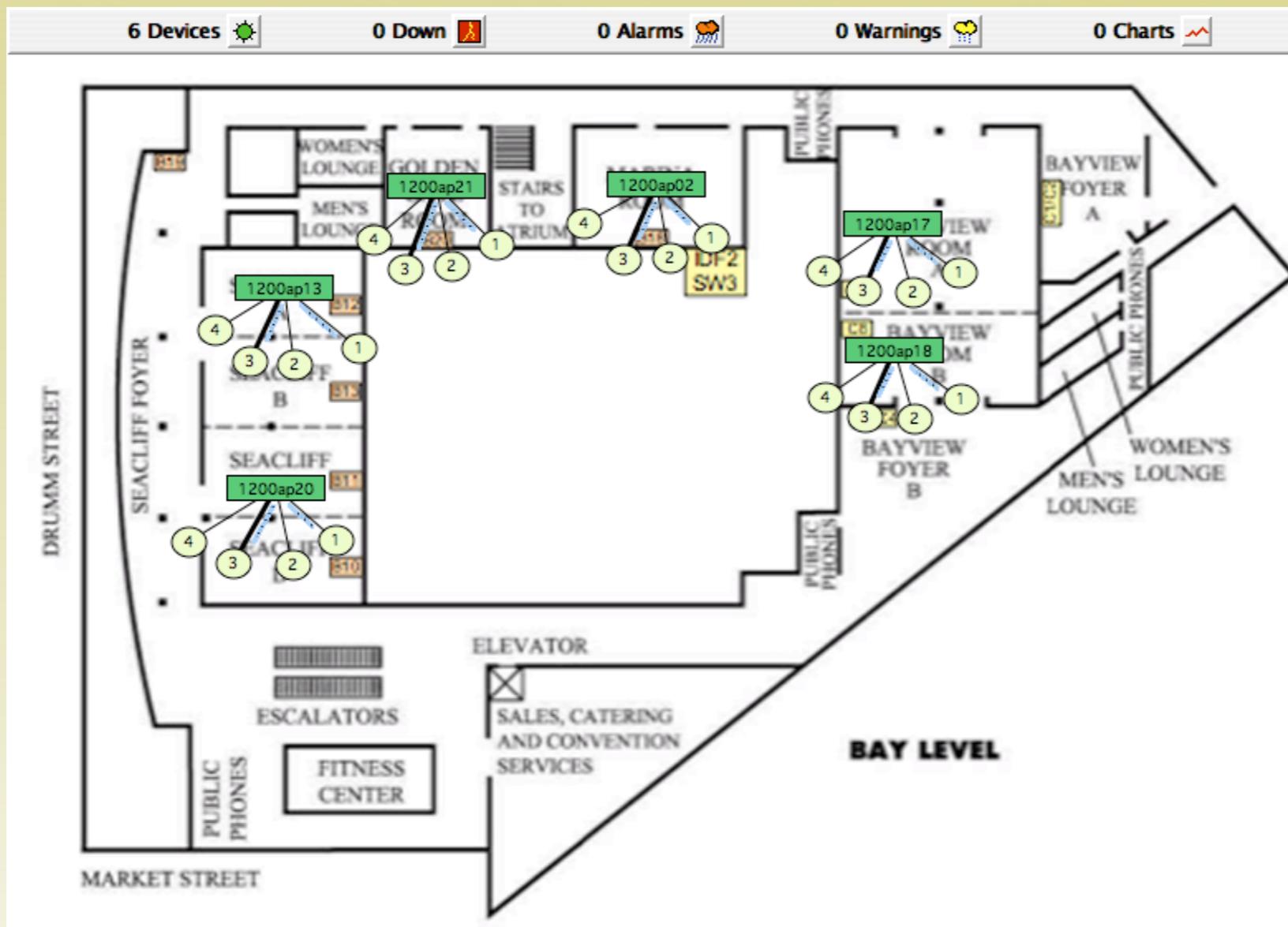
Start of General Network Monitoring



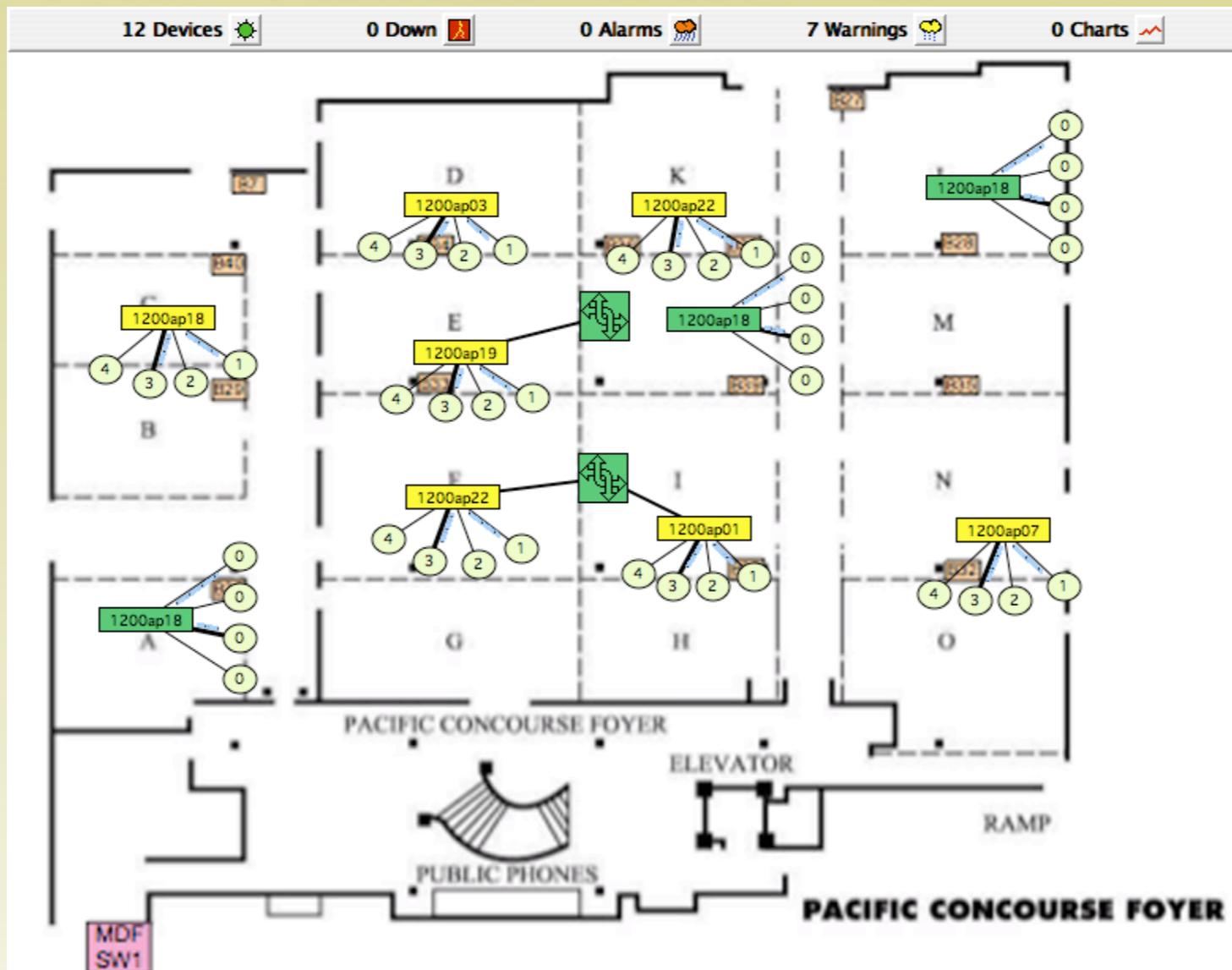
Network Layout Atrium



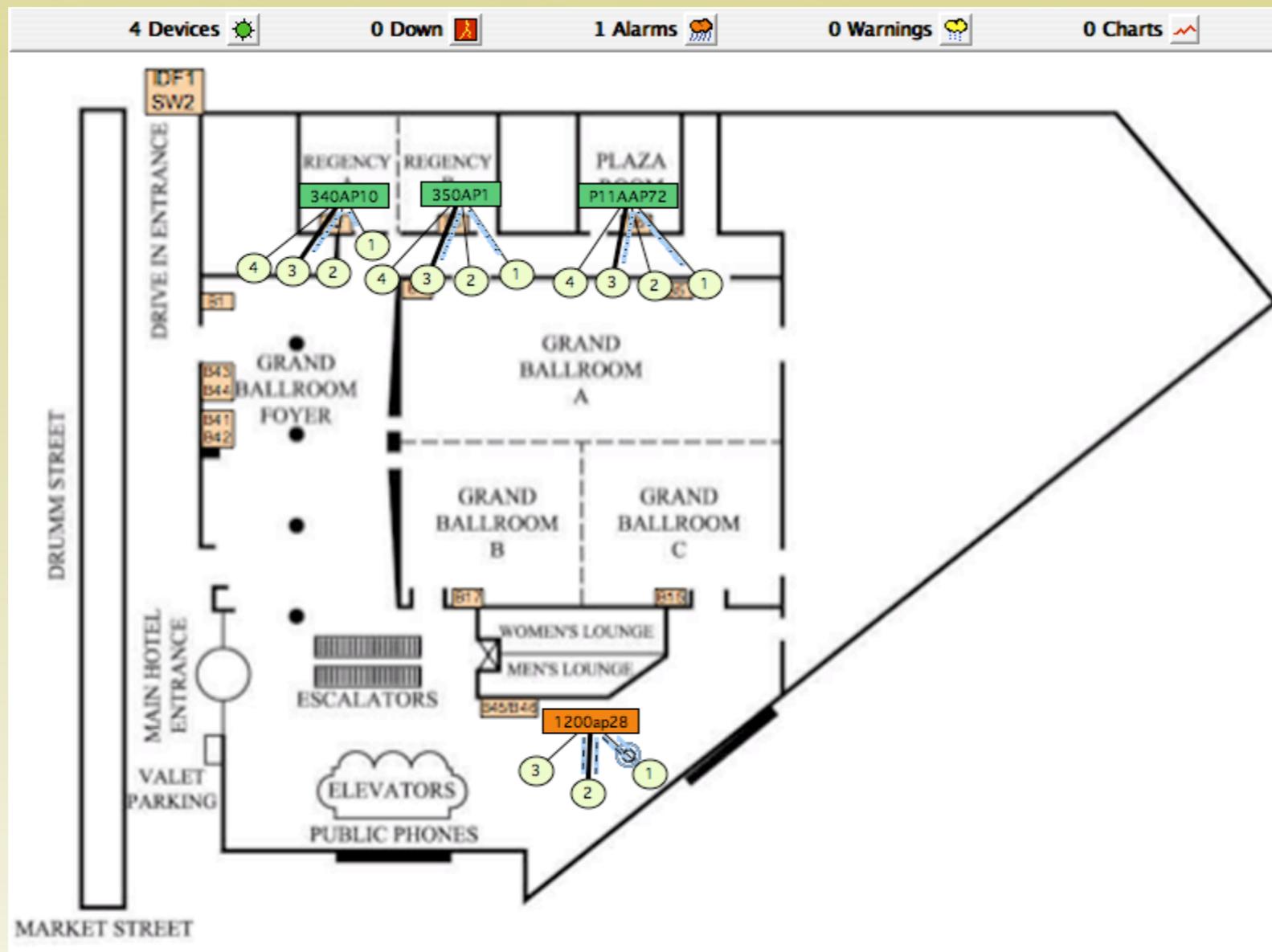
Network Layout Bay Level



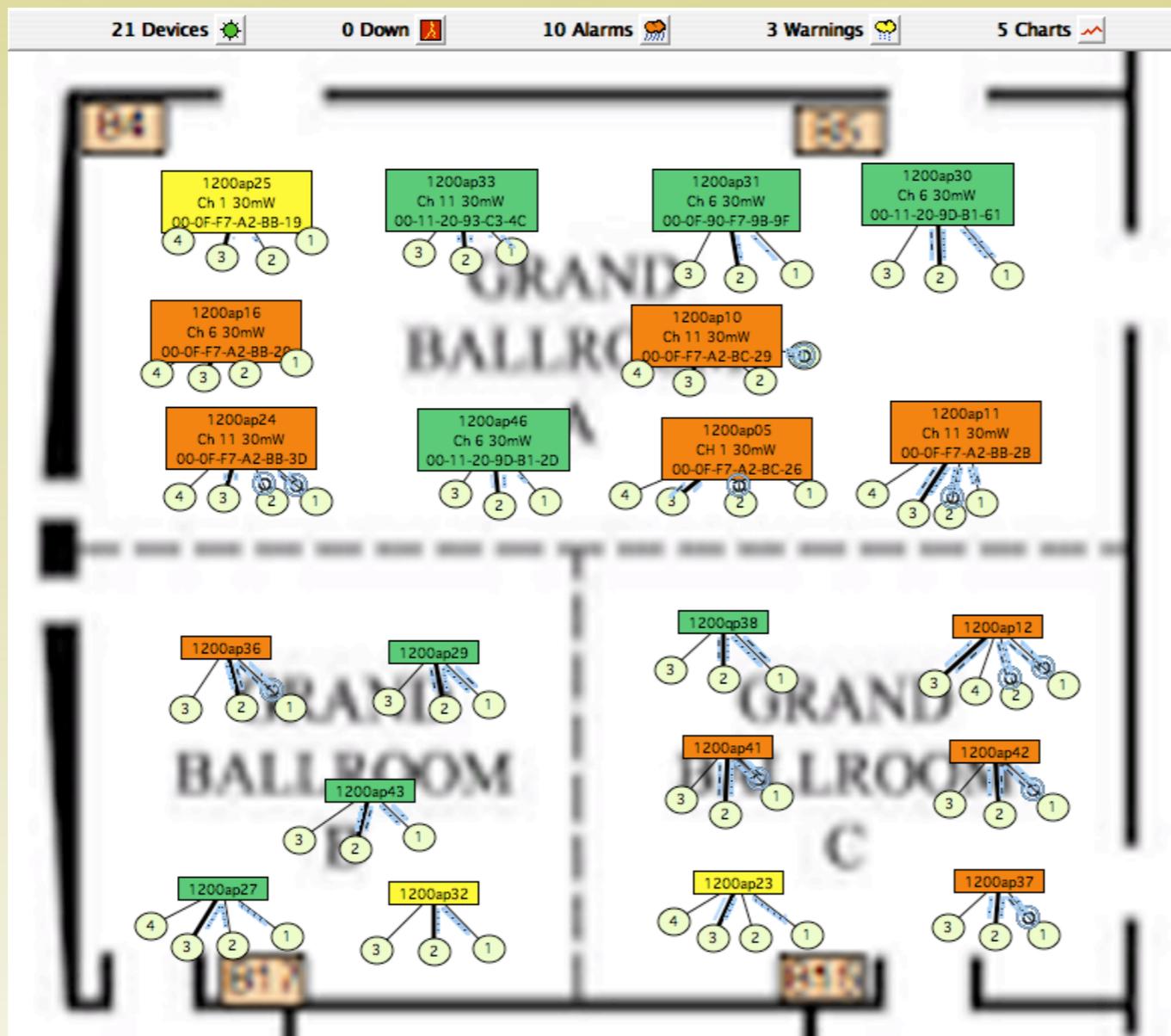
Network Layout Pacific Level



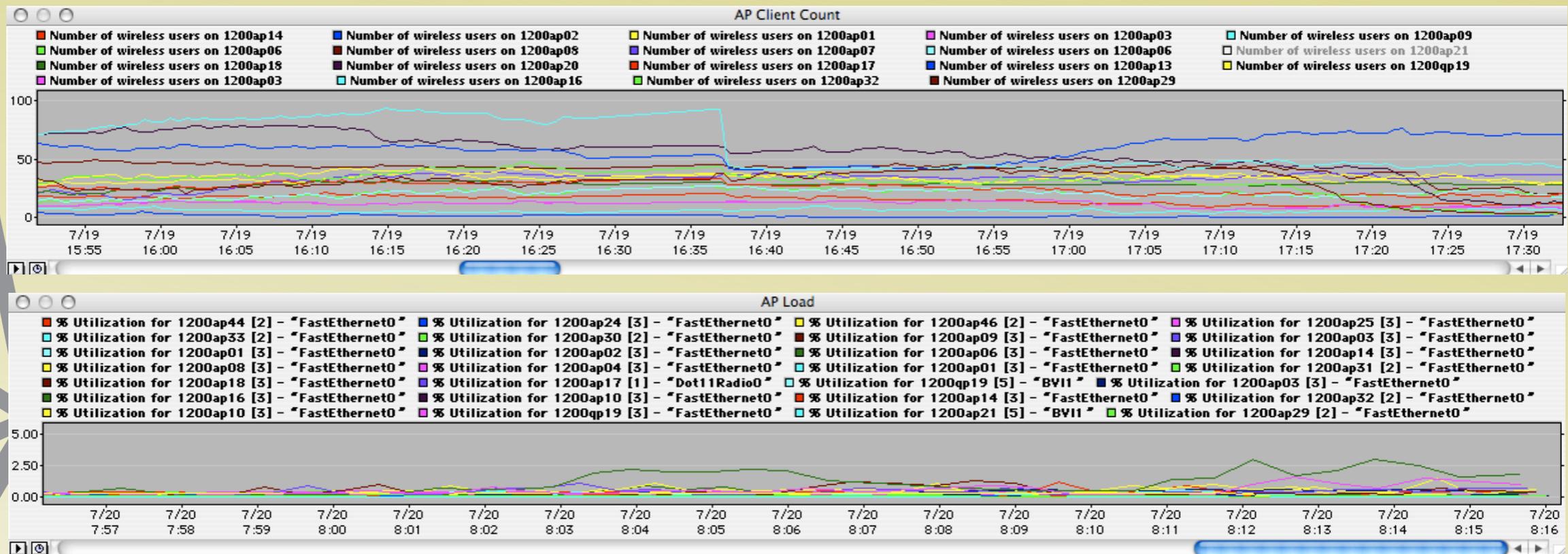
Network Layout Street Level

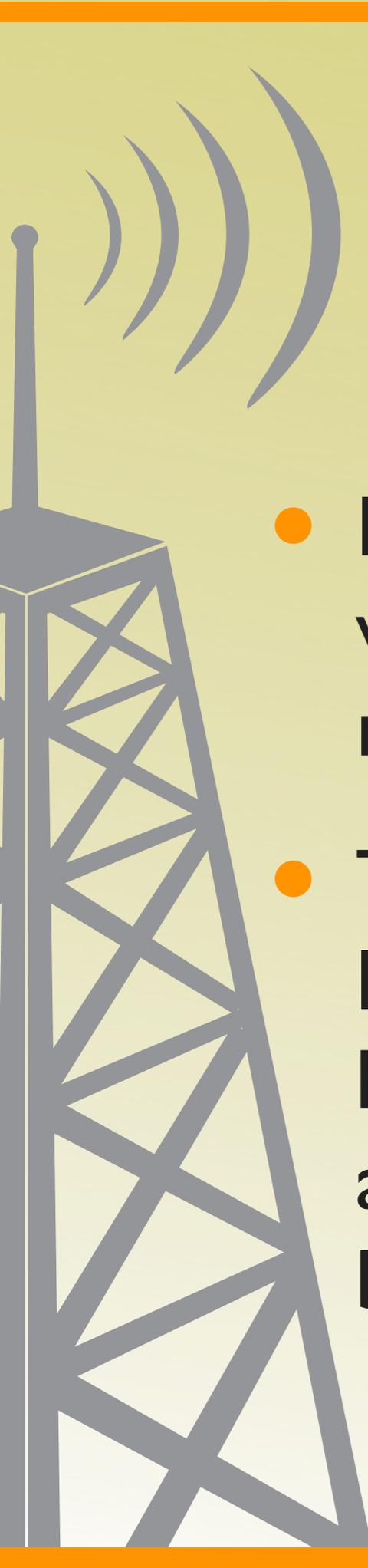


Network Layout Grand Ballroom



Network Usage





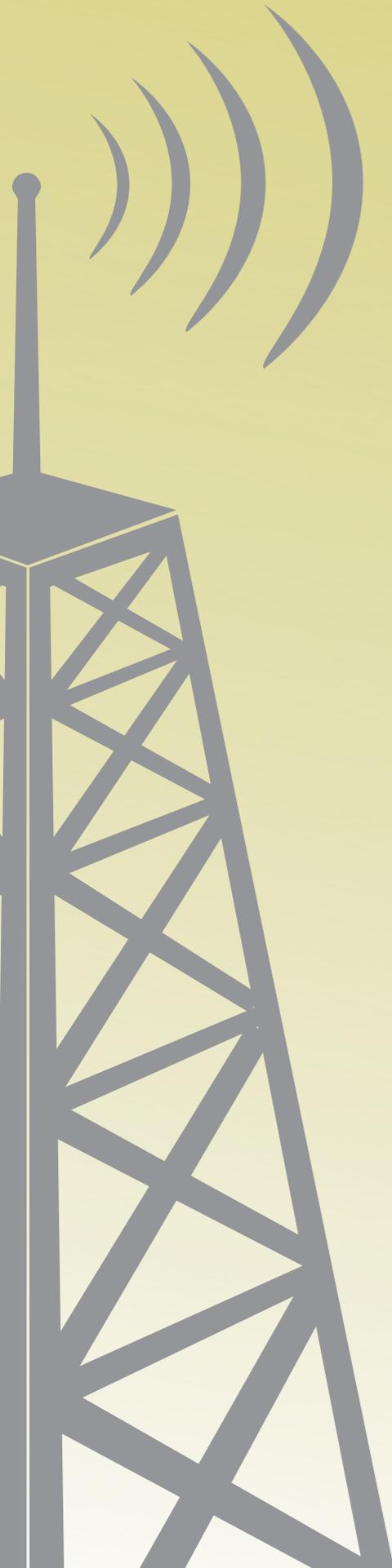
Lessons Learned

- No Different hardware without the known working hardware in place for rapid replacement.
- Trusting venue for services; We have learned not to trust hotels in Europe to have anything. Now, we have a new item added to our lessons learned about US based hotels.



Research

- Multiple PPTP, IPSec VPN passthrough.
- Hot standby, High Availability gateways and servers
- 802.11b AP upgrade to 802.11a/b/g
- Block infected computers, DNS hijack, SMTP auto redirect unless SSL allow, caching service and proxy service.
- WLAN stress and HSPA validation prior to meeting start.



Questions?

IEEE 802 Motion

Agenda Item: **11.04a**

Mover: **Rigsbee**
Secunder: **Hawkins**

Whereas our Network Services Vendor corrected all start-up problems experienced on Monday, and provided stable Network Access for the remainder of the week, and has received the unanimous endorsement of our Network Advisory Committee:

I move that we proceed to draft a 2-year contract with VeriLAN, Inc. of Portland, OR for Support of IEEE 802 Plenary Sessions (and Interim Sessions as requested by Interim Organizers). Such contract to be reviewed and approved by Networks Services Review Committee, the IEEE 802 EC, and by IEEE Contract Support person prior to final execution.

For: 10 Against: 0 Abstain: 5

Moved: Buzz Rigsbee/John Hawkins
Passes: 10/0/5

IEEE 802 Motion

Agenda Item: **11.04b**

Mover: **Rigsbee**
Secunder: **Hawkins**

Whereas our Network Manager, Tim Godfrey, has recommended that we proceed with acquisition of the 802.11a modules for our Cisco 1200 AP that are not currently so equipped:

I move that we proceed to acquire those additional modules (20), and further that we investigate a promotional deal to encourage more of our attendees to upgrade to the Tri-Mode (with 802.11a) interface cards, which would also allow us to regulate client transmit power levels in dense configurations. Terms of deal will be reviewed with Network Services Advisory Committee for final approval by the 802 EC prior to deployment.

For: _____ Against: _____ Abstain: _____

Moved: Buzz Rigsbee/John Hawkins

This will be moved to the reflector for discussion and ballot.

11.05 MI Non-North-American Venues Report and Action Item - Rigsbee 10 05:54 PM

Non-North American Venue Proposal

The Hilton London Metropole

225 Edgware Road
London, England, UK
(near Hyde Park, Soho and the Marble Arch)

January 14-19, 2007 802-Hosted Interim

- Room Rate: 145 GBP/night with full English breakfast (~\$264) plus VAT.
- Will provide complimentary meeting space for their 40+ meeting rooms.
- Will provide >20Mb/s Internet Access Full Duplex at 17,000 GBP / week.
- Will provide 100% coverage for power receptacles in meeting rooms for 8,800 GBP / week (~\$16K).
- Will accept 802 Cancellation Policy and most of our standard guidelines.
- F&B for the week includes Morning & Afternoon breaks, 2 course sit-down luncheon, and a Wed evening Social.
- Estimated Registration Fee with all costs included is \$600 for break-even.

Main concern is with method of financing the Meeting planning service.

Estimated rooms commission just for 900 rooms blocked is \$130K.

This amount should be sufficient to cover the “finders & contractors” fee plus the Meeting Services Fee. We MUST be allowed the option to choose our own provider or the deal will fail to be consummated. The “finders & contractors” fee will go to Mary Russell of Hamilton Group Meeting Planners.

I will draft a directed position from the EC to vote on at the Friday EC meeting.

IEEE 802 Motion

Agenda Item: 11.05

Mover: **Rigsbee**
Seconded: **Hawkins**

Whereas we have obtained an option for a Non-North American Venue for the January 2007 timeframe, and that it is possible that we can secure this deal on favorable terms:

I move that we proceed to finalize the contract arrangements assuming that all 802 requirements can be addressed by such a contract arrangement.

For: 13 Against: 0 Abstain: 1

Moved: Buzz Rigsbee/John Hawkins
Passes: 13/0/1

11.06 MI Future Plenary Session Venue Options - Rigsbee 10 05:53 PM

This is moved to the EC reflector for discussion and ballot.

11.07 II TGv and TGw coexistence statement in the 5C - Kerry 1

Get file from Al Petrick

Get file from Pat

Get file from Pat

11.10 MI Tracking motions between meetings

- Thaler 10 05:59PM

Tracking email motions

- Email motions are currently difficult to track
 - Searching archive is an awkward way to find the motions with final results.
 - Our minutes should provide a record of our actions
- Rules change: Add to 7.1.4.2
 - All motions processed by ballot between meeting shall be reported with their results in the opening minutes of the next plenary.

Motion

- Approve the following rules change for Distribution and Executive Committee Ballot:
 - Add to 7.1.4.2: All motions processed by ballot between meeting shall be reported with their results in the opening minutes of the next plenary.

Moved: Thaler; Second: Upton

Y: N: A:

Moved: Pat Thaler/Jerry Upton
Passes: 9/3/1

11.11 II 802.18 summary

- Lynch 5

802.18 RR-TAG Closing Report

- Report on July 05 Interim Meeting
- Work accomplished at this Meeting

Report on July 05 Plenary Meeting

- Met with 802.11 CBP SG and 802.16h
 - Reviewed/discussed FCC 3650 MHz R&O
- Held joint session with 802.22
 - Approved FCC ex parte presentation
- Met with 802.15 SG 3c
 - Helped develop a FCC input on 60 GHz
- Prepared revision of 802.18 P&P

Report on July 05 Plenary Meeting

- Reviewed Canadian spectrum consultation
 - Prepared comments to Industry Canada
- Reviewed FCC 2 GHz NPRM
 - Decided no comments were needed
- Completed revision of 802.18 P&P
 - Will review again in November

Jumbo Frames discussion

- Informal meeting with representative from IETF
- IETF wants guidance on problems with jumbo frames
 - They will propose an informational RFC on “hazards” of jumbo frames
 - 802.3 will review and comment
 - Request for an 802.3 advisor
- Other 802 groups providing Ethernet services may want to take note

SA Support for P&P Revisions

- LMSC 1st VC willing to accept support from SA
- Does not believe required at this time
- Many P&P Changes
 - Will handle with bulk balloting
 - More limited scope than last time
- Try and focus on model WG P&P
- Strawpoll on SA Support

The appeal panel will discuss the material presented at the hearing and draft a preliminary finding. This will be reviewed with an attorney provided by the IEEE SA, before publishing the final decision. The decision will be provided to the parties to the appeal within thirty days of the hearing.

11.15

11.16

11.17 II interactive opening plenary meeting format proposal

- Nikolich 5

One of the specific recommendations was to change the format of the opening plenary meeting, such that instead of each EC member using their 4 minutes to present their slides, they would indicate where the status slides are posted and use the remaining time to take questions from the floor.

Liaison text:

From: Tony Jeffree, chair IEEE 802.1

To: Gilles Joncour, Rapporteur, ITU-T SG13 Q5

Subj: Reply to Liaison Statement on EtherType codes for Ethernet OAM

802.1 discussed at some length the proposal expressed in your liaison letter for allocating 8 consecutive values for encoding the MA Level in the EtherType field that identifies a P802.1ag CFM Protocol Data Unit.

Quoting IEEE Std. 802-2001, Clause 10.4:

"The function of the Ethernet type value is to identify the protocol that is to be invoked to process the user data in the frame."

Based on this definition, the IEEE Registration Authority Committee (RAC) has established criteria for assigning the limited number of available EtherType values for use as protocol identifiers. Quoting from the Ethernets Tutorial available at <http://standards.ieee.org/regauth/ethertype/type-tut.html>

"The EtherType Field is a very limited space and therefore its assignment will be limited. [...] In particular, only one new EtherType Field is necessary to limit reception of a new protocol or protocol family to the intended class of devices. New protocols and protocol families should have provision for a sub-type field within the new specification to handle different aspects of the application (e.g., control vs. data) and future upgrades.

The following should be considered before requesting a new EtherType Field:

- * Use of an existing protocol with its currently allocated EtherType Field.
- * Use of further, as yet unexhausted, protocol identification capabilities (sub-types) within an existing protocol or protocol family.
- * Specification of additional protocol identification types within a new protocol to allow similar or related uses without the need for more than one EtherType Field assignment."

There is no IEEE standard specifying whether or how a bridge could filter frames based on EtherType, so the suggestion of using 8 EtherTypes for filtering is not supported by any IEEE standard. Certainly, there are a number of bridge products that are able to apply EtherType filters. However, the policy for EtherType allocation cited above has encouraged an increasing number of bridge products to have the ability to apply filters that extend some distance beyond the EtherType. Because there is no standard for where the sub-types should be placed relative to the EtherType, these filters are typically flexible, in order to accommodate the increasing number of protocols that utilize different formats for their subtype fields.

In the CFM PDU as defined in the current versions of both P802.1ag and Y.17ethoam, the octet immediately following the EtherType field contains:

- 1) A version number field; and
- 2) The MA Level field.

These fields were placed adjacent to the EtherType field specifically to maximize the likelihood that a bridge would be able to filter based on MA Level, using the filtering mechanism intended for filtering sub-types.

Finally, we observe that:

- a) The requested change would benefit only bridges that have a (non-standard) EtherType filter, but not a (non-standard) sub-type filter;
- b) It is likely that new bridges will incorporate hardware at the interface level that will perform proper filtering of CFM Messages; and
- c) Multicast frames carrying CFM PDUs can be filtered using the existing standards; so therefore
- d) Only unicast frames to unknown or inappropriate destinations would be filtered by this additional mechanism, and only until better hardware is deployed.

The cost of violating the well-established standards and guidelines for EtherType allocation does not, in our opinion, justify this limited addition to the functionality of CFM for a small class of existing devices, for a limited time. We therefore decline to make this request to the RAC.

MOTION

- 802.1 requests its Chair and liaisons to present the current working draft of P802.1ag to ITU-T Q5 SG13 and MEF.
- 802.1 Proposed: Finn Second: Mohan
 - For: 20 Against: 0 Abstain: 2

11.19

11.20 II BPL Sponsor Ballot

-

- Shellham
mer

1

Broadband over power-line Project

- The standards board recently approved a project for broadband over power-line
- At the March plenary meeting there were several concerns regarding the BPL PAR
 - The architecture committee had some architecture concerns
 - The 802.19 coexistence TAG had some concern regarding potential interference to wireless systems

Broadband over power-line Project

- The BPL PAR states that voting will be by entity and not individual
- It was suggested that 802 join the BPL sponsor ballot as an entity
- In checking with Steve Mills 802 cannot become an entity since it does not have an independent board of directors
- Hence 802 cannot join the BPL sponsor ballot

Comment from Geoff Thompson

- Geoff Thompson requested that his following comment be on record in the EC meeting minutes,
 - Geoff considers the denial of access to 802 to voting is denial of participation to a "materially interested party" and thus potentially grounds for an appeal of the IEEE process to ANSI.
 - The IEEE needs to get this fixed. We have a legitimate interest in this project.

11.21 II History of IEEE/ITU-R relationship

- Marks 10

Paul announced that all information items not reached in the agenda are to be sent to the recording secretary to be published with the minutes.

ADJOURN SEC MEETING

- **Nikolich**

06:00 PM

ME - Motion, External

MI - Motion, Internal

DT- Discussion Topic

II - Information Item

Respectfully submitted,

Bob O'Hara
Recording Secretary, 802 LMSC