

# AGENDA & MINUTES (Unconfirmed) - IEEE 802 LMSC EXECUTIVE COMMITTEE MEETING (updated 24 September 2007)

Friday July 20, 2007 1:00 PM – 6:00 PM

San Francisco, CA

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

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

- 10 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
- 15 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
- Rick Alfvín (acting) - Chair, IEEE 802.15 – Wireless PAN Working Group
- 20 Roger Marks - Chair, IEEE 802.16 – Broadband Wireless Access Working Group
- John Lemon - 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
- Arnie Greenspan - Chair, IEEE 802.20 – Mobile Broadband Wireless Access
- Vivek Gupta - Chair, IEEE 802.21 – Media Independent Handover
- 25 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 01:01 PM**

**r04 AGENDA - IEEE 802 LMSC EXECUTIVE COMMITTEE MEETING  
Friday, July 20, 2007 - 1:00PM -6:00PM**

<b>1.00</b>	<b>MEETING CALLED TO ORDER</b>	-	<b>Nikolich</b>	<b>1</b>	<b>01:00 PM</b>
<b>2.00</b>	<b>MI APPROVE OR MODIFY AGENDA</b>	-	<b>Nikolich</b>	<b>9</b>	<b>01:01 PM</b>
<b>3.00</b>		-			<b>01:10 PM</b>
<b>3.01</b>		-			<b>01:10 PM</b>
<b>3.02</b>		-			<b>01:10 PM</b>
<b>4.00</b>	<b>II Announcements from the Chair</b>	-	<b>Nikolich</b>	<b>5</b>	<b>01:10 PM</b>
<b>4.01</b>	<b>II</b>	-			<b>01:15 PM</b>
<b>Category (* = consent agenda)</b>					
<b>5.00</b>	<b>IEEE Standards Board Items</b>	-			<b>01:15 PM</b>
<b>5.01</b>	<b>ME</b>	-			<b>01:15 PM</b>
<b>5.02</b>	<b>ME 802.1ak-COR-1 PAR to NESCOM</b>	-	<b>Jeffree</b>	<b>5</b>	<b>01:15 PM</b>
<b>5.03</b>	<b>ME 802.11n PAR extension</b>	-	<b>Kerry</b>	<b>5</b>	<b>01:20 PM</b>
<b>5.04</b>	<b>ME 802.11s PAR modification</b>	-	<b>Kerry</b>	<b>5</b>	<b>01:25 PM</b>
<b>5.05</b>	<b>ME 802.11z PAR to NESCOM</b>	-	<b>Kerry</b>	<b>5</b>	<b>01:30 PM</b>
<b>5.06</b>	<b>ME 802.15.4c PAR to NESCOM</b>	-	<b>Heile</b>	<b>5</b>	<b>01:35 PM</b>

5.07	ME	802.3az PAR to NESCOM	-	Grow	5	01:40 PM
5.08	ME	802.3ba 40 & 100 Gb/s approval for presubmittal to NESCOM	-	Grow	5	01:45 PM
5.09	ME	802.16-2004/COR2 Par withdrawal	-	Marks	5	01:50 PM
5.10	ME	Conditional approval of 802.16g to REVCOM, with extension request	-	Marks	10	01:55 PM
5.11	ME	1802.3 submittal to REVCOM and withdrawal	-	Grow	5	02:05 PM
5.12	ME		-			02:10 PM
5.13	ME	802.11r approval for sponsor ballot	-	Kerry	10	02:10 PM
5.14	ME	802.11y conditional approval for sponsor ballot	-	Kerry	10	02:20 PM
5.15	ME	802.21 conditional approval for sponsor ballot	-	Gupta	10	02:30 PM
5.16	ME	802.3 revision conditional approval for sponsor ballot	-	Grow	5	02:40 PM
5.17	ME	802.1AX conditional approval for sponsor ballot	-	Grow	5	02:45 PM
6.00		<b>Executive Committee Study Groups, Working Groups, TAGs</b>	-			02:50 PM
6.01	MI*	802.11 Direct link setup SG extension (1st renewal)	-	Kerry		02:50 PM
6.02	MI*	802.11 QoS extensions SG extension (1st renewal)	-	Kerry		02:50 PM
6.03	MI*	802.11 Very high throughput SG extension (1st renewal)	-	Kerry		02:50 PM
6.04	MI*	802.11 Video transport streams SG extension (1st renewal)	-	Kerry		02:50 PM
6.05	MI	802.15.4c China regulations SG extension (3rd renewal)	-	Heile	5	02:50 PM
6.06	MI	802.15 Body area networking SG extension (3rd renewal)	-	Heile	5	02:55 PM
6.07	MI	802.3 Higher speed SG extension (3rd renewal)	-	Grow	5	03:00 PM
6.08	MI*	802.3 Energy efficient Ethernet (2nd renewal)	-	Grow		03:05 PM
6.09			-			03:05 PM
6.10			-			03:05 PM
6.11			-			03:05 PM
6.12			-			03:05 PM
6.13	MI	802.15.4 MAC Enhancement SG approval	-	Heile	5	03:05 PM
6.14	MI	802.21 Security SG approval	-	Gupta	5	03:10 PM
6.15	MI	802.21 Multi-radio power management SG approval	-	Gupta	5	03:15 PM
6.16			-			03:20 PM
7.00		<b>Break</b>	-		10	03:20 PM
8.00		<b>IEEE-SA Items</b>	-			03:30 PM
8.01	II	802 Task Force update	-	Nikolich	5	03:30 PM
8.02	MI	Get IEEE 802 program 2008 agreement	-	Hawkins	10	03:35 PM
8.03			-			03:45 PM
9.00		<b>LMSC Liaisons &amp; External Interface</b>	-			03:45 PM
9.01	II	Get IEEE 802 Program Update	-			03:45 PM
9.02	ME	What to do about ISO/IEC 8802-2	-	Thompson	5	03:45 PM
9.03	ME	Liaison recommendation on PDTR 8802-1	-	Thompson	5	03:50 PM
9.04	II	802.11 interaction with SC6	-	Kerry	2	03:55 PM
9.05	ME	Approval of China Liaison	-	Marks	5	03:57 PM
9.06	ME	Response to OFCOM consultation	-	Lynch	5	04:02 PM
9.07	ME	Liaison to ITU-R Working Party 8F	-	Lynch	5	04:07 PM
9.08	II	Liaison contribution to IEEE 1588	-	Jeffree	5	04:12 PM
9.09	II	Liaison responses to MEF, ITU-T SG15 (2 off) and IETF CCAMP	-	Jeffree	5	04:17 PM
9.10	ME	802.20 Liaison to ARIB	-	Greenspan	5	04:22 PM
			-			04:27 PM
10.00		<b>LMSC Internal Business</b>	-			04:27 PM
10.01	II	TREASURER'S REPORT	-	Hawkins	10	04:27 PM
10.02	MI	Meeting site selection	-	Rigsbee	10	04:37 PM
10.03	MI	P&P revision adoption	-	Sherman	15	04:47 PM
10.04	MI	Approval to ballot P&P revision "P&P revision process"	-	Sherman	5	05:02 PM
10.05	MI	Approve NC EC draft minutes of 20 June 2007 telecon (NC EC only)	-	Nikolich	5	05:07 PM
10.06	MI	Approve NC EC draft minutes of 16 July 2007 executive session (NC EC only)	-	Nikolich	5	05:12 PM
10.07	MI	Name of 802.3 working group	-	Grow	1	05:17 PM
10.08	MI	2008 802 CD-ROM Alternative	-	O'Hara	10	05:18 PM

10.09			-			05:28 PM
10.10			-			05:28 PM
10.11			-			05:28 PM
10.12			-			05:28 PM
10.13			-			05:28 PM
10.14			-			05:28 PM
10.15			-			05:28 PM
11.00	Information Items			-		05:28 PM
11.01	II	P&P revision process - future	-	Sherman	2	05:28 PM
11.02	II	Network Services Report	-	Alfvin	5	05:30 PM
11.03	II	Attendance software report	-	Gilb	10	05:35 PM
11.04	II	Emergency Services - next steps	-	Nikolich	10	05:45 PM
11.05	II	Send 802.20 OC draft reports to NC EC email ballot	-	Nikolich	5	05:55 PM
11.06	DT	Ex officio discussion	-	Nikolich	5	06:00 PM
11.07	II	Reminder of 802 elections in March 2008	-	Grow	5	06:05 PM
11.08	II	Update to IMT Advanced activities	-	Lynch	5	06:10 PM
11.09	II	DYSPAN SCC update	-	Nikolich/ Shellhammer	5	06:15 PM
11.10	DT	Decorum during meetings	-	Nikolich	5	06:20 PM
11.11	II	Potential press release	-	Stevenson	1	06:25 PM
11.12			-			06:26 PM
11.13			-			06:26 PM
11.14			-			06:26 PM
11.15			-			06:26 PM
11.16			-			06:26 PM
11.17			-			06:26 PM
11.18			-			06:26 PM
11.19			-			06:26 PM
11.20			-			06:26 PM
11.21			-			06:26 PM
<b>ADJOURN SEC MEETING</b>			-	Nikolich		06:00 PM
ME - Motion, External      MI - Motion, Internal						
DT- Discussion Topic        II - Information Item						
Special Orders						

Moved: To approve the agenda, as modified.

Moved: Stevenson/Lynch

Passes: 14/0/0

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3.00			-			
3.01			-			
3.02			-			
4.00	II	Announcements from the Chair	-	Nikolich	5	01:04 PM

None.

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4.01	II		-			
Category (* = consent agenda)						
5.00	IEEE Standards Board Items			-		
5.01	ME		-			
5.02	ME	802.1ak-COR-1 PAR to NESCOM	-	Jeffree	5	01:04 PM

# MOTION

- 802.1 requests EC approval to forward the draft PAR for 802.1ak-COR-1, to NesCom.
- 802.1: Proposed: Haddock Second:  
finn For: 27 Against: 0 Abstain:  
7
- EC proposed: Jeffree second:

# Supporting material

- This corrigendum will implement an urgent fix to the protocol description of Std 802.1ak.
- Draft PAR circulated by the 48 hour deadline. Text of draft PAR is here:
- <http://www.ieee802.org/1/files/public/docs2007/ak-draft-corrigendum-par-0707-v1.pdf>

**Moved: 802.1 requests EC approval to forward the draft PAR for 802.1ak-COR-1, to NesCom.  
Moved: Jeffree/Grow**

No discussion.

5

**Passes: 15/0/0**

5.03 ME 802.11n PAR extension

- Kerry

5 01:06 PM

# IEEE 802 LMSC RESOLUTION

Motion By: KERRY

Seconded By: O'Hara

**Move: Request the IEEE 802 Executive Committee approval to forward IEEE 802.11n PAR extension to NESCOM.**

May 2007 802.11 TGn

TG: Move: Adrian Stephens

TG 2<sup>nd</sup>: Dave Bagby

TGn Results: (30-0-0) Approved

May 2007 WG: Moved by Bruce Kraemer on behalf of the Task Group

802.11 WG Results

**Result: (76-0-1) Approved**

**July 2007 WG Reaffirmation:** Moved by Bruce Kraemer on behalf of the Task Group

802.11 WG Results

**Result: (139-0-1) Approved**

Approve:

Do Not Approve:

Abstain:

# TGn Motion #3 PAR Extension

- Extension text captured in 11-07-0814r0
- Motion: Approve submission 11-07-0814r0 PAR Extension Request to 802.11 WG
- requesting submission to NesCom with any required editorial changes.
- Approved inTGn: 30/0/0
  - PAR Extension
  - Extension text captured in 11-07-0814r0
  - **Motion: Approve submission 11-07-0814r0 PAR Extension Request to 802.11 WG requesting submission to NesCom with any required editorial changes. Approved inTGn: 30/0/0**
  - Chair: This will require re-affirmation at the July 2007, as there is no quorum at this meeting.
  - For: 76, Against: 0, Abstain: 1 (Motion passes)

Motion to  
REAFFIRM TGN PAR EXTENSION DECISION (DOC: 11-07-0814R0) AT INTERIM  
For 139, Against 0 , Abstain 1



**Moved: Request the IEEE 802 Executive Committee approval to forward IEEE 802.11n PAR extension to NESCOM.**

**Moved: Kerry/O'Hara**

5 This is a two year extension.

**Passes: 14/0/0**

5.04 ME 802.11s PAR modification

- Kerry

5

01:08 PM

# IEEE 802 LMSC RESOLUTION

Motion By: KERRY

Seconded By: O'Hara

Motion: to approve the amendment in 11-07/149r5 to the 802.11s PAR and 5 Criteria and forward PAR to NESCOM for approval.

- TG Moved by: Guido Hiertz
- TG Second: W. Steven Conner
- TG Results: **26/0/2**
- WG Results: **53/5/11**

Approve:

Do Not Approve:

Abstain:

**Moved: to approve the amendment in 11-07/149r5 to the 802.11s PAR and 5 Criteria and forward PAR to NESCOM for approval.**

**Moved: Kerry/O'Hara**

- 5 This expands the scope to include Stations as well as APs.

**Passes: 15/0/0**

5.05 ME 802.11z PAR to NESCOM

- Kerry

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01:09 PM

# IEEE 802 LMSC RESOLUTION

Motion By: KERRY

Seconded By: O'Hara

Move to request the IEEE 802.11 Working Group approve the PAR and 5 Criteria document IEEE 802.11-07/0225r3 and forward it to ExCom for Approval.

**802.11z**

- TGr Moved by:
- TGr Results: **x/x/x**
- WG Moved by:
- WG Results:

Approve:

Do Not Approve:

Abstain:

**Moved: to request the IEEE 802.11 Working Group approve the PAR and 5 Criteria document IEEE 802.11-07/XXXX0225r3 and forward it to ExCom for Approval.**

**Moved: Kerry/O'Hara**

5 No discussion.

**Passes: 15/0/0**

5.06 ME 802.15.4c PAR to NESCOM

- Heile

5

01:12 PM

# 802.15.4c Agenda Item-PAR approval

## Executive Committee Actions-802.15.4c PAR

- Four comments were received
- All the changes were editorial and did not change the technical content of the document.
- Two were essentially the same and were combined with the two commenters' approval.
- All the suggested changes were accepted and reaffirmed by the Working Group (59/0/2).

## Executive Committee Actions-802.15.4c PAR

Action taken in the Working Group--

Motion: *that the 802.15 WG seek executive committee approval per 802 P&P to forward the PAR for P802.15.4c (15-07-0606-03) to NesCom*

Moved by Clint Powell and seconded by Phil Beecher. Upon no discussion the vote was taken with the results of 59/0/2, motion carries.

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## Executive Committee Actions-802.15.4c

- Move to forward 15-07-0606-03-004c-sg4c-draft-par , in the proper form, to NesCom

Moved: Steve Shellhammer

Second: Vivek Gupta

**Moved: to forward 15-07-0606-03-004c-sg4c-draft-par , in the proper form, to NesCom.  
Moved: Shellhammer/Gupta**

No discussion.

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**Passes: 15/0/0**

5.07 ME 802.3az PAR to NESCOM

- Grow

5 01:16 PM

# P802.3az Energy-efficient Ethernet status

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- No questions from other WGs
- Five Criteria approved by 802.3
  - Move that 802.3 approve the EEE \_\_\_\_\_ Criterion per 0707\_eeesg\_close\_report.pdf
  - Broad market potential Y:75, N:1, A:8
  - Compatibility Y:78, N:1, A:6
  - Distinct Identity Y:81, N:1, A:4
  - Technical feasibility Y:77, N:0, A:8
  - Economic feasibility Y:82, N:0, A:3
- PAR approved by 802.3
  - Energy-efficient to be hyphenated per IEEE editorial staff (PAR and 5C will be updated)
  - 802.3 WG approve the 802.3az, Energy Efficient Ethernet, PAR ([http://grouper.ieee.org/groups/802/3/eee\\_study/eee\\_par.pdf](http://grouper.ieee.org/groups/802/3/eee_study/eee_par.pdf)) and request EC approval for submittal to NesCom for consideration at the September meeting. Y:83, N:1, A:4

# EC Motion – P802.3az PAR approval

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- The EC approves the P802.3az PAR and Five Criteria; and PAR submittal to NesCom for September SASB consideration.

M: Bob Grow

S: Tony Jeffree

**Moved: The EC approves the P802.3az PAR and Five Criteria; and PAR submittal to NesCom for September SASB consideration.**

**Moved: Grow/Jeffree**

5 No discussion.

**Passes: 15/0/0**

5.08 ME 802.3ba 40 & 100 Gb/s approval for presubmittal to NESCOM - Grow 5 01:18 PM

# P802.3ba Higher Speed Ethernet status (p.1)

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- No questions from other WGs
- Five Criteria approved by 802.3
  - Move that 802.3 approve the HSSG \_\_\_\_\_ Criterion per 0707\_hssg\_closing\_report.pdf
  - Broad market potential Y:80, N:1, A:4
  - Compatibility Y:80, N:1, A:4
  - Distinct Identity Y:85, N:1, A:3
  - Technical feasibility Y:86, N:0, A:2
  - Economic feasibility Y:85, N:0, A:4

## P802.3ba Higher Speed Ethernet status (p.2)

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- PAR approved by 802.3
  - PAR submittal to be renumbered to 802.3ba
  - IEEE 802.3 motion #23  
Move that 802.3 approve the HSSG PAR, per par\_0707.pdf  
([http://www.ieee802.org/3/hssg/public/july07/par\\_0707.pdf](http://www.ieee802.org/3/hssg/public/july07/par_0707.pdf)) Y:82, N:0, A:3
  - IEEE 802.3 motion #25  
Move that the 802.3 Working Group request that the LMSC Chair pre-submit the 802.3ba PAR to NESCOM for consideration at the December 2007 meeting, remaining on the agenda subject to November 802 EC approval. Y:81, N:0, A:3

# EC Motion – P802.3ba PAR pre-submittal

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- The EC approves the pre-submission of the P802.3ba PAR to NESCOM for consideration at the December 2007 SASB meeting, remaining on the agenda subject to November 802 EC approval.

M: Bob Grow

S: Tony Jeffree



**Moved: The EC approves the pre-submission of the P802.3ba PAR to NESCOM for consideration at the December 2007 SASB meeting, remaining on the agenda subject to November 802 EC approval.**  
**Moved: Grow/Jeffree**

- 5 Roger believes that no motion such as this is required, as the WG chair is able to put a PAR on the Nescom agenda without EC approval.

**Passes: 14/0/1**

5.09 ME 802.16-2004/COR2 PAR withdrawal - Marks 5 01:20 PM

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**Moved: to withdraw the 802.16-2004/Cor2 PAR.**  
**Moved: Marks/Sherman**

No discussion.

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**Passes: 15/0/0**

5.10	ME	Conditional approval of 802.16g to REVCOM, with extension request	-	Marks	10	01:22 PM
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2007-07-20

IEEE 802.16-07/039

# P802.16g to Revcom: Conditional Approval

20 July 2007

# 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: **26 April 2007**

Stage	Open	Close	
Sponsor Ballot Recirc #1	13 Dec	15 Jan	2007
Sponsor Ballot Recirc #2	29 Jan	13 Feb	2007
Sponsor Ballot Recirc #3	23 Feb	10 Mar	2007
Sponsor Ballot Recirc #3	11 Apr	26 Apr	2007

# Vote tally including Approve, Disapprove and Abstain votes

- 136 Approve 99%
  - 2 Disapprove
  - 14 Abstain 9%
- |  |        |     |
|--|--------|-----|
|  | Return | 78% |
|--|--------|-----|
- No comments or votes received in the last recirc

# Comments that support the remaining disapprove votes and Working Group responses

- 23 outstanding Disapprove comments from the two disapprove voters
- See IEEE 802.16-07/027
  - [http://ieee802.org/16/docs/07/80216-07\\_027.pdf](http://ieee802.org/16/docs/07/80216-07_027.pdf)

# Schedule for confirmation ballot and resolution meeting

- Jul 27: Open Recirculation
- Aug 11: Close Recirculation
- Aug 17: Submittal deadline for RevCom  
Sept mtg
- Sep 17-20: comment resolution at  
802.16 Session #51, if  
necessary



# Need for Extension Request

IEEE-SA Standards Board Operations Manual,  
Subclause 8.1.2:

- Up to three amendments can be approved before the standard shall be revised, unless the base standard has been approved or reaffirmed within the past three years... After the three-year period, RevCom shall defer consideration of additional amendments or corrigenda until a revision or a two-year extension request... If, for any extenuating circumstances, an exception to these rules is required, the Sponsor shall take its request for a two-year extension to RevCom.

# 802.16 WG Motion

802.16 Opening Plenary: 16 Jul 2007:

Motion: To authorize the Working Group Chair to request conditional approval for submittal of P802.16g/D9 to RevCom and to seek authorization, from the 802 EC, to request extension of the P802.16g approval deadline beyond the normal three-year limit for amendments.

- Proposed: Phillip Barber
- Seconded: Dan Gal
- Approved 78-0-0.

# Motion

To grant conditional approval, under Clause 20, to forward P802.16g to RevCom, and make a request to RevCom, under subclause 8.1.2 of the IEEE-SA Operations Manual, for an extension of the P802.16g approval deadline beyond the normal three-year limit for amendments.

Moved: Roger Marks

Seconded: Bob Grow

Approve:

Disapprove:

Abstain:

**Moved: To grant conditional approval, under Clause 20, to forward P802.16g to RevCom, and make a request to RevCom, under subclause 8.1.2 of the IEEE-SA Operations Manual, for an extension of the P802.16g approval deadline beyond the normal three-year limit for amendments.**

**Moved: Marks/Grow**

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The recirculation is necessary because RevCom had concerns about the visibility of some of the comments during the balloting process and in the submittal package. RevCom requested one more recirculation completely inside the MyBallot system.

10 **Passes: 15/0/0**

5.11 ME 1802.3 submittal to REVCOM and withdrawal

- Grow

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01:29 PM

## **Motion – P1802.3, 10BASE-T Conformance Tests, submit to RevCom then withdraw**

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The LMSC EC grants approval to submit IEEE Std 1802.3 reaffirmation to RevCom, and further approves Sponsor withdrawal of IEEE Std 1802.3 after approval.

M: Bob Grow

S: Tony Jeffree

**Moved: The LMSC EC grants approval to submit IEEE Std 1802.3 reaffirmation to RevCom, and further approves Sponsor withdrawl of IEEE Std 1802.3 after approval.**

**Moved: Grow/Jeffree**

- 5 Roger asked whether clarification of “after approval” is needed. He asked if this would be done at the same Standards Board meeting. Bob indicated that RevCom would be made aware of the situation. But, action to withdraw would not be taken at the same meeting.

**Passes: 13/0/2**

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5.12	ME		-		
5.13	ME	802.11r approval for sponsor ballot	-	Kerry	10 01:38 PM

# IEEE 802 LMSC RESOLUTION

Motion By: KERRY

Seconded By: Grow

Motion: 802.11WG requests ExCOM approval to forward P802.11r to Sponsor ballot.

- TGr Moved by: Hunter, 2<sup>nd</sup> Sood
- TGr Results: **16/0/1**
- WG Moved by: Chaplin, 2<sup>nd</sup> Worstell
- WG Results: **98/0/1**

Approve:

Do Not Approve:

Abstain:

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**IEEE P802.11**  
**Wireless LANs**

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**IEEE 802.11r Report for Sponsor Ballot Approval****Date:** 2007-06-29**Author(s):**

<b>Name</b>	<b>Company</b>	<b>Address</b>	<b>Phone</b>	<b>email</b>
Clint Chaplin	Samsung Information Systems America	75 W. Plumeria Drive, San Jose, CA 95134	408-544-5815	clint.chaplin@gmail.com

**Abstract**

This is the report documenting the results of the WG letter ballots on IEEE 802.11r. This report is to be submitted to the IEEE 802 Executive Committee to support the request to forward IEEE 802.11r to Sponsor Ballot.



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Appendix A. Detailed Ballot and Comment Information for Each Remaining Negative Voter.....	12
Audeh, Malik (Tropos Networks) .....	12
Barber, Simon (Devicescape Software, Inc.) .....	13
Cam-Winget, Nancy (Cisco Systems).....	14
Epstein, Joseph (Meru Networks) .....	15
Harkins, Daniel (Tropos Networks) .....	16
Lefkowitz, Martin () .....	18
Palm, Stephen (Broadcom).....	19
Stanley, Dorothy (Aruba Networks).....	20
Zaks, Artur (Texas Instruments).....	21

## **1. Introduction and Summary**

This is the report to the IEEE 802 Executive Committee that documents all the WG letter ballots of IEEE 802.11r, including voting results, comment statistics, and unresolved negative comments.

The total number of voters on IEEE 802.11r is 518. The final results of the voters on IEEE 802.11r are 362-9-65, for an approval percentage of 97.6%, a return percentage of 84.2%, and an abstain percentage of 14.9%.

There are 59 outstanding negative comments from eight remaining negative voters; four of these outstanding negative comments are from the latest latter ballot and the remaining 55 outstanding negative comments are previously recirculated unresolved negative comments from previous letter ballots.

In addition, there is one remaining negative voter without comments.

41 negative comments were ruled invalid, of these 13 were from the remaining negative voters.

The four negative comments from the latest letter ballot are from three different negative voters. Three of these comments are out of scope for this recirculation and will be carried forwarded to sponsor ballot, and the remaining comment is not a new topic from the commenter.

Based on results of the letter ballots on IEEE 802.11r as documented in this report, we are asking for approval from the IEEE 802 Executive Committee to forward IEEE 802.11r to sponsor ballot.

## 2. Voting Results

	LB79	LB82	LB87	LB91	LB98	LB105	Final
Draft	1.0	2.0	3.0	4.0	5.0	6.0	
Ballot Open	11/25/05	03/15/06	09/29/06	11/20/06	03/20/07	05/28/07	
Ballot Close	01/04/06	04/04/06	10/14/06	12/04/06	04/04/07	06/13/07	
Total Voters	518						
Approve	268	316	318	335	350	360	362
Do Not Approve with comments	64	44	50	30	19	8	8
Do Not Approve without comments	0	0	0	0	0	3	1
Abstain	72	69	65	70	67	65	65
Total Votes	404	429	433	435	436	436	436
Approval %	80.7%	87.8%	86.4%	91.8%	94.9%	97.0%	97.6%
Abstain %	17.8%	16.1%	15.0%	16.1%	15.4%	14.9%	14.9%
Return %	78.0%	82.8%	83.6%	84.0%	84.2%	84.2%	84.2%
							Totals
Total comments submitted	1287	1028	1285	621	259	16	4496
Comments not part of negative vote	663	464	445	410	134	12	2128
Comments part of negative vote (negative comments)	606	564	840	211	125	4	2350
Comments not specified (considered as negative comments)	18	0	0	0	0	0	18
Total negative comments (sum of previous two rows)	624	564	840	211	125	4	2368
Negative comments ruled invalid	0	0	26	12	3	0	41
Negative comment resolutions approved by commenter	618	551	802	195	102		2268
Negative comment resolutions disapproved by commenter (outstanding negative comments)	6	13	12	3	15		49
Negative comment resolutions not indicated by commenter (considered as outstanding negative comments)	0	0	0	1	5	4	10
Total outstanding negative comments (sum of previous two rows)	6	13	12	4	20	4	59

### 3. Statistics of Comments per Outstanding “Disapprove” Voters

Voter	Total Comments Submitted	Comments not part of negative vote	Comments part of negative vote (negative comments)	Comments not specified (considered as negative comments)	Negative comments ruled invalid	Negative comment resolutions approved by commenter	Negative comment resolutions disapproved by commenter (outstanding negative comments)	Negative comment resolutions not indicated by commenter (considered as outstanding negative comments)	Total outstanding negative comments
Audeh, Malik	7	0	7	0	0	6	1	0	1
Barber, Simon	14	5	9	0	0	7	2	0	2
Cam-Winget, Nancy	265	109	156	0	3	145	7	1	8
Epstein, Joseph	12	0	12	0	0	4	7	1	8
Harkins, Daniel	73	9	64	0	3	51	8	2	10
Lefkowitz, Martin	87	18	68	1	3	65	0	1	1
Palm, Stephen	49	1	48	0	4	18	21	5	26
Stanley, Dorothy	243	157	86	0	0	83	3	0	3
Zaks, Artur	29	12	17	0	0	17	0	0	0
Totals	779	311	467	1	13	396	49	10	59

There are 59 outstanding negative comments from 8 outstanding negative voters; Artur Zaks is counted as a negative voter without comments (he has approved the resolutions to all of his negative comments, but never changed his vote to “Approve”). Details on each voter are enclosed in Appendix A, including how many comments in each of the above categories were received during each latter ballot and the written feedback received from the voter accepting the resolutions to their negative comments.

## 4. Comments Ruled Invalid

41 negative comments were ruled invalid:

	LB79	LB82	LB87	LB91	LB98	LB105	Total
Negative comments ruled invalid	0	0	26	12	3	0	41

Of these 41 negative comments, 13 were from voters that have retained their negative vote; the other 28 were from commenters who are now voting “Approve”:

Voter	Negative comments ruled invalid
Audeh, Malik	0
Barber, Simon	0
Cam-Winget, Nancy	3
Epstein, Joseph	0
Harkins, Daniel	3
Lefkowitz, Martin	3
Palm, Stephen	4
Stanley, Dorothy	0
Zaks, Artur	0
Totals	13

These comments were requested to be ruled invalid by the comment resolution committee technical editor, and were ruled invalid by the comment resolution committee chair.

The comments were ruled invalid because they did not meet the IEEE SA criteria for valid comments: “specific objections with proposed resolution in sufficient detail in a legible form so that the specific wording of the changes that will cause the negative voter to change his or her vote to “approve” can readily be determined.” In the professional opinion of the comment resolution committee technical editor he determined that these comments did not “contain sufficient detail to the proposed resolution so that the specific wording of the changes can be determined.” The comment resolution committee chair agreed, and ruled the comments invalid.

The rulings are given in the documents embedded here (double-click to open):



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**Figure 1: LB87 Invalid Comment Ruling**



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**Figure 2: LB91 Invalid Comment Ruling**



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**Figure 3: LB98 Invalid Comment Ruling**

## 5. Summary of Outstanding Negative Comments per Voter and Letter Ballot

	LB79	LB82	LB87	LB91	LB98	LB105		Totals
Audeh, Malik	1	0	0					1
Barber, Simon	1			1				2
Cam-Winget, Nancy	0	0	1	0	6	1		8
Epstein, Joseph		0	0		7	1		8
Harkins, Daniel	2	3	1	2		2		10
Lefkowitz, Martin	0		0		1			1
Palm, Stephen	2	10	9	1	4			26
Stanley, Dorothy	0	0	1	0	2			3
Zaks, Artur	0	0			0			0
Totals	6	13	12	4	20	4		59

Of the 59 unsatisfied negative comments, we can categorize them as follows:

	Previous letter ballots, recirculated	LB105
Editorial Changes	17 Barber: 1 Cam-Winget: 1 Palm: 15	
Inter-amendment Coordination	1 Lefkowitz: 1	
PTKSA Deletion during Fast BSS Transition	5 Cam-Winget: 5	
Changes requested to baseline IEEE 802.11-2007 document	8 Palm: 7 Stanley: 1	
Key Distribution Protocol	9 Audeh: 1 Harkins: 8	2 Harkins: 2
Resource allocation prior to association only be provisional	7 Epstein: 7	1 Epstein: 1
Mechanism for pre-authentication with new key hierarchy	1 Stanley: 1	
External security review needed	1 Stanley: 1	
Objections to protocol supporting QoS	3 Palm: 3	
Introductory text in Clause 5	1 Palm: 1	
Other: unclassified	2 Barber: 1 Cam-Winget: 1	1 Cam-Winget: 1

## 6. Outstanding Negative Comments

The 59 outstanding negative comments include 55 previously recirculated unresolved negative comments, as well as four negative comments received during the last recirculation.

Of these last four negative comments, three of them are out of scope for this recirculation and will be carried forwarded to sponsor ballot, and one is not a new topic from the commenter. These four negative comments, along with the resolutions agreed to by the comment resolution committee, are in the document embedded here (double-click to open):



**Figure 4: LB105 Negative Comments**

The comment resolution committee attempted to update the resolutions to the unresolved negative comments as the draft was modified. That is, as comments on letter ballots were resolved and the draft modified as a result, these modifications may have also modified parts of the draft that were changed as a result of resolving comments from previous letter ballots. The comment resolution committee attempted to then update the resolutions to comments from previous letter ballots. However, the comment resolution committee did not want to just overwrite the original resolution with the updated resolutions; the comment resolution committee wanted to leave a verifiable trail. So, when the comment resolutions were updated, the original resolution was left in the second part of the resolution entry, and the updated resolution was placed in the first part of the resolution entry.

As an example, the resolution to one comment is as follows:

(resolution to this comment agreed as part of LB98)

Counter. Text changed to "If the target AP does not have the key identified by PMKR1Name, it may retrieve that key from the R0KH identified by the STA. See 11A.2."

(resolution to this comment agreed as part of LB79)

Accepted in part. Text changed to "If the target AP does not have the key identified by R1Name, it may attempt to retrieve that key from the R0KH identified by the STA. See clause 8.5A.6." Ongoing work will define this key distribution protocol in the IETF. Clause 8.5A.6 will reference the IETF RFC (when available) that defines the key distribution protocol.

The original resolution is the second part, the part that is labelled with the note "(resolution to this comment agreed as part of LB79)". The updated resolution is the first part, the part that is labelled with the note "(resolution to this comment agreed as part of LB98)". Note that in this case the resolution has changed from "Accepted in part" to "Counter".

The 55 previously recirculated unresolved negative comments, including the WG responses (which in some cases have both the original resolution and the updated one), are in the document embedded here (double-click to open):





**Figure 5: Unresolved Negative Comments from Previous Letter Ballots**

## **7. IEEE 802.11r Drafts**

After IEEE 802.11r D6.0 was created and LB105 closed, IEEE 802.11-2007 was published. Previous to this publication, IEEE 802.11r D6.0 was based on the last draft of IEEE 802.11-2007, which was IEEE 802.11ma D9.0. There were significant changes in figure and table numbering between IEEE 802.11ma D9.0 and IEEE 802.11-2007, as well as some sub-clause renumbering; these changes necessitated changes in IEEE 802.11r. IEEE 802.11r D7.0 is the result of these required changes, the only changes were figure and table numbering and clause changes due to the changes between IEEE 802.11ma D9.0 and IEEE 802.11-2007; these changes are all editorial in nature.

## **Appendix A. Detailed Ballot and Comment Information for Each Remaining Negative Voter**

### **Audeh, Malik (Tropos Networks)**

	LB79	LB82	LB87	LB91	LB98	LB105	Totals
	Do Not Approve	Do Not Approve	Do Not Approve				
Total comments submitted	5	1	1				7
Comments not part of negative vote	0	0	0				0
Comments part of negative vote (negative comments)	5	1	1				7
Comments not specified (considered as negative comments)	0	0	0				0
Negative comments ruled invalid	0	0	0				0
Negative comment resolutions approved by commenter	4	1	1				6
Negative comment resolutions disapproved by commenter (outstanding negative comments)	1	0	0				1
Negative comment resolutions not indicated by commenter (considered as outstanding negative comments)	0	0	0				0
Total outstanding negative comments	1	0	0				1

2006-12-04 Comment resolution acceptance feedback:



2007-04-04 Comment resolution acceptance feedback:



**Barber, Simon (Devicescape Software, Inc.)**

	LB79	LB82	LB87	LB91	LB98	LB105	Totals
	Do Not Approve			Do Not Approve			
Total comments submitted	5			9			14
Comments not part of negative vote	0			5			5
Comments part of negative vote (negative comments)	5			4			9
Comments not specified (considered as negative comments)	0			0			0
Negative comments ruled invalid	0			0			0
Negative comment resolutions approved by commenter	4			3			7
Negative comment resolutions disapproved by commenter (outstanding negative comments)	1			1			2
Negative comment resolutions not indicated by commenter (considered as outstanding negative comments)	0			0			0
Total outstanding negative comments	1			1			2

2006-11-29 Comment resolution acceptance feedback:



2007-04-04 Comment resolution acceptance feedback:



2007-05-29 Comment resolution acceptance feedback:



**Cam-Winget, Nancy (Cisco Systems)**

	LB79	LB82	LB87	LB91	LB98	LB105	Totals
	Do Not Approve	Do Not Approve	Do Not Approve	Do Not Approve	Do Not Approve	Do Not Approve	
Total comments submitted	63	86	80	9	25	2	265
Comments not part of negative vote	41	43	19	2	3	1	109
Comments part of negative vote (negative comments)	22	43	61	7	22	1	156
Comments not specified (considered as negative comments)	0	0	0	0	0	0	0
Negative comments ruled invalid	0	0	2	1	0		3
Negative comment resolutions approved by commenter	22	43	58	6	16		145
Negative comment resolutions disapproved by commenter (outstanding negative comments)	0	0	1	0	6		7
Negative comment resolutions not indicated by commenter (considered as outstanding negative comments)	0	0	0	0	0	1	1
Total outstanding negative comments	0	0	1	0	6	1	8

2006-10-23 Comment resolution acceptance feedback:



2007-04-25 Comment resolution acceptance feedback:



2007-06-13 Comment resolution acceptance feedback:



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**Epstein, Joseph (Meru Networks)**

	LB79	LB82	LB87	LB91	LB98	LB105	Totals
		Do Not Approve	Approve		Do Not Approve	Do Not Approve	
Total comments submitted		3	0		8	1	12
Comments not part of negative vote		0	0		0	0	0
Comments part of negative vote (negative comments)		3	0		8	1	12
Comments not specified (considered as negative comments)		0	0		0	0	0
Negative comments ruled invalid		0	0		0		0
Negative comment resolutions approved by commenter		3	0		1		4
Negative comment resolutions disapproved by commenter (outstanding negative comments)		0	0		7		7
Negative comment resolutions not indicated by commenter (considered as outstanding negative comments)		0	0		0	1	1
Total outstanding negative comments		0	0		7	1	8

2006-10-19 Voted "Approve"

2007-06-05 Comment resolution acceptance feedback:



**Harkins, Daniel (Tropos Networks)**

	LB79	LB82	LB87	LB91	LB98	LB105	Totals
	Do Not Approve	Do Not Approve	Do Not Approve	Do Not Approve		Do Not Approve	
Total comments submitted	26	12	19	14		2	73
Comments not part of negative vote	5	2	1	1		0	9
Comments part of negative vote (negative comments)	21	10	18	13		2	64
Comments not specified (considered as negative comments)	0	0	0	0		0	0
Negative comments ruled invalid	0	0	0	3			3
Negative comment resolutions approved by commenter	19	7	17	8			51
Negative comment resolutions disapproved by commenter (outstanding negative comments)	2	3	1	2			8
Negative comment resolutions not indicated by commenter (considered as outstanding negative comments)	0	0	0	0		2	2
Total outstanding negative comments	2	3	1	2		2	10

2006-05-04 Comment resolution acceptance feedback:



2006-12-06 Comment resolution acceptance feedback:



2007-04-03 Comment resolution acceptance feedback:



2007-06-13 Comment resolution acceptance feedback:





**Lefkowitz, Martin ()**

	LB79	LB82	LB87	LB91	LB98	LB105	Totals
	Do Not Approve		Do Not Approve		Do Not Approve		
Total comments submitted	70		14		3		87
Comments not part of negative vote	16		2		0		18
Comments part of negative vote (negative comments)	53		12		3		68
Comments not specified (considered as negative comments)	1		0		0		1
Negative comments ruled invalid	0		1		2		3
Negative comment resolutions approved by commenter	54		11		0		65
Negative comment resolutions disapproved by commenter (outstanding negative comments)	0		0		0		0
Negative comment resolutions not indicated by commenter (considered as outstanding negative comments)	0		0		1		1
Total outstanding negative comments	0		0		1		1

2007-04-04 Comment resolution acceptance feedback:



**Palm, Stephen (Broadcom)**

	LB79	LB82	LB87	LB91	LB98	LB105	Totals
	Do Not Approve	Do Not Approve	Do Not Approve	Do Not Approve	Do Not Approve		
Total comments submitted	20	10	10	4	5		49
Comments not part of negative vote	1	0	0	0	0		1
Comments part of negative vote (negative comments)	19	10	10	4	5		48
Comments not specified (considered as negative comments)	0	0	0	0	0		0
Negative comments ruled invalid	0	0	0	3	1		4
Negative comment resolutions approved by commenter	17	0	1	0	0		18
Negative comment resolutions disapproved by commenter (outstanding negative comments)	2	10	9	0	0		21
Negative comment resolutions not indicated by commenter (considered as outstanding negative comments)	0	0	0	1	4		5
Total outstanding negative comments	2	10	9	1	4		26

2006-04-11 Comment resolution acceptance feedback:



2006-12-04 Comment resolution acceptance feedback:



**Stanley, Dorothy (Aruba Networks)**

	LB79	LB82	LB87	LB91	LB98	LB105	Totals
	Approve	Do Not Approve	Do Not Approve		Do Not Approve	Do Not Approve	
Total comments submitted	40	1	122	77	2	1	243
Comments not part of negative vote	40	0	72	44	0	1	157
Comments part of negative vote (negative comments)	0	1	50	33	2	0	86
Comments not specified (considered as negative comments)	0	0	0	0	0	0	0
Negative comments ruled invalid	0	0	0	0	0		0
Negative comment resolutions approved by commenter	0	1	49	33	0		83
Negative comment resolutions disapproved by commenter (outstanding negative comments)	0	0	1	0	2		3
Negative comment resolutions not indicated by commenter (considered as outstanding negative comments)	0	0	0	0	0		0
Total outstanding negative comments	0	0	1	0	2		3

2006-11-28 Comment resolution acceptance feedback:



2007-03-22 Comment resolution acceptance feedback:



2007-05-29 Comment resolution acceptance feedback:



**Zaks, Artur (Texas Instruments)**

	LB79	LB82	LB87	LB91	LB98	LB105	Totals
	Do Not Approve	Do Not Approve			Do Not Approve		
Total comments submitted	11	14			4		29
Comments not part of negative vote	5	7			0		12
Comments part of negative vote (negative comments)	6	7			4		17
Comments not specified (considered as negative comments)	0	0			0		0
Negative comments ruled invalid	0	0			0		0
Negative comment resolutions approved by commenter	6	7			4		17
Negative comment resolutions disapproved by commenter (outstanding negative comments)	0	0			0		0
Negative comment resolutions not indicated by commenter (considered as outstanding negative comments)	0	0			0		0
Total outstanding negative comments	0	0			0		0

2006-04-25 Comment resolution acceptance feedback:



2007-04-04 Comment resolution acceptance feedback:



2007-05-30 Comment resolution acceptance feedback:



**References:**

**Moved: 802.11WG requests ExCOM approval to forward P802.11r to Sponsor ballot.**

**Moved: Kerry/Grow**

5 Clint Chaplin (chair of 802.11 TGr) clarified that the comments that were ruled out of scope would be carried to the sponsor ballot by the task group chair. Clint also clarified the rationale for ruling certain comments invalid. Geoff indicated that a good practice is to include any comment ruled invalid in the recirculation package, to have the ballot group sustain the ruling and prevent difficulties in the future. The invalid comments should also be included in the RevCom submittal package.

10 **Passes: 15/0/0**

5.14 ME 802.11y conditional approval for sponsor ballot

- Kerry

10

01:56 PM

# IEEE 802 LMSC RESOLUTION

Motion By: KERRY

Seconded By: O'Hara

Motion: 802.11WG requests ExCOM conditional approval to forward P802.11y to Sponsor ballot.

- TGy Moved by: Rich Kennedy
- TGy Second: Victoria Poncini
- TGy Results: **3/0/0**  
WG Results: **68/0/3**

Approve:

Do Not Approve:

Abstain:

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**IEEE P802.11**  
**Wireless LANs**

---

**802.11y Conditional Sponsor Ballot Report****Date:** 2007-07-13**Author(s):**

<b>Name</b>	<b>Affiliation</b>	<b>Address</b>	<b>Phone</b>	<b>email</b>
Peter Ecclesine	Cisco Systems	170 W. Tasman Dr., San Jose, Ca 95134-1706	+1-408-527-0815	petere@cisco.com

**Abstract**

This is the report documenting the results of the WG letter ballots on IEEE 802.11y. This report is to be submitted to the IEEE 802 Executive Committee to support the request to forward IEEE 802.11y to Sponsor Ballot.



## **1. Introduction and Summary**

This is the report to the IEEE 802 Executive Committee that documents all the WG letter ballots of IEEE 802.11y, including voting results, comment statistics, and unresolved negative comments.

The total number of voters on IEEE 802.11y is 347. The final results of the voters on IEEE 802.11y are 362-9-65, for an approval percentage of 97.6%, a return percentage of 84.2%, and an abstain percentage of 14.9%.

There are 59 outstanding negative comments from eight remaining negative voters; four of these outstanding negative comments are from the latest latter ballot and the remaining 55 outstanding negative comments are previously recirculated unresolved negative comments from previous letter ballots.

In addition, there is one remaining negative voter without comments.

41 negative comments were ruled invalid, of these 13 were from the remaining negative voters.

The four negative comments from the latest letter ballot are from three different negative voters. Three of these comments are out of scope for this recirculation and will be carried forwarded to sponsor ballot, and the remaining comment is not a new topic from the commenter.

Based on results of the letter ballots on IEEE 802.11y as documented in this report, we are asking for approval from the IEEE 802 Executive Committee to forward IEEE 802.11y to sponsor ballot.

Agenda Items and motions requesting conditional approval to forward when 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 recirculation ballot and resolution meeting.

Letter Ballot 94 was a vote on Draft 1.0, and ran for 40 days starting 12 December 2007, and ending on 7 January 2007.

309 voted, 182 yes, 59 no, 71 abstained, 75.52% approval rate  
Approve 182, Disapprove comments 59, Abstain 71

Letter Ballot 104 was a recirculation vote on Draft 2.0 and resolutions in 11-07-0008-12, and ran for 16 days from 19 April 2007 until 5 May 2007.

324 voted, 221 yes, 41 no, 62 abstained, 84.35% approval rate  
Approve 129, Disapprove comments 19, Abstain 32 = 180 ballots

Letter Ballot 106 was a recirculation vote on Draft 3.0 and resolutions recorded in 11-07-0602-07, and ran for 15 days from 5 June 2007 until 20 June 2007.

326 voted, 242 yes, 24 no, 60 abstained, 90.98% approval rate  
Approve 129, Disapprove comments 9, Abstain 28 = 166 ballots cast

Subsequently two negative voters have changed their votes to Approve, and at this time there are 17 Negative voters with comments recorded in the comment database.

Note that the resolutions for LB 106 comments have not yet been approved by the WG.

Of the total 124 no-voter unsatisfied comments from all letter ballots, many are non-technical comments marked technical, and many address similar topics.

The comments may be categorized as follows:

62 Required Comments on Draft 1.0 with no subsequent Negative voter participation. They mainly had an issue related with TGn timelines: the Channel Switch Announcement text that also appeared in TGn Draft 1.0 (LB 84) and TGv, and in subsequent events got consolidated into TGy, as it is scheduled to complete before TGn and TGv. At the time of LB 94, the TGn Channel Switch Announcement defined another way to change Regulatory Classes, and proponents of that scheme made comments in LB 94 to remove Extended Channel Switching. TGn then changed their definition of what Regulatory Classes would be required, and in TGn Draft 2.0 adopted the TGy language for LB 97. If the WG approves the proposed LB 106 comment resolutions, there will be just three Channel Switch Announcement comments from LB 104 and 106 that remain rejected.

LB	Comment	Accept	Accept in Principle	Reject
94	Technical Required	19	25	23
94	Editorial Required	1	2	0
104	Technical Required	1	2	3
104	Editorial Required	1	1	0
106	Technical Required	12	24	5
106	Editorial Required	3	2	1
		37	56	32

There was one Required comment on LB 104 “Confusions from submitting redline version without providing rationale to voters.” and suggesting “Cancel and reissue ballot with justification for redline draft and include clean version, too.” which the Task Group considers Out of Scope. If the WG agrees it is out of scope, then the voter’s previous Approve vote on LB 94 would be the official one, not the Negative vote on LB 104.

The working group responses to all of these unsatisfied comments are on the following pages:

Cl 00 SC P L # 1110  
 "Kurihara, Thomas"  
 Comment Type GR Comment Status D  
 Confusions from submitting redline version without providing rationale to voters.  
 SuggestedRemedy  
 Cancel and reissue ballot with justification for redline draft and include clean version, too.  
 Proposed Response Response Status W  
 PROPOSED REJECT. Out of Scope

Cl 00 SC 0 P1 L # 5  
 "Amann, Keith"  
 Comment Type TR Comment Status A  
 The document does not cite which base document(s) this addendum applies to, therefore making it impossible to know what this document is modifying.  
 SuggestedRemedy  
 Add the statement "[This document is based on IEEE Std 802.11(tm), 2007 Edition]", assuming that this is the correct reference for the recently adopted maintenance release of 802.11. If not then the reference should be adjusted accordingly.  
 Response Response Status W  
 PROPOSED ACCEPT.

Cl 03 SC 3.34a P1 L 54 # 2051  
 Myles, Andrew  
 Comment Type TR Comment Status X  
 The text speaks of an association between the dependent STA and the enabling AP.  
 However, this is confusing because I understand that this is not intended to be an 802.11 association.  
 SuggestedRemedy  
 Modify nomenclature to call relationship between the dependent STA and the enabling AP a "registration"  
 Proposed Response Response Status W  
 PROPOSED REJECT. As the FCC uses "registration" for licensed operators and stations in required databases and regulations, it would be very confusing to replace "enablement" with "registration"

Cl 03 SC 3.34b P1 L 59 # 2049  
 Myles, Andrew  
 Comment Type TR Comment Status X  
 Definition uses term "restricted channel"  
 However, this is not defined anywhere  
 SuggestedRemedy  
 Define "restricted channel"

A similar comment applies to 3.48a, which defines "restricted bands"  
 Proposed Response Response Status W  
 PROPOSED ACCEPT IN PRINCIPLE. Adding definition of restricted channel ", which is a channel where transmission is restricted to licensed operators and stations operating under their control".

Cl 03 SC 3.54a P1 L 65 # 2050  
 Myles, Andrew  
 Comment Type ER Comment Status X  
 The text uses "station"  
 However, "STA" would be more consistent with the rest of clause 3  
 SuggestedRemedy  
 Replace "station" with STA  
 Similar comment applies to other clauses in draft  
 Proposed Response Response Status W  
 PROPOSED ACCEPT.

Cl 03 SC 3.y1 P9 L 12 # 426  
 "Palm, Stephen"  
 Comment Type TR Comment Status D  
 What does "publicly registered" mean?  
 SuggestedRemedy  
 explain  
 Proposed Response Response Status W  
 PROPOSED ACCEPT IN PRINCIPLE. Replaced with 'registered STA', meaning there is a registration system than can be used to facilitate interference resolution.

Cl 03 SC 3.y3 P2 L 10 # 1034  
"Ecclesine, Peter"

Comment Type TR Comment Status D

Comment from Scott Blue: "The term enabling AP is not appropriate. By definition an AP provides a DSTA access to a DS over the air (for purposes including association). This device broadcasts information over the air that a dependant STAs needs in order to gain and retain permission to access to access a channel."

SuggestedRemedy

1) Use the ITU term for this kind of function - Control (or Controlling) STA 2) Remove the word 'associated' from the current definition 3) Properly articulate the channel permissioning mechanism using a subset of existing association procedures.

Proposed Response Response Status W

PROPOSED REJECT. Reject: based on discussion and editorial instructions in 07/0801r0

Cl 03 SC 3.y3 P9 L 19 # 427  
"Palm, Stephen"

Comment Type TR Comment Status D

What does "publicly registered" mean?

SuggestedRemedy

explain

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE. Replaced with 'registered STA', meaning there is a registration system than can be used to facilitate interference resolution.

Cl 03 SC 3.y4 P9 L 22 # 428  
"Palm, Stephen"

Comment Type TR Comment Status D

"some regulatory domains" contradicts the title that states "in USA". USA has only a single regulatory domain

SuggestedRemedy

correct title or definition to be consistant

Proposed Response Response Status W

PROPOSED ACCEPT.

Cl 05 SC 5.2.7 P10 L 10 # 430  
"Palm, Stephen"

Comment Type TR Comment Status D

What is the definie of "cognitive radio"?

SuggestedRemedy

define

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE. The sentence being commented on is removed in the rewrite of 5.2.7, now Annex J.2 (07/0271).

Cl 05 SC 5.2.7 P10 L 15 # 431  
"Palm, Stephen"

Comment Type TR Comment Status D

Is "US" the same as "USA"? If so, the usage should be consistant

SuggestedRemedy

Change "US" to "USA"

Proposed Response Response Status W

PROPOSED ACCEPT. The comment is applied to Annex J.2 (07/0271).

Cl 05 SC 5.2.7 P10 L 26 # 432  
"Palm, Stephen"

Comment Type TR Comment Status D

"leading us". Is "us" colloquial or "USA"?

SuggestedRemedy

correct title or definition to be consistant

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE. The sentence being commented on is removed in the rewrite of 5.2.7, now Annex J.2 (07/0271).

Cl 05 SC 5.2.7 P 10 L 32 # 433  
 "Palm, Stephen"  
 Comment Type TR Comment Status D  
 Is the implication of the last clause that \*only\* 5MHz channels may be used or the 5 MHz may \*also\* be used?  
 SuggestedRemedy  
 clarify  
 Proposed Response Response Status W  
 PROPOSED ACCEPT. The 'shalls' in 5.2.7 are being moved to Annex J.2 defining operation in US 3650 MHz band.

Cl 05 SC 5.2.7 P 10 L 9 # 429  
 "Palm, Stephen"  
 Comment Type TR Comment Status D  
 "should have" - is that a recommendation or requirement?  
 SuggestedRemedy  
 clarify  
 Proposed Response Response Status W  
 PROPOSED ACCEPT IN PRINCIPLE. The sentence being commented on is removed in the rewrite of 5.2.7, now Annex J.2 (07/0271).

Cl 05 SC 5.2.7 P 4 L 23 # 258  
 "Kwak, Joe"  
 Comment Type TR Comment Status D  
 New FCC rules emphasize cognitive radio features, listen-before-talk, listening enhancements and other radio-aware features for licensed use. These capabilities imply the need for objective radio measurements and thus require the radio measurement capability specified in TGk amendment. This is especially true for use of a new standardized ED mechanism which cannot rely on RSSI which is not quantitatively specified and has no accuracy requirement. RCPI is needed for uniform ED operation within a DSE BSA.  
 SuggestedRemedy  
 P4L23, change ",Regulatory" to ", Radio Measurement capability (dot11RadioMeasurementEnabled true), Regulatory"  
 Proposed Response Response Status W  
 PROPOSED REJECT. The 'shalls' in 5.2.7 are being moved to a subclause defining operation in US 3650 MHz band. The baseline for Tgy includes TGk and TGr, so the measurements described in the comment will be available via the 802.11k amendment.

Cl 07 SC 7.2.3.1 P 3 L 19 # 2043  
 Myles, Andrew  
 Comment Type ER Comment Status X  
 The text uses "DSE registered location"  
 However, it would be clearer if it used "DSE Registered Location"  
 SuggestedRemedy  
 Fix  
 A similar comment applies to 7.2.3.5, 7.2.3.7, 7.2.3.9, 7.3.2  
 Proposed Response Response Status W  
 PROPOSED REJECT. Use is consistent with base standard. See IEEE Standards Style Manual, Jan 2007, clause 13.8 on capitalization.

Cl 07 SC 7.2.3.1 P 3 L 20 # 2021  
 Ecclesine, Peter  
 Comment Type TR Comment Status X  
 The Notes for DSE registered location here and elsewhere in Clauses 7 and 10 refer to 'if dot11DSERequired is true or dot11RegLocRequired is true', when dot11LCIDSERequired is true when either of these is true. The quoted text should be replaced by 'if dot11LCIDSERequired is true' everywhere it occurs.  
 SuggestedRemedy  
 Per comment  
 Proposed Response Response Status W  
 PROPOSED ACCEPT IN PRINCIPLE. also replace 'if dot11RegLocRequired is true or dot11DSERequired is true'.

Cl 07 SC 7.2.3.1 P3 L 20 # 2022  
 Ecclesine, Peter

Comment Type ER Comment Status D

If a description of how a dependent STA comes under the control of an enabling AP is created (maybe in response to other unsatisfied comments, e.g. LB104 1034 or 1101), then the variable dot11LCIDSERequired should be renamed globally to something more descriptive of enablement.

SuggestedRemedy

Per comment

Proposed Response Response Status W

PROPOSED REJECT. LCIDSE conveys location-based dependent STA enablement in six letters of a 19 letter name. LCI is used in IETF geopriv and related areas like emergency services, and DSE is widely used in P802.11y D3.0. Fifty-two letters is about the length of a line of DESCRIPTION in a MIB."

Cl 07 SC 7.2.3.1 P3 L 24 # 2072  
 Trainin, Solomon

Comment Type TR Comment Status X

As it is stated in the subclause 11.9 of the basic spec "STAs shall use the DFS procedures defined in this subclause if dot11SpectrumManagementRequired is true." The Extended Channel switch functionality is part of the 11.9 definition, so both attributes dot11SpectrumManagementRequiredshoud and dot11ExtendedChannelSwitchImplemented should be mentioned as requirement for the Extended Channel Switch Announcement information element presence. The same comment applies to any appearance of the Extended Channel Switch Announcement in 7.2.3.4 - 7.2.3.9

SuggestedRemedy

The attribute dot11SpectrumManagementRequired enables wide range of features. In the current spec there is no way to separately declare support of them. Clear specification should be provided to allow or disallow separate use of the extended channel switching

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE. Commenter writes "I would see that the text at the line 24 on page 3 should be changed this way:  
 The Extended Channel Switch Announcement information element may be present only if dot11ExtendedChannelSwitchImplemented, dot11SpectrumManagementRequired and dot11RegulatoryClassesRequired are true." Will add a normative statement in 11.9.7 "When dot11ExtendedChannelSwitchImplemented is true, dot11MultiDomainCapabilityEnabled, dot11SpectrumManagementReqired and dot11RegulatoryClassesRequired shall be true."

Cl 07 SC 7.2.3.1 P3 L 27 # 2073  
 Trainin, Solomon

Comment Type TR Comment Status X

As it is stated in the subclause 11.9 of the basic spec "STAs shall use the DFS procedures defined in this subclause if dot11SpectrumManagementRequired is true." The Supported Regulatory Classes functionality is part of the 11.9 definition, so both attributes dot11SpectrumManagementRequiredshoud and dot11ExtendedChannelSwitchImplemented should be mentioned as requirement for the Supported Regulatory Classes information element presence. The same comment applies to any appearance of the Supported Regulatory Classes in 7.2.3.4 - 7.2.3.9

SuggestedRemedy

The attribute dot11SpectrumManagementRequired enables wide range of features. In the current spec there is no way to separately declare support of them. Clear specification should be provided to allow or disallow separate use of the Supported Regulatory Classes information element.

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE. Commenter writes "I would see that the text at the line 24 on page 3 should be changed this way:  
 The Extended Channel Switch Announcement information element may be present only if dot11ExtendedChannelSwitchImplemented, dot11SpectrumManagementRequired and dot11RegulatoryClassesRequired are true." Will add a normative statement in 11.9.7 "When dot11ExtendedChannelSwitchImplemented is true, dot11MultiDomainCapabilityEnabled, dot11SpectrumManagementRequired and dot11RegulatoryClassesRequired shall be true."

Cl 07 SC 7.2.3.9 P5 L 10 # 2046  
 Myles, Andrew

Comment Type ER Comment Status X

Text defines when element is required using "is"

However, in 7.2.3.1 used language with "shall"

SuggestedRemedy

Change language to be consistent

Note: I admit the base standard is not consistent but each amendment should be

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE. commenter mixes Beacon frame elements with Probe Response frame elements, and many persistent Beacon frame elements (11, 14, 17, 18, 21) are Noted as "shall be present". Few Probe Response frame elements (13, 16, 17) use "shall be present", most (6, 7, 8, 9, 18, 19, 20, 21, 22) use "is present".

CI 07 SC 7.2.3.9 P5 L17 # 2045

Myles, Andrew

Comment Type TR Comment Status X

The Supported Regulatory Classes element in Probe Response "is present if . is true"

However, a Supported Regulatory Classes element in a Beacon (see 7.2.3.1) "may be present if . is true"

*SuggestedRemedy*

Claiify why is there a difference, and correct as appropriate.

Proposed Response Response Status W

PROPOSED ACCEPT. Many persistent Beacon frame elements (11, 14, 17, 18, 21) are Noted as "shall be present". Few Probe Response frame elements (13, 16, 17) use "shall be present", most (6, 7, 8, 9, 18, 19, 20, 21, 22) use "is present." Will change change Supported Regulatory Classes element Notes in Beacon to "shall be present" and delete "only."

CI 07 SC 7.3.2.21.11 P6 L39 # 2054

Myles, Andrew

Comment Type TR Comment Status X

The text refers to the AP with which the STA is associated.

However, it is unclear if this is the enabling AP (with which it is registered) or the local AP (with which it is associated - in 802.11 speak)

*SuggestedRemedy*

Clarify to which AP the clause applies.

If it is the enabling AP, how does the STA return the report if it cannot actually communicate directly with the enabling AP

Proposed Response Response Status W

PROPOSED ACCEPT. It is mandatory to generate a report in response to a request from either the enabling AP or the AP with which it is associated.

CI 07 SC 7.3.2.22.11 P7 L24 # 2053

Myles, Andrew

Comment Type TR Comment Status X

The text states that it is mandatory for a STA to support the generation of a DSE report if dot11LCIDSERequired is true.

However, the next sentence says it is always optional

*SuggestedRemedy*

Remove contradiction

Proposed Response Response Status W

PROPOSED ACCEPT.

CI 07 SC 7.3.2.36 P10 L10 # 288

"Levy, Joseph"

Comment Type TR Comment Status D

I assume Meters means meters above sea level - is this correct?

*SuggestedRemedy*

Please define accordingly.

Proposed Response Response Status W

PROPOSED REJECT. IETF RFC 3825 is the normative reference, and Meters is defined with respect to Datum therein. The definition in IETF RFC 3825 is unchanged by 802.11y, therefore the definition is removed.

Cl 07 SC 7.3.2.36 P 10 L 11 # 6

"Amann, Keith"

Comment Type TR Comment Status D

This draft appears to be referencing the same RFC as the 802.11k draft, but appears to be using it differently.

SuggestedRemedy

Resolve the differences between this draft and the 802.11k draft to utilize a single location method, or provide a detailed explanation of why these are both required. It also seems like there should be some coordination between 802.11y and 802.11k regarding the addition of this information if they are going to both rely on the use of it.

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE. Both LCI elements were contributed by the same author (refer to 11-05/517r0), who has processed all TGk LCI comments, and is editor of TGy. The coordination is close ;- ) TGk's LCI measurement report element's use is via Measurement Request and Response, while TGy DSE LCI IE is entered administratively in Registered STAs and only the Dependent Enablement Identifier changes. The TGk LCI is not an Element with an ID listed in Table 26, however it is listed in Table 29 Measurement Type Definitions.

Cl 07 SC 7.3.2.36 P 10 L 11 # 289

"Levy, Joseph"

Comment Type TR Comment Status D

I assume Floors refers to the number of floors above ground level - is this correct?

SuggestedRemedy

Please define accordingly.

Proposed Response Response Status W

PROPOSED REJECT. IETF RFC 3825 is the normative reference, and Floors is defined with respect to Datum therein. The definition in IETF RFC 3825 is unchanged by 802.11y, therefore the definition is removed.

Cl 07 SC 7.3.2.36 P 10 L 2 # 259

"Kwak, Joe"

Comment Type TR Comment Status D

Figure y112A (the only figure in this clause) should be titled to define the format of the DSE registered location element.

SuggestedRemedy

Retitle Figure y112A to "DSE Egistered Location Element Format", consistent with baseline. Furthermore rewrite clause to eleimiate term DSE Location Configuration Information, but indicate that DSE Registered Location Element contains LCI information.

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE. Will add a figure for the DSE Registered Location element format, and remove this figure.

Cl 07 SC 7.3.2.36 P 11 L 3 # 263

"Kwak, Joe"

Comment Type TR Comment Status D

From the description given for DSE LCI and DEI, it is not clear if the DEI is unique to a single STA or unique to a broadly defined location or unique among national licensees. Can two enabling STAs use the same DEI? If so under what conditions? Can the LCI resolution be broad enough to cover a campus? a town? a state? Can two or more enabling STAs operate at the same registered location? Does the DEI need to be registered in the FCC database for registered fixed STAs? Can enabling STAs be mobile or portable within a broad registered location? How can operation within the rules occur indoors? Can indoor (shielded from outdoor transmissions from enabling STA) operation in an entire building be permitted if at least one indoor STA is enabled by the distant registered fixed STA and can relay the information to other indoor STAs? Can a DSE enabled STA enable nearby STAs which cannot receive the direct transmission from the distant fixed registered STA, for instance mobile STAs in cars which enter a town and are shielded by buildings along the street from the horizon. Can a STA be enabled by being in radio range of a STA that can directly receive beacons from a fixed registered STA? If a STA is enabled on chan A, can it transmit on channel B while continuing to monitor for enabling beacons on channel A once each minute?

SuggestedRemedy

Please answer these questions and clarify text where needed. BTW: This is great work in a fairly short time period by a very dedicated and skilled task group! KUDOS! Your use and explanation of known draft defects and ongoing efforts in editorial notes on page vii should be a model for all drafts.

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE. The questions should be answered in the rewrite of clause 11 DSE procedures, rather than clause 7 field descriptions. It should be noted that FCC registration requires the location be stated to within one meter, therefore two registered stations will not have the same LCI.



CI 07 SC 7.3.2.36 P11 L3 # 260  
"Kwak, Joe"

Comment Type TR Comment Status D

Field description not clear. Clarify as shown.

*SuggestedRemedy*

P11L3 Replace "value set by the enabling station" with "value. If Dependant STA bit is zero, the Dependant Enablement Identifier contains the ID of the enabling station which transmitted this IE. Otherwise the Dependant Enablement Identifier conatins the ID of the enabling STA which has enabled transmissions for the dependant STA which is transmitting this IE." Or use similar equivalent wording.

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE. Sentence changed to "Dependent Enablement Identifier is a 16-bit field with a value set by the enabling station via the DSE registered location element in the (re)association response, or zero." Description of setting shall be in clause 11 DSE procedures, not in clause 7.

CI 07 SC 7.3.2.36 P16 L10 # 437  
"Palm, Stephen"

Comment Type TR Comment Status D

As this line is not a sentence, "meter" shall not be capitalized. See [http://www.bipm.fr/en/si/si\\_brochure/chapter5/5-2.html](http://www.bipm.fr/en/si/si_brochure/chapter5/5-2.html)

*SuggestedRemedy*

Fix capitalization

Proposed Response Response Status W

PROPOSED ACCEPT. The definition in IETF RFC 3825 is unchanged by 802.11y, therefore this line is deleted.

CI 07 SC 7.3.2.36 P16 L11 # 436  
"Palm, Stephen"

Comment Type TR Comment Status D

What are "floors"?

*SuggestedRemedy*

Define

Proposed Response Response Status W

PROPOSED REJECT. IETF RFC 3825 is the normative reference, and Floors is defined with respect to Datum therein. The definition in IETF RFC 3825 is unchanged by 802.11y, therefore the definition is removed.

CI 07 SC 7.3.2.36 P16 L12 # 438  
"Palm, Stephen"

Comment Type TR Comment Status D

As the word is not at the beginning of a sentence, "meter" shall not be capitalized. See [http://www.bipm.fr/en/si/si\\_brochure/chapter5/5-2.html](http://www.bipm.fr/en/si/si_brochure/chapter5/5-2.html)

*SuggestedRemedy*

Fix capitalization

Proposed Response Response Status W

PROPOSED ACCEPT.

CI 07 SC 7.3.2.36 P16 L6 # 435  
"Palm, Stephen"

Comment Type TR Comment Status D

Which one has the definitions, the reference or this document.

*SuggestedRemedy*

Clarify

Proposed Response Response Status W

PROPOSED ACCEPT. Clause 2 states Normative Reference for RFC 3825, and will change "2.1 or as" to "2.1 except as".

CI 07 SC 7.3.2.37 P11 L6 # 439  
"Parameswaran, Subra"

Comment Type TR Comment Status D

Extended channel switch announcement information element has only one more field (i.e., new regulatory class) than the existing channel switch announcement IE, so why not use only the new regulatory class as the content of this new IE? When needed, both the existing CSA IE and the new IE can be sent.

*SuggestedRemedy*

Redefine the extended channel switch announcement IE so that it contains only new information that is not in the existing channel switch announcement IE.

Proposed Response Response Status W

PROPOSED REJECT. The ECSA is six octets, fewer than any alternative in US 3650 MHz band. We do the same as TGn D2.0.

Cl 07 SC 7.3.2.50 P10 L 63-6 # 2039  
 Hiertz, Guido

Comment Type TR Comment Status X

A zero value for the Channel Switch Count field to indicate ". that the switch occurs anytime after the frame containing the element is transmitted." seems to be useless. If the transition occurs arbitrarily, there is no use in telling other STAs.

SuggestedRemedy

Delete sentence and reword previous sentence to become "A value of 0 indicates that the switch occurs immediately before the next TBTT."

Proposed Response Response Status W

PROPOSED REJECT. Text is identical to 7.3.2.20 CSA, and works identically. The AP says "I am leaving this channel", and the receiving STAs know not to wait TBTT before tuning to another frequency.

Cl 07 SC 7.3.2.50 P7 L 5 # 1002  
 "Amann, Keith"

Comment Type TR Comment Status D

There is a 1 octet field defined in the Extended Channel Switch Announcement Information Element called "Channel Switch Count" with no text describing what it is, or how it is used.

SuggestedRemedy

In the previous version of the draft there was text that described what this field was, and what values it could contain. It appears to have been stricken in this version of the draft, and in reviewing the comment resolutions I think I've discovered why. Although I understand the original commenter's concern (CID 359 on previous ballot), I don't agree that this text should have been moved, and would recommend that it be moved back here.

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE. "Accept in Principle based on discussion and editorial instructions in 07/0673: ætext from 7.3.2.20 will be used, replacing "shall be set to" with "indicates", replacing "shall be set to zero" with "or zero" and "shall occur" with "occurs". "

Cl 07 SC 7.3.2.x P9 L 1 # 264  
 "Kwak, Joe"

Comment Type TR Comment Status D

Modify TGk's Neighbor Report Element for this band so that the DSE Registered Location element may be included for each AP in the neighbor list. The new element would be an optional neighbor report subelement which would be required when operating in this 3650-3700 band. This would provide a neighbor report listing all the registered fixed STAs for a licensee (and optionally for competitors) and would provide a geographical layout of the network which would greatly facilitate roaming for mobile STA in cars on rural roadways which have knowledge of position, velocity and direction.

SuggestedRemedy

Add new clause copied from TGk as suggested.

Proposed Response Response Status W

PROPOSED REJECT. As TGk is part of the baseline for Tgy, the Neighbor Report Element will be present. Additionally, Tgy has no requirement to roam, so the basis for 'Neighbor' a 'validated AP' is not present.

Cl 07 SC 7.4 P11 L 23 # 2020  
 Ecclesine, Peter

Comment Type TR Comment Status D

If a description of how a dependent STA comes under the control of an enabling AP is created (maybe in response to other unsatisfied comments, e.g. LB104 1034 or 1101), and other Action frames are defined, then DSERegisteredLocationAnnouncement should be moved from Spectrum management into a new category of Action frames that involve dependent stations.

SuggestedRemedy

Per comment

Proposed Response Response Status W

PROPOSED REJECT. Creating a new category of Action frames for three Actions involving dependent stations does not appear worth the effort. Keeping them together with Spectrum Management Action frames will lead to broader use in 802.11.

CI 07 SC 7.4.1.6 P 13 L 4 # 655

"Trainin, Solomon"

Comment Type TR Comment Status D

There is no need for additional Extended Channel Switch Announcement frame. The new Extended Channel Switch Information Element may be contained in the existent Channel Switch Announcement frame

SuggestedRemedy

Remove the Extended Channel Switch Announcement frame.

Proposed Response Response Status W

PROPOSED REJECT. The REV-ma Channel Switch Announcement element has a length of 5 octets, and legacy stations would have unspecified behavior if the element indicated a length other than 3. There is no backward compatibility with TGh stations in this band, and only the ECSA is used.

CI 07 SC 7.4.1.6 P 13 L 4 # 440

"Parameswaran, Subra"

Comment Type TR Comment Status D

To maintain backwards compatibility, the existing CSA frame needs to be sent anyway, so it is more efficient to append new information to the existing CSA frame than define new channel switch related frame.

SuggestedRemedy

Remove this newly defined channel switch announcement related frame.

Proposed Response Response Status W

PROPOSED REJECT. The REV-ma Channel Switch Announcement element has a length of 5 octets, and legacy stations would have unspecified behavior if the element indicated a length other than 3. There is no backward compatibility with TGh stations in this band, and only the ECSA is used.

CI 07 SC 7.4.1.7 P 12 L 38 # 2006

Cypher, David

Comment Type TR Comment Status X

There is no Action Value field in Figure 117b. There is only an Action field.

SuggestedRemedy

For consistency add value after Action in the Figure. NOTE: This inconsistency also exists for Figure 117a and 7.4.1.6 (however it was not commented on in a previous ballot.)

Proposed Response Response Status W

PROPOSED ACCEPT.

CI 09 SC 9.8.3 P 13 L 12 # 2013

Ecclesine, Peter

Comment Type TR Comment Status X

The 802.11-2007 standard is silent about parsing the Country Information element information, and the statements should apply to any station when dot11RegulatoryClassesImplemented is true.

SuggestedRemedy

Remove "and dot11LCIDSERequired is true" from the first sentence, and add a PICS capability tests about Clause 9.8.3 to A.4.12.

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE. Will Remove "and dot11LCIDSERequired is true" from the first sentence, and add a PICS capability tests about Clause 9.8.3 to A.4.10.

CI 09 SC 9.8.3 P 13 L 12 # 2074

Trainin, Solomon

Comment Type TR Comment Status X

As it is stated in "When dot11RegulatoryClassesImplemented is true and dot11LCIDSERequired is true, the following statements apply:" the defined rules applies to the STA that enables the Dependent Station Enablement procedures only. It seems that the rules may be useful for any station that operates with regulatory classes

SuggestedRemedy

Extend the rules for any station that operates with regulatory classes

Proposed Response Response Status W

PROPOSED ACCEPT.

CI 09 SC 9.8.4 P 13 L 42 # 2015

Ecclesine, Peter

Comment Type TR Comment Status X

The 802.11-2007 standard is silent about resolving situations where the Country Information element is received by an unassociated station, and the statement should apply to any station when dot11RegulatoryClassesImplemented is true.

SuggestedRemedy

Remove "and dot11LCIDSERequired is true" from the sentence, and change PICS A.4.13 RC5 accordingly.

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE. Will Remove "and dot11LCIDSERequired" from the fourth sentence, "and dot11LCIDSERequired is true" from the sixth sentence, and change PICS capability tests about Clause 9.8.4 in A.4.13.

Cl 09 SC 9.8.4 P 13 L 48 # 2014

Ecclesine, Peter

Comment Type TR Comment Status X

The 802.11-2007 standard is silent about resolving situations where the received Max Transmit Power Level differs from the Transmit Power limit indicated by the Regulatory Class, and the statement should apply to any station when dot11RegulatoryClassesImplemented is true.

SuggestedRemedy

Remove "and dot11LCIDSERequired is true" from the sentence, and change PICS A.4.13 RC6 and RC7 accordingly.

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE. Will Remove "and dot11LCIDSERequired" from the fourth sentence, "and dot11LCIDSERequired is true" from the sixth sentence, and change PICS capability tests about Clause 9.8.4 in A.4.13.

Cl 09 SC 9.8.4 P 13 L 49 # 2012

Ecclesine, Peter

Comment Type ER Comment Status D

Typo 'dot11LCSDSERequired' should be 'dot11LCIDSERequired'

SuggestedRemedy

Per comment

Proposed Response Response Status W

PROPOSED ACCEPT.

Cl 10 SC 10.3.10.1.2 P 20 L 15 # 2009

Ecclesine, Peter

Comment Type ER Comment Status D

All Type of other entries in the parameter table are textual, while the Valid range entries point to definition clauses. For consistency with the other entries, change the Type to 'As defined in the DSE registered location element.'

SuggestedRemedy

Per comment

Proposed Response Response Status W

PROPOSED ACCEPT.

Cl 10 SC 10.3.10.1.2 P 20 L 15 # 2019

Ecclesine, Peter

Comment Type ER Comment Status D

The verb in the MLME-START.request was wrong in D2.0, and should be 'for', not 'from'

SuggestedRemedy

Per comment

Proposed Response Response Status W

PROPOSED ACCEPT.

Cl 10 SC 10.3.10.1.2 P 20 L 16 # 2005

Cypher, David

Comment Type ER Comment Status X

Why is there a lack of consistency with the entries under Type and Valid range for this item that use specific subclause references, while in all previous similar items, generic descriptive text is used instead?

SuggestedRemedy

Either correctly point (link/reference) these items in all 10.3.XXX by using subclause references, or replace this single instance with the generic non-descriptive text. For clarity the former is requested.

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE. Will change Type to 'As defined in the DSE registered location element', and Valid range to 'As defined in 7.3.2.49' in all the other Clause 10 entries for DSE registered location and 7.3.2.51 for SupportedRegulatoryClasses.

Cl 11 SC 11.1 P 26 L 1 # 293

"Levy, Joseph"

Comment Type TR Comment Status A

This section redefines the meaning of BSA to be a geographically defined service area corresponding to the regulatory requirements. I do not believe that this was the original intent of the term and this new definition will confuse the meaning of the original term. Therefore a new term should be introduced to define the geographic service area enabled by an enabling station.

SuggestedRemedy

I suggest DSE-SA

Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE. As the term is not used outside this subclause, there is no need to create a new one. We spell out DSE Service Area in the title and sentences of the subclause.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general COMMENT STATUS: D/dispatched A/accepted R/rejected RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn SORT ORDER: Clause, Subclause, page, line

Cl 11 SC 11.10.3 P 26 L 37-3 # 9

"Amann, Keith"

Comment Type TR Comment Status D

The implication of this poorly worded statement implies that every station will respond to a probe request containing a DSE registered location element with a Probe Response. Based on my somewhat limited understanding of this standard it appears that enabling and fixed stations are the equivalent of an access point. If this is true then this requirement appears to conflict with the "implied" requirement of clause 11.1.3.2.1 (802.11ma-D9.0, Sending a probe response) that the AP is the only device to respond to a probe request in a BSS.

SuggestedRemedy

Add appropriate clarifying text to the statement which differentiates the appropriate behavior which should occur for each of the different types of environments that a dependent device could find itself in.

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE. The rewritten clause will not mention Probe Request nor Probe Response

Cl 11 SC 11.10.3 P 26 L 44 # 265

"Kwak, Joe"

Comment Type TR Comment Status D

Requiring a dependent STA to transmit to self a Probe response after each transmission is ridiculous. Perhaps it would be better to transmit such a Probe response every 256 transmissions or receptions. Where does this "requirement" come from? I find no FCC rule requiring DSE enabled STAs to broadcast the source of their enablement.

SuggestedRemedy

P26L44 change "whenever the sum modulo [256] changes" to "whenever the sum modulo [256] decreases indicating count rollover". This makes more sense, but still might be excessive.

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE. The rewritten clause will not mention Probe Request nor Probe Response. The three counters increment when ACKs or frames or fragments are transmitted, allowing the scheduling of DSE registered location frames in relation to the number of transmissions, rather than as a function of time. Text changed to "and schedule this Action frame to be sent to the broadcast address using normal frame transmission rules, whenever the sum modulo dot11DSETransmitDivisor has a remainder of zero."

Cl 11 SC 11.14 P 25 L 35 # 2052

Myles, Andrew

Comment Type TR Comment Status X

This is similar comment to one I made in the last LB that was not addressed because I accidently marked it as not required

My understanding of the intent of 11y is as follows:

- \* Dependent AP hears enabling AP
- \* Dependent AP registers with enabling AP, either over the air or via wire (noting the dependent AP may be a low power device unable to communicate with the enabling AP)
- \* Enabling AP accepts registration from dependent AP and allocates unique identity to dependent AP
- \* Dependent STA hears enabling AP, either over the air or via wire
- \* Dependent STA registers with enabling AP, either over the air or via wire (noting the dependent AP may be a low power device unable to communicate with the enabling AP)
- \* Enabling AP accepts registration from dependent STA and allocates unique identity to dependent STA
- \* Both the dependent AP and the dependent STA may operate normally while they regularly hear the enabling AP

However, if this understanding is correct then there are lots of unanswered questions in the draft

- \* Where is all this described in the text?
- \* What protocol is used for a dependent STA or a dependent AP to communicate with the enabling AP, over the wire (possibly in a different subnet) or over the air?
- \* Is the dependent STA allowed to associate with the dependent AP for the purpose of registering over the wire with the enabling AP? The text in 11.14.3 implies not.
- \* ...

SuggestedRemedy

The text needs to be completely rewritten to describe intent completely

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE. Will rewrite to remove concurrent associations.

Cl 11 SC 11.14 P 25 L 50 # 2056  
Myles, Andrew

Comment Type **TR** Comment Status **X**  
The text refers to "frequency band"

However, "frequency band" is not defined

*SuggestedRemedy*

Define "frequency band" in this context

Proposed Response Response Status **W**

PROPOSED ACCEPT IN PRINCIPLE. Frequency bands is undefined in the base standard and appears 18 times. Will rewrite 11.14 text being commented on to remove it.

Cl 11 SC 11.14 P 25 L 50 # 2057  
Myles, Andrew

Comment Type **TR** Comment Status **X**  
The text defines various parameters indexed by frequency band

However they do not seem to be indexed by frequency band in the MIB.

*SuggestedRemedy*

Fix, or explain why not

Proposed Response Response Status **W**

PROPOSED ACCEPT. Will rewrite to remove apparent MIB indexing.

Cl 11 SC 11.14 P 25 L 64 # 2055  
Myles, Andrew

Comment Type **TR** Comment Status **X**  
Page 40 says the DSE procedures (defined in 11.14) are only used when dot11DSERequired is true

However, line 64 covers the case when dot11DSERequired is false

*SuggestedRemedy*

Remove reference to dot11DSERequired when false

Proposed Response Response Status **W**

PROPOSED ACCEPT.

Cl 11 SC 11.14 P 26 L 32 # 2058  
Myles, Andrew

Comment Type **TR** Comment Status **X**  
The draft seems to define measurement requests and responses.

However, there is no description in 11.14 on how this should occur

*SuggestedRemedy*

Provide a description in 11.14 on how the measurements are intended to be used

Proposed Response Response Status **W**

PROPOSED ACCEPT IN PRINCIPLE. Will put usage overview description in 11.14.1.

Cl 11 SC 11.14.1 P 23 L 11 # 1144  
"Nanda, Sanjiv"

Comment Type **TR** Comment Status **D**  
There is a problem with the concept of a STA associating with an enabling AP for "enablement" and with another local AP's BSS. The need for this use case is clear since we want to enable communications with the local AP by providing a signal from the enabling AP.

*SuggestedRemedy*

Define a separate management mechanism called enablement that is provided by an Enablement Server, akin to AAA. Only the "beacon" from the Enablement Server needs to be heard over the air. The Enablement message exchange occurs through the local AP, but the connection between the local AP and the enablement server can use either 11y MAC/PHY or any other medium? The enablement procedure needs new management frames, specification, as well as clarification whether the AP to Enablement Server communication can occur over non-11y channels.

Proposed Response Response Status **W**

PROPOSED REJECT. Reject: based on discussion and editorial instructions in 07/0801r0; "Commenter is encouraged to propose text that would satisfy comment"

Cl 11 SC 11.14.3 P 27 L 1 # 2059

Myles, Andrew

Comment Type TR Comment Status X

The text provides a picture of a "typical" state machine.

Why does the draft need a "typical" state machine?

SuggestedRemedy

Remove diagram or provide better context

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE. a picture is sometimes worth 1000 words, and 802.11-2007 Figures 15.7, 15.9, 17.15, 17.7, 18.8 and 18.10 show typical state machines. The state machine diagram clarifies the decision to change states, and its consequences.

Cl 11 SC 11.14.3 P 27 L 42-4 # 2040

Hiertz, Guido

Comment Type TR Comment Status X

A station can use active or passive scanning. With passive scanning, a STA does not transmit any frames. It solely seeks for beacon frames. With active scanning, a STA transmits probe request frames after some period the WM is detected as idle.

"The current text reads "For DSE, the following statements apply: A STA with dot11DSERequired set to true shall not operate in an infrastructure BSS or IBSS unless it has received a Beacon frame or Probe Response frame from an enabling AP with the Spectrum Management bit set to 1 in the Capability Information field, and with the RegLocDSE bit set to 1 in the DSE registered location element."

To receive a Probe Response the STA needs to transmit a Probe Request. Once it has transmitted a Probe Request in search of an AP it may have already violated the regulatory limitations.

SuggestedRemedy

Do not allow active scanning when the STA is known to operate in a frequency band that requires an enabling AP to be allowed to transmit.

Therefore, change the text accordingly to not to allow a station to search for APs using Probe Request frames.

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE. will remove Probe Response from unenabled state, but retain Probe Request/Probe Response in enabled state, for use when dot11DSERenewalTime limit approaches.

Cl 11 SC 11.14.3 P 28 L 7 # 2060

Myles, Andrew

Comment Type TR Comment Status X

The text includes "count the sum"

This makes no sense

SuggestedRemedy

Recast sentence to remove "count the sum"

Proposed Response Response Status W

PROPOSED ACCEPT.

Cl 11 SC 11.14.3 P 35 L 49 # 1003

"Amann, Keith"

Comment Type TR Comment Status D

The paragraph states that "A STA with dot11DSERequired set to true shall not operation in an infrastructure BSS or IBSS unless it has received a Beacon frame or Probe Response frame from an enabling AP...". The following paragraph goes on to state that an STA that is not associated with an enabling AP shall not transmit except to authenticate and associate. So, how does a STA with dot11DSERequired set to true operating in an IBSS start an IBSS? According to this text it isn't allowed to transmit until is has received a Beacon from an enabling AP, but in an IBSS there is no AP. Furthermore, these two paragraphs would imply that the STA is also not able to send probe request messages because they don't fall into the category of authentication or association, so if it is not currently hearing beacons it is also unable to probe to locate service.

SuggestedRemedy

Clarify the text as to how an STA can start an IBSS by indicating that it is permissible for the STA to start the IBSS if it is either configured for that mode, or has fallen back to IBSS mode after attempting to find an enabling AP, and in this case that it is permissible for the STA to transmit an IBSS beacon. Further clarify the text to state whether it is permissible for the STA to send probe requests or not when attempting to locate an enabling AP.

Proposed Response Response Status W

PROPOSED REJECT. Reject: based on discussion and editorial instructions in 07/0801r0; "The first suggested remedy is illegal in US 3650 MHz band, as all dependent stations must directly receive and decode an enabling signal before first transmission, as stated in next entry in dashed list."

Cl 11 SC 11.9.7.1 P 24 L 12 to # 441

"Parameswaran, Subra"

Comment Type TR Comment Status D

Regulatory class -unaware legacy devices can not switch to the new channel properly according to these defined rules.

*SuggestedRemedy*

CSA frame should always be sent to ensure the proper channel switch of legacy devices. When a new regulatory class information needs to be communicated, it can be appended to the existing CSA frame in the format of a new information IE.

Proposed Response Response Status W

PROPOSED REJECT. There are no legacy devices that support CSA that perform 'proper channel switch' as it was undefined in the base standard or amendment h. We adopt the TGn D2 variable dot11ExtendedChannelSwitchImplemented.

Cl 11 SC 11.9.7.1 P 24 L 23 # 2075

Trainin, Solomon

Comment Type TR Comment Status X

Using of an Extended Channel Switch Announcement element and frame and a Channel Switch Announcement element and frame actually will present the same information so it is not clear why the use of the Extended Channel Switch Announcement element and frame is mandated. The same comment applies to 11.9.7.2

*SuggestedRemedy*

Explain clearly when each of the information elements and frames should be used and why

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE. The change in regulatory class is the information that differs between ECSA and CSA. The only cases where regulatory class is changed and both ECSA and CSA are sent, are when the requirements signified by the new regulatory class are met by all STAs that act on the Channel Switch Announcement.

Cl 11 SC 11.9.7.1 P 24 L 32 # 2077

Wang, Qi

Comment Type TR Comment Status X

"If dot11ExtendedChannelSwitchImplemented is false, the AP shall send the Channel Switch Announcement and frame, or both the Extended Channel Switch Announcement and the Channel Switch Announcement elements and frames."

*SuggestedRemedy*

If doc11ExtendedChannelSwitchImplemented is false, how can an AP send both Extended Channel Switch Announcement and the Channel Switch Announcements and frames since the AP does not have the Extended Channel Switch capability? Section 11.9.7.1 is under clause 11 for DFS in 5Ghz band, do the rules specified here also apply to the operation in other bands (e.g. 2.4Ghz and 3.65Ghz)? Clarify.

Proposed Response Response Status W

PROPOSED REJECT. No further clarification needed. The fourth sentence of 11.9 allows DFS procedures to be used in other bands. Other text makes their use mandatory for operation in other bands.

\* The STA may choose to implement ECSA without setting dot11ExtendedChannelSwitchImplemented to true  
 \* 802.11n specifies in 11.9.8 that dot11ExtendedChannelSwitchImplemented shall be true for HT STAs operating in either or both of the 2.4 and 5 GHz bands. The 3.65 band is covered by TGy. Comment lacks specific objections with proposed resolution in sufficient detail so that the specific wording of the changes that will cause the negative voter to change his or her vote to "approve" can readily be determined.

Cl 11 SC 11.9.7.1 P 24 L 38 # 2076

Trainin, Solomon

Comment Type TR Comment Status X

Paragraph that starts at line 38 does not define behavior of the Extended Channel Switch Announcement element

*SuggestedRemedy*

Define behavior for the Extended Channel Switch Announcement element

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE. Will change initial text of second paragraph to "In the following text:" and make corresponding change to 11.9.7.2. Commenter writes "add the following text before paragraph the starts with "An AP shall inform associated STAs":

In the following text, wherever Channel Switch Announcement is referred to both the Extended Channel Switch Announcement and Channel Switch Announcement should be used as defined in 1) and 2)".



Cl 11 SC 11.9.7.2 P 24 L 64 # 2078  
Wang, Qi

Comment Type TR Comment Status X

"If dot11ExtendedChannelSwitchImplemented is false, the DFS shall send the Channel Switch Announcement and frame, or both the Extended Channel Switch Announcement and the Channel Switch Announcement elements and frames."

SuggestedRemedy

If doc11ExtendedChannelSwitchImplemented is false, how can a DFS owner send both Extended Channel Switch Announcement and the Channel Switch Announcements and frames since the DFS owner does not have the Extended Channel Switch capability? Section 11.9.7.2 is under clause 11 for DFS in 5Ghz band, do the rules specified here also apply to the operation in other bands (e.g. 2.4Ghz and 3.65Ghz)? Clarify.

Proposed Response Response Status W

PROPOSED REJECT. No further clarification needed. The fourth sentence of 11.9 allows DFS procedures to be used in other bands. Other text makes their use mandatory for operation in other bands.

\* The STA may choose to implement ECSA without setting dot11ExtendedChannelSwitchImplemented to true

\* 802.11n specifies in 11.9.8 that dot11ExtendedChannelSwitchImplemented shall be true for HT STAs operating in either or both of the 2.4 and 5 GHz bands. The 3.65 band is covered by TGy. Comment lacks specific objections with proposed resolution in sufficient detail so that the specific wording of the changes that will cause the negative voter to change his or her vote to "approve" can readily be determined.

Cl 11 SC 11.9.7.2 P 25 L 42 # 442  
"Parameswaran, Subra"

Comment Type TR Comment Status D

Legacy devices that are regulatory class -unaware can not switch to the new channel properly according to these defined rules.

SuggestedRemedy

CSA frame should always be sent to ensure the proper channel switch of legacy devices. When a new regulatory class information needs to be communicated, it can be appended to the existing CSA frame in the format of a new information IE.

Proposed Response Response Status W

PROPOSED REJECT. There are no legacy devices that support CSA that perform 'proper channel switch' as it was undefined in the base standard or amendment h. We adopt the TGn D2 variable dot11ExtendedChannelSwitchImplemented.

Cl 11 SC 11.9.7.3 P 22 L 25 # 1020  
"Chaplin, Clint"

Comment Type TR Comment Status D

"this Country." What is "this" country?

SuggestedRemedy

Please specify which, or what, "this" country is.

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE. Accept in Principle based on discussion in 07/0674: 'operating with, for this Country (7.3.2.9)'.

Cl 11 SC 11.9.7.3 P 26 L 16 # 2002  
Chaplin, Clint

Comment Type TR Comment Status X

"The List of Regulatory Class(es) field shall list in ascending order all Regulatory Classes that the STA is capable of operating with, for this Country (7.3.2.9)." "Country" is still not defined to my satisfaction.

SuggestedRemedy

"The List of Regulatory Class(es) field shall list in ascending order all Regulatory Classes that the STA is capable of operating with, for the Country that is specified in the Country information element (7.3.2.9)."

Proposed Response Response Status W

PROPOSED ACCEPT.

Cl 17 SC 17.1 P 27 L 12 # 13  
"Amann, Keith"

Comment Type TR Comment Status D

Clause 19 contains references that point back to clause 17 for purposes of defining OFDM operation at 2.4GHz. The proposed addition of the statement "This OFDM system shall not be operated in the 2.4 GHz frequency band" creates a conflict with the statements in clause 19 that refer to clause 17, which now states that none of this applies (thus creating a conflict within the standard).

SuggestedRemedy

Remove the statement regarding operation on the 2.4GHz band, or change the statement to indicate that specific details for the use of OFDM are in clause 19, and that it should be referenced first when examining 2.4GHz operation.

Proposed Response Response Status W

PROPOSED ACCEPT.

Cl 17 SC 17.3.10.5 P 31 L 10-1 # 443

"Parameswaran, Subra"

Comment Type TR Comment Status D

The definition of the threshold is not quite correct.

*SuggestedRemedy*

Change the sentence to: ""If the preamble portion was missed, the receiver shall hold the CS signal busy for any signal 20 dB or more above the minimum modulation and coding rate sensitivity (greater or equal than -62 dBm for 20 MHz channel spacing, greater or equal than -65 dBm for 10 MHz channel spacing, and greater or equal than -68 dBm for 5 MHz channel spacing).

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE. Annex I will refer to 10 Db more restrictive ED\_THRESHOLD.

Cl 17 SC 17.3.10.5 P 32 L 32-4 # 2026

Erceg, Vinko

Comment Type TR Comment Status D

"For the optional CCA-ED, the OFDM PHY shall provide the additional capability to perform CCA-ED. The CCA shall indicate BUSY if there is any energy above the ED threshold or CS." In these sentence there is a "shall" statement for "optional". If something is "optional" then usage of "shall" seems to be incorrect.

*SuggestedRemedy*

Change the sentence to: "For the optional CCA-ED, the OFDM PHY provides the additional capability to perform CCA-ED. The CCA indicates BUSY if there is any energy above the ED threshold or CS."

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

Cl 17 SC 17.3.12 P 32 L 9 # 266

"Kwak, Joe"

Comment Type TR Comment Status D

A standardized ED mechanism cannot rely on RSSI which is not quantitatively specified and has no accuracy requirement. RCPI is needed for uniform ED operation within a DSE BSA

*SuggestedRemedy*

P32L9 change "RSSI" to "RCPI".

Proposed Response Response Status W

PROPOSED REJECT. RSSI is currently used in clause 17 for CCA. 11y D1.0 maintains this approach.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general

COMMENT STATUS: D/dispatched A/accepted R/rejected RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn

SORT ORDER: Clause, Subclause, page, line

Cl 17 SC 17.3.6 P 29 L 58-6 # 2024

Erceg, Vinko

Comment Type TR Comment Status D

"For improved spectrum sharing in some bands, an optional Clear Channel Assessment-Energy Detect (CCAED) may be used. The behavior class indicating CCA-ED is given in Table 1.3. The regulatory classes requiring the corresponding CCA-ED behavior class are given in Annex J." In this paragraph optional CCA-ED is defined that actually becomes mandatory for the 3.65 GHz band in Annex I and J. I don't think that this is a good way of writing a spec: optional that is actually mandatory is very confusing.

*SuggestedRemedy*

In some way relate CCA-ED to only regulatory classes in Annex I and J that are required to have CCA-ED, i.e. 3.65 GHz band. Wording "optional CCA-ED" is very confusing. Avoid using optional in the text. I understand that this may be a tricky task but I believe that it has to be done.

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE.

Cl 17 SC 17.3.9.2 P 26 L 62 # 1006

"Amann, Keith"

Comment Type TR Comment Status D

The text calls states that at 15MHz frequency offset the transmit spectrum will have a -40dBr bandwidth when using 20MHz channel spacing. Figure y254a (next page) appears to indicate that this is -45 dBr.

*SuggestedRemedy*

Correct either the text or the figure as required to ensure that the text and the figure are consistent with regard to the bandwidth number in this case.

Proposed Response Response Status W

PROPOSED ACCEPT.

Cl 17 SC 17.3.9.2 P 29-30 L 11 # 12

"Amann, Keith"

Comment Type **TR** Comment Status **D**

It appears that the task group felt it necessary to duplicate information which was contained in Annex I related to spectral mask. Based on some reasonable comparison of these two sections it appears to simply be a duplication of information.

*SuggestedRemedy*

Remove the additional changes made to clause 17.3.9.2. If there is some distinction made with these changes then I suggest incorporating them into Annex I rather than creating what appears to be a duplication of information that is subject to synchronization issues in the future.

Proposed Response Response Status **W**

PROPOSED ACCEPT IN PRINCIPLE. CID 444 removes them from Annex I, (informative) which should be requirements from regulation, not default PHY behavior. Default PHY requirements should be specified uniquely in PHY clauses.

Cl 17 SC 17.3.9.2 P 30 L 25 # 2071

Stephens, Adrian

Comment Type **TR** Comment Status **X**

I remember the discussion in the group about what "more stringent" means. As I remember it, the intent of the resolution was to require the actual mask to be the more stringent of regulatory and default masks at all frequency points.

The outcome in D3.0 is different. Provided that one of the regulatory mask points is more stringent than the default, the entire regulatory mask will be used, even if all its other points are more relaxed.

*SuggestedRemedy*

Replace with something like: "In the absence of a regulatory mask, use the mask defined here. In presence of a regulatory mask, the device shall meet both the requirements of the regulatory mask and the mask defined here -i.e., its emissions shall be no higher at any frequency offset than the minimum of the values specified in the regulatory and default masks."

Proposed Response Response Status **W**

PROPOSED ACCEPT IN PRINCIPLE.

Cl 17 SC 17.4.1 P 33 L 16 # 2017

Ecclesine, Peter

Comment Type **ER** Comment Status **D**

Table 146 heading is partially underlined, and should not be

*SuggestedRemedy*

Per comment

Proposed Response Response Status **W**

PROPOSED ACCEPT.

Cl 17 SC 17.5.5.9.1 P 35 L 19 # 269

"Kwak, Joe"

Comment Type **TR** Comment Status **D**

A standardized ED mechanism cannot rely on RSSI which is not quantitatively specified and has no accuracy requirement. RCPI is needed for uniform ED operation within a DSE BSA

*SuggestedRemedy*

Change "RSSI" to "RCPI".

Proposed Response Response Status **W**

PROPOSED REJECT. RSSI is currently used in clause 17 for CCA. 11y D1.0 maintains this approach.

Cl 17 SC 17.5.5.9.2 P 36 L 1 & 1 # 267

"Kwak, Joe"

Comment Type **TR** Comment Status **D**

A standardized ED mechanism cannot rely on RSSI which is not quantitatively specified and has no accuracy requirement. RCPI is needed for uniform ED operation within a DSE BSA

*SuggestedRemedy*

Change "RSSI" to "RCPI", 3 places in table at line 1 and two places in table at line 16.

Proposed Response Response Status **W**

PROPOSED REJECT. RSSI is currently used in clause 17 for CCA. 11y D1.0 maintains this approach.

Cl A SC A.4.10 P 35 L 54 # 2003

Chaplin, Clint

Comment Type TR Comment Status X

There is an editor's instruction here to add entries into a table. However, the text here does not contain any entries to be added.

SuggestedRemedy

If there are entries to be added, put those entries into the draft. If there are no entries to be added, delete the editor's instruction.

Proposed Response Response Status W

PROPOSED REJECT. Frontmatter Page v, Editorial Note 3 says that tables may "float" (this one floated to page 36, line 2), and "Please do not report it as a defect in the draft."

Cl A SC A.4.17 P 48 L 5 # 434

"Palm, Stephen"

Comment Type TR Comment Status D

This clause does not have explanatory text

SuggestedRemedy

Add text to introduce the clause

Proposed Response Response Status W

PROPOSED REJECT. In REV-ma Annex A.4, none of the prior clauses have explanatory text.

Cl A SC A.4.8 P 35 L 15 # 2027

Erceg, Vinko

Comment Type TR Comment Status D

Is "CCA-ED energy detect with OFDM CS" needed?

SuggestedRemedy

If not required, please remove "CCA-ED energy detect with OFDM CS" from the table.

Proposed Response Response Status W

PROPOSED ACCEPT.

Cl Annex SC A.4.17 P 37 L 57 # 2023

Ecclesine, Peter

Comment Type TR Comment Status X

PICS A.4.17 DSE4, Extended Channel Switch procedure, should be part of A.4.12, after SM20, and depending on CF10.

SuggestedRemedy

Per comment

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE. CF15 requires CF10, so CF10 does not need to be in the Status field when DSE4 is moved to A.4.12.

Cl Annex SC Annex D P 40 L 12 # 2044

Myles, Andrew

Comment Type TR Comment Status X

The definitions of various parameters uses the clause "The capability is disabled otherwise"

However, the definition provides semantics rather than describing a capability and so the "The capability is disabled otherwise" makes no sense

SuggestedRemedy

In each case, properly define the semantics in the "otherwise case"

Proposed Response Response Status W

PROPOSED ACCEPT IN PRINCIPLE. Of the four occurrences of the phrase in Annex D text, two indicate capabilities and two are indications of requirements. The description text of dot11RegLocRequired and dot11DSERequired will be changed, and commas will be added after "disabled" in all occurrences.

Cl Annex SC Annex D P 40 L 19 # 2016

Ecclesine, Peter

Comment Type TR Comment Status X

All the dot11StationConfigTable elements and dot11LCIDSE Table entries should be read-only, as they can only be changed from their default values by a licensed operator.

SuggestedRemedy

Change dot11LCIDSERequired, dot11DSERequired and all accessible parts of dot11LCIDSETable from read-write to read-only.

Proposed Response Response Status W

PROPOSED ACCEPT.

**Cl Annex SC Annex D P 40 L 28 # 2041**  
 Myles, Andrew  
**Comment Type ER Comment Status X**  
 dot11RecLocRequired should be dot11RegLocRequired  
**SuggestedRemedy**  
 Fix  
**Proposed Response Response Status W**  
 PROPOSED ACCEPT.

**Cl Annex SC Annex D P 40 L 28 # 2047**  
 Myles, Andrew  
**Comment Type TR Comment Status X**  
 The name of "dot11RgLocRequired" suggests that something is required.  
 However the definition provides no hint as to what is required  
**SuggestedRemedy**  
 Change the definition so that it is clear what is required  
**Proposed Response Response Status W**  
 PROPOSED ACCEPT IN PRINCIPLE. the description text will be clarified or deleted

**Cl Annex SC Annex D P 40 L 40 # 2048**  
 Myles, Andrew  
**Comment Type TR Comment Status X**  
 The name of "dot11DSERequired" suggests that something is required.  
 However the definition only hints that the station is required to be enabled by an "enabling AP"  
**SuggestedRemedy**  
 Change the definition so that it is clearer what is required  
**Proposed Response Response Status W**  
 PROPOSED ACCEPT IN PRINCIPLE. the description text will be clarified

**Cl Annex SC Annex D P 41 L 57 # 2007**  
 Ecclesine, Peter  
**Comment Type ER Comment Status D**  
 LB104 accepted comment 1085 asked that RFC-4181 best practices be followed in Annex D, yet dot11RegLocAgreement, dot11RegLocDSE and dot11DependentSTA are type INTEGER, when they should be TruthValues per RFC-4181 4.6.1.9  
**SuggestedRemedy**  
 Change to TruthValues, and revise DESCRIPTIONs accordingly  
**Proposed Response Response Status W**  
 PROPOSED ACCEPT.

**Cl Annex SC Annex D P 42 L 34 # 2008**  
 Ecclesine, Peter  
**Comment Type TR Comment Status X**  
 dot11LCIDSETable elements that are defined in RFC-3825 should be stored in the MIB big-endian, and the DESCRIPTIONs changed to say they are big-endian.  
**SuggestedRemedy**  
 Alter DESCRIPTIONs of dot11LCIDSELatitudeResolution, dot11LCIDSELatitudeInteger, dot11LCIDSELatitudeFraction, dot11LCIDSELongitudeResolution, dot11LCIDSELongitudeInteger, dot11LCIDSELongitudeFraction, dot11LCIDSEAltitudeType, dot11LCIDSEAltitudeResolution, dot11LCIDSEAltitudeInteger, dot11LCIDSEAltitudeFraction, and dot11LCIDSEDatum per comment.  
**Proposed Response Response Status W**  
 PROPOSED ACCEPT.

**Cl Annex SC Annex D P 44 L 48 # 2018**  
 Ecclesine, Peter  
**Comment Type ER Comment Status D**  
 dot11RegLocAgreement and dot11RegLocDSE DESCRIPTIONs refer to RegLoc STA, but should refer to Enabling AP  
**SuggestedRemedy**  
 Change RegLoc STA's to Enabling AP's in both descriptions  
**Proposed Response Response Status W**  
 PROPOSED ACCEPT.

Cl Annex I SC Annex I P 60 L 1 # 272  
"Kwak, Joe"

Comment Type TR Comment Status D  
Cannot delete "base" from 5th row of table. Baseline spec uses term licensed here. Base station in 7 is directly related to mobile STA in 8.

SuggestedRemedy  
Change 5th row of Table I.3 from "enabling station" to "licensed base/enabling station".

Proposed Response Response Status W  
PROPOSED ACCEPT IN PRINCIPLE. Will use Tgy terms on new rows for ' Fixed STA and Enabling AP' and 'Dependent STA'

Cl Annex I SC Annex I P 60 L 1 # 271  
"Kwak, Joe"

Comment Type TR Comment Status D  
New rule 90.1333 does not prohibit IBSS operation, but merely defines restrictions on mobile to mobile communications.

SuggestedRemedy  
Change 3rd row of Table I.3 from "(IBSS) prohibited" to "(IBSS) restrictions".

Proposed Response Response Status W  
PROPOSED ACCEPT.

Cl Annex I SC Annex I P 60 L 1 # 273  
"Kwak, Joe"

Comment Type TR Comment Status D  
DSE STAs may be mobile or portable.

SuggestedRemedy  
Change 6th row of Table I.3 from "dependent mobile station" to "dependent mobile/portable station".

Proposed Response Response Status W  
PROPOSED ACCEPT IN PRINCIPLE. Will use Tgy terms on new rows for ' Fixed STA and Enabling AP' and 'Dependent STA'

Cl Annex I SC Annex I P 60 L 1 # 274  
"Kwak, Joe"

Comment Type TR Comment Status D  
Table I.3 modifications require change to last reserved row.

SuggestedRemedy  
Modify last row of table to reserve values 11-255.

Proposed Response Response Status W  
PROPOSED ACCEPT. Really 14-255 after 11k and CIDs 272 and 500.

Cl Annex J SC Annex J P 62 L # 11  
"Amann, Keith"

Comment Type ER Comment Status D  
The title of table J.1 was undated to reflect the addition of the new frequency, but there is an additional statement within the text of Annex J that states "The regulatory classes specified for 4.9 GHz and 5 GHz operation in the USA are enumerated in Table J.1" (802.11ma-D9.0, Annex J, Page 1151, line 34) which was not updated to correspond to the change. Although this statement is technically correct even with the 802.11y draft change, it becomes confusing that the new rows exist without a corresponding change here as well.

SuggestedRemedy  
Add additional editing instructions to update this statement in the base draft to reflect the addition of the new frequency band.

Proposed Response Response Status W  
PROPOSED ACCEPT.

Cl D SC D P 44 L 29 # 2004  
Cypher, David

Comment Type TR Comment Status X  
The Datum field in the DSE LCI from figure 85q, the DSE registered location from Figure 112z, and the text of 7.3.2.49 all indicate that this is a 3-bit field rather than the 8-bit field defined in RFC 3825. A previous comment 1206 from LB #104 was rejected when it was proposed to expand it to 8-bits, so that 802.11y would use without modification to RFC 3825. From 11-07-673r3 (page 12), the approved change for this item did not include changing the three-bit to 8-bit nor did it change the values from (0..7) to (0..255).

SuggestedRemedy  
Change 8-bit to three-bit and change (0..255) to (0.7) Thus reflecting the fact that the datum is using only 3-bits (thus 8 possible values (0..7)).

Proposed Response Response Status W  
PROPOSED ACCEPT IN PRINCIPLE. Commenter's email says "the simple fix is to change (0..255) to (1..3) after the INTEGER for the Datum MIB element"

Cl **General** SC **General** P1 L 0 # 1005  
 "Amann, Keith"

Comment Type **ER** Comment Status **D**

There seems to be an inconsistent use of TRUE/FALSE nomenclature. There are several locations in the document that previously read "true" that have been changed to "1", and similarly for "false" and "0", but not all of them were changed, and there doesn't appear to any good reason for which ones changed and which ones didn't.

SuggestedRemedy

Make the use of "true/false", or "1/0", consistent throughout the document.

Proposed Response Response Status **W**

PROPOSED ACCEPT IN PRINCIPLE. Accepted in Principle based on discussion in 07/0674r2

Cl **General** SC **General** P25 L 32 # 2061  
 Myles, Andrew

Comment Type **TR** Comment Status **X**

The description of the DSE procedures need a rewrite to make them much clearer and match the intent of the TG

SuggestedRemedy

It is hard to know how to rewrite the procedures until the intent of the TG is more obvious

Proposed Response Response Status **W**

PROPOSED ACCEPT IN PRINCIPLE. Comment appears to be a generalization of Comment 2052 by same commenter, which only addresses 11.14. Accepting 2052 and doing the supporting message formats causes changes to other clauses.

Cl **General** SC **General** P27 L 19 # 2042  
 Myles, Andrew

Comment Type **ER** Comment Status **D**

dot11AssociateFailHoldTime is used three times in the document.

It should be dot11DSEAssociateFailHoldTime'.

SuggestedRemedy

Fix

Proposed Response Response Status **W**

PROPOSED ACCEPT.

Cl **General** SC **General** P3 L 32 # 2011  
 Ecclesine, Peter

Comment Type **ER** Comment Status **D**

Editorial notes in the body of the clean draft should be removed, as they will not be in the draft forwarded to Sponsor Ballot, but can remain in the redlined version of the draft.

SuggestedRemedy

Remove EDITORIAL NOTEs from the body of the clean draft.

Proposed Response Response Status **W**

PROPOSED ACCEPT.

Cl **Table of** SC **Table of Contents** Px L 11 # 2010  
 Ecclesine, Peter

Comment Type **ER** Comment Status **D**

The 802.11-2007 standard does not list the tables in Clause 10, so delete them from P802.11y.

SuggestedRemedy

Per comment

Proposed Response Response Status **W**

PROPOSED ACCEPT.

**Moved: 802.11WG requests ExCOM conditional approval to forward P802.11y to Sponsor ballot.  
Moved: Kerry/O'Hara**

**Passes: 15/0/0**

5

5.15 ME 802.21 conditional approval for sponsor ballot - Gupta 10 02:02 PM





# P802.21 To Sponsor Ballot Conditional Approval

20 July, 2007



# Conditional Approval Rules

## Clause 20

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

## 15 July, 2007



Stage	Open	Close
WG Letter Ballot	March 31, 2006	April 30, 2006
WG Letter Ballot Recirc #1	October 06, 2006	October 23, 2006
WG Letter Ballot Recirc #2	December 04, 2006	January 03, 2007
WG Letter Ballot Recirc #3	February 04, 2007	February 19, 2007
WG Letter Ballot Recirc #4	April 12, 2007	April 27, 2007
WG Letter Ballot Recirc #5	June 30, 2007	July 15, 2007



# Vote Tally

Draft Ver	Approve	Disapprove	Total	Approval Ratio	Abstain	Ballots	Members	Return Ratio
D6.0	59	3	62	59/62 = 95.1%	1	63	72	63/72 = 87%

- No new Disapprove voters in LB-1e
- 3 Disapprove Voters with Comments
  - 42 Negative Comments submitted which constitute the 3 Disapprove Votes
  - WG resolved all 42 comments and the 3 voters have changed to Approve
- 1 Disapprove voter with NO Comments
  - Have not received any comments in last 2 re-circulations
  - Attempts to contact this individual have not resulted in a response
- Other Comments
  - 156 Editorial and Minor Technical Comments submitted
  - The WG resolved all of these (42+156) Comments in draft D7.0
- Draft D7.0 to be re-circulated for confirmation



# Voting Results



[http://www.ieee802.org/21/ballot\\_1.html](http://www.ieee802.org/21/ballot_1.html)

	LB #1	LB #1a	LB #1b	LB #1c	LB #1d	LB #1e	
						July-15	July-18
Draft	1.0	2.0	3.0	4.0	5.0	6.0	7.0
Total Voters	72						
Approve	14	18	28	40	46	59	63
Disapprove with Comments	39	42	33	21	15	3	0
Disapprove without Comments - Invalid	0	0	0	0	3	2	1
Abstain	5	1	1	1	1	1	1
Total Ballots	58	61	62	62	62	63	64
Approval %	26%	30%	46%	66%	75%	95%	100%
Return %	81%	85%	86%	86%	86%	87%	88%



# Comment Resolution

	LB #1	LB #1a	LB #1b	LB #1c	LB #1d	LB #1e	Total
<b>Draft</b>	<b>1.0</b>	<b>2.0</b>	<b>3.0</b>	<b>4.0</b>	<b>5.0</b>	<b>6.0</b>	
<b>Total comments Submitted</b>	<b>915</b>	<b>414</b>	<b>405</b>	<b>481</b>	<b>591</b>	<b>198</b>	<b>3004</b>
<b>Technical</b>	<b>579</b>	<b>287</b>	<b>303</b>	<b>341</b>	<b>410</b>	<b>141</b>	<b>2061</b>
<b>Editorial</b>	<b>336</b>	<b>127</b>	<b>102</b>	<b>140</b>	<b>181</b>	<b>57</b>	<b>943</b>
<b>Comments <b>NOT</b> part of Disapprove vote</b>	<b>469</b>	<b>212</b>	<b>237</b>	<b>287</b>	<b>330</b>	<b>156</b>	<b>1691</b>
<b>Comments part of Disapprove vote</b>	<b>446</b>	<b>202</b>	<b>168</b>	<b>194</b>	<b>261</b>	<b>42</b>	<b>1313</b>



# Comments that support the Remaining disapprove votes and Working Group responses

- None.
- No comments from the only remaining Disapprove voter.



# Confirmatory Email Messages



- *This is to confirm that I approve the LB #1e. Regards, -ajay (Ajay Rajkumar)*
- *Thanks for taking care of my 802.21 comments this week. Please note that I am approving the draft (in LB-1e) per the accepted comments and voting to move on into the SB process (cycles) - BR, Peretz Feder*
- *I approve of the current draft (in LB-1e) and I intend to become a sponsor ballot member. Regards, Fran (Francis O'Brien)*
- *The comment resolution procedure done on yesterday, July 17th 2007 was successful to resolve my issues. Therefore, I am approving our draft in LB-1e. Best Regards, Junghoon Jee*





# Schedule for Confirmation Ballot and Resolution Meeting



- July 26 Issue D7.0
- July 29 – Aug 13 Recirculation
- Sept 16- 20 Comment Resolution,  
if required at 802.21 #22



## 802.21 WG Motion

- Motion the 802.21 WG To develop and issue the Working Group Draft P802.21/D7.0, to authorize the WG Chair to forward P802.21/D7.0 to the EC for conditional approval to initiate a Sponsor Ballot on the Draft, to initiate a Working Group Letter Ballot confirmation recirculation to close around August 10, 2007, and to authorize the WG Chair to initiate a Sponsor Ballot on the Draft P802.21/D7.0
  - Moved By: Yoshi Ohba
  - Seconded By: Junghoon Jee
  
  - Yes: 27
  - No: 0
  - Abstain: 2
  
- Result: Motion Passes



# Motion



- To grant conditional approval, under Clause 20, to forward P802.21 to Sponsor Ballot
  - Moved: Vivek Gupta
  - Seconded: Tony Jeffree
  
  - Approve:
  - Disapprove
  - Abstain:
  
  - Result:

**Moved: To grant conditional approval, under Clause 20, to forward P802.21 to Sponsor Ballot.**  
**Moved: Gupta/Jeffree**

5 Steve asked which of the ballots termed “recirculations” were actually original ballots. Vivek clarified that “Recirculaton #4” was the first ballot that achieved 75% consensus. Each of the ballots up to this started with new voter pools.

**Passes: 15/0/0**

10 5.16 ME 802.3 revision conditional approval for sponsor ballot - Grow 5 02:06 PM

# P802.3, Revision status

---

- 802.3 Motion #3  
...IEEE 802.3 Working Group Chair request IEEE 802 EC grant conditional approval per IEEE 802 P&P Procedure 20 for IEEE 802.3ax (IEEE P802.3AX) Link Aggregation and IEEE 802.3ay (IEEE P802.3) revision to proceed to Sponsor Ballot.  
Y: 76, N: 0, A: 3
- 92% approval rate (7 negatives)
- 11 unresolved D1.0 comments, 5 unresolved D1.1 comments –  
<http://www.ieee802.org/3/axay/comments>

# **EC Motion – P802.3, Revision conditional to Sponsor ballot**

---

The LMSC EC grants conditional approval per LMSC P&P Clause 20 for P802.3 (802.3ay) sponsor ballot.

M: Bob Grow

S: Tony Jeffree

**Moved: The LMSC EC grants conditional approval per LMSC P&P Clause 20 for P802.3 (802.3ay) sponsor ballot.**

**Moved: Grow/Jeffree**

**5 Passes: 15/0/0**

5.17 ME 802.1AX conditional approval for sponsor ballot - Grow 5 02:09 PM

# Link Aggregation status

---

- 802.3 Motion #3  
...IEEE 802.3 Working Group Chair request IEEE 802 EC grant conditional approval per IEEE 802 P&P Procedure 20 for IEEE 802.3ax (IEEE P802.3AX) Link Aggregation and IEEE 802.3ay (IEEE P802.3) revision to proceed to Sponsor Ballot.  
Y: 76, N: 0, A: 3
- 4 unresolved D1.0 comments, no new D1.1 disapprove comments:  
<http://www.ieee802.org/3/axay/comments>
- 97% approval rate (3 disapproves)
- Substantive changes will be recirculated (years on normative references)



# **Motion – P802.1AX, Link Aggregation conditional to Sponsor ballot**

---

The LMSC EC grants conditional approval per LMSC P&P Clause 20 for P802.1AX (802.3ax) sponsor ballot.

M: Bob Grow

S: Tony Jeffree

**Moved: The LMSC EC grants conditional approval per LMSC P&P Clause 20 for P802.1AX (802.3ax) sponsor ballot.**

**Moved: Grow/Jeffree**

- 5 Bob will be sending requests for new patent letters of assurance (LOAs) to those that submitted blanket LOAs and those that submitted LOAs on link aggregation. David Law (PatCom chair) indicated that this is in the Standards Board Operations Manual.

**Passes: 15/0/0**

10

6.00		Executive Committee Study Groups, Working Groups, TAGs	-			
6.01	MI*	802.11 Direct link setup SG extension (1st renewal)	-	Kerry		
6.02	MI*	802.11 QoS extensions SG extension (1st renewal)	-	Kerry		
6.03	MI*	802.11 Very high throughput SG extension (1st renewal)	-	Kerry		
6.04	MI*	802.11 Video transport streams SG extension (1st renewal)	-	Kerry		
6.05	MI	802.15.4c China regulations SG extension (3rd renewal)	-	Heile	5	02:50 PM

## Executive Committee Actions-802.15 SG4c

- Move that the 802 Executive Committee approve extending the 805.15 Study Group 4c (SG4c) through the November 2007 Plenary Meeting.

Moved: Bob Grow

Second: Carl Stevenson

**Moved: that the 802 Executive Committee approve extending the 805.15 Study Group 4c (SG4c) through the November 2007 Plenary Meeting.**

**Moved: Grow/Stevenson**

- 5 Rick indicated that this is a contingency motion in case the PAR approved earlier in the meeting to be forwarded to NesCom was not subsequently approved.

**Passes: 15/0/0**

6.06 MI 802.15 Body area networking SG extension (2nd renewal) - Heile 5 02:20 PM

10

## Executive Committee Actions-802.15 SGBAN

- Move that the 802 Executive Committee approve extending the 805.15 Study Group BAN (SGBAN) through the November 2007 Plenary Meeting.

Moved: Steve Shellhammer

Second: Vivek Gupta

**Moved: that the 802 Executive Committee approve extending the 805.15 Study Group BAN (SGBAN) through the November 2007 Plenary Meeting.**

**Moved: Shellhammer/Gupta**

5

**Passes: 15/0/0**

6.07 MI 802.3 Higher speed SG extension (3rd renewal)

- Grow

5 02:21 PM

# HSSG Extension

---

- Deadlock on 40 Gb/s and 100 Gb/s was broken
  - Very strong consensus for going forward with a single PAR for both speeds
  - Objectives, 5C and PAR approved by 802.3
- P802.3ba PAR will be on the EC November list of PARs to be considered
- IEEE 802.3 motion: Y:83, N:0, A:3  
Move that the HSSG requests that IEEE 802.3 extend the Higher Speed Study Group.

**Moved: that the HSSG requests that the EC extend the Higher Speed Study Group through the November plenary.**

**Moved: Grow/Jeffree**

**5 Passes: 15/0/0**

6.08	MI*	802.3 Energy efficient Ethernet (2nd renewal)	-	Grow		
6.09			-			
6.10			-			
6.11			-			
6.12			-			
6.13	MI	802.15.4 MAC Enhancement SG approval	-	Heile	5	02:24 PM



# 15.4 MAC Enhancement Study Group

## 15.4 MAC Enhancement Study Group

**Motion that passed in the WG closing plenary (27/0/4):**

*That the IEEE 802.15 WG seek approval from the IEEE 802 EC to start a study group investigating 802.15.4-2006 MAC enhancements such as*

- *Support for Determinism*
- *Mixed service and power savings levels in one network (dynamic transmit power control)*
- *Frequency diversity for retransmissions for improved reliability*
- *Low duty cycle operation with beacons for power efficiency*
- *Distributed management of time slots and frequency hopping patterns for fast recovery from regional failures*
- *2ms per hop latency including 1 retransmission*
- *Direct communication between Reduced Functionality Devices in the network*

*that would allow the IEEE 802.15.4-2006 standard to better address the needs of wireless critical applications such as industrial control and alarm systems, waste water plant control and alarm systems, robotics, and last meter telecom services.*

## 15.4 MAC Enhancement Study Group

Move to approve the formation a Study Group in 802.15 to draft a PAR and 5C for MAC enhancements to 802.15.4

Moved: Steve Shellhammer

Second: Vivek Gupta

**Moved: to approve the formation a Study Group in 802.15 to draft a PAR and 5C for MAC enhancements to 802.15.4.**

**Moved: Shellhammer/Gupta**

**5 Passes: 15/0/0**

**6.14 MI 802.21 Security SG approval**

**- Gupta**

**5 02:26 PM**



# Request to form 802.21 Security SG



- Security-related signaling can add significant delays to Handover efforts and in many cases service continuity can not be met, in particular, for real-time applications
- Various presentations on this problem in the group over last year
  - [http://www.ieee802.org/21/doctree/2007-07\\_meeting\\_docs/21-07-0122-04-0000-Security\\_proposal.ppt](http://www.ieee802.org/21/doctree/2007-07_meeting_docs/21-07-0122-04-0000-Security_proposal.ppt) - by Yoshi Ohba et al
  - [http://www.ieee802.org/21/doctree/2007-01\\_meeting\\_docs/21-07-0024-00-0000-Security\\_Issues\\_in\\_Transition.ppt](http://www.ieee802.org/21/doctree/2007-01_meeting_docs/21-07-0024-00-0000-Security_Issues_in_Transition.ppt) by Jesse Walker
  - [http://www.ieee802.org/21/doctree/2007-03\\_meeting\\_docs/21-07-0127-00-0000-Hokey\\_802.21.ppt](http://www.ieee802.org/21/doctree/2007-03_meeting_docs/21-07-0127-00-0000-Hokey_802.21.ppt) by Madjid Nakhjiri
- WG Motion to request EC Approval for formation of Security SG
  - 28-0-2
  - Yoshi Ohba/Clint Chaplin (as potential SG Chair candidates)



# Motion to form 802.21 Security SG



- **Request the IEEE 802 Executive Committee to create an IEEE 802.21 study group to address security issues during handovers with the intent to create necessary PAR and 5 Criteria.**
  - Moved: Vivek Gupta
  - Seconded: Steve Shellhammer
  
  - Approve:
  - Disapprove
  - Abstain:
  
  - Result:

**Moved: to create an IEEE 802.21 study group to address security issues during handovers with the intent to create necessary PAR and 5 Criteria.**

**Moved: Gupta/Shellhammer**

- 5 Tony asked if liaison with the 802.1 security work was planned. Vivek indicated that they would.

**Passes: 15/0/0**

6.15 MI 802.21 Multi-radio power management SG approval - Gupta 5 02:31 PM



# Request to form 802.21 Multi-Radio Power Management Study Group



- Considerable power savings at the Mobile Device can be achieved using multi-radio power management by simply considering the multi-radio capability of mobile device and by using the active radio for signaling (paging, wake on wireless, location update etc.)
- Various presentations on this problem in the group over last year
  - [http://www.ieee802.org/21/doctree/2007-07\\_meeting\\_docs/21-07-0258-00-0000-Multi-Radio-Power-Management.ppt](http://www.ieee802.org/21/doctree/2007-07_meeting_docs/21-07-0258-00-0000-Multi-Radio-Power-Management.ppt) by Behcet et al
  - [http://www.ieee802.org/21/doctree/2006-07\\_meeting\\_docs/21-06-0701-00-0000-Media%20independent%20idle%20mode%20and%20paging.ppt](http://www.ieee802.org/21/doctree/2006-07_meeting_docs/21-06-0701-00-0000-Media%20independent%20idle%20mode%20and%20paging.ppt) by Muthu
  - [http://www.ieee802.org/21/doctree/2007-03\\_meeting\\_docs/21-07-0121-00-0000-Multi-Radio%20Paging.ppt](http://www.ieee802.org/21/doctree/2007-03_meeting_docs/21-07-0121-00-0000-Multi-Radio%20Paging.ppt) by Behcet/Phil/Emily et al
- WG Motion to request EC Approval for formation of PM SG
  - 27-0-10
  - Behcet Sarikaya/David Johnston (as potential SG Chair candidates)





# Motion to form 802.21 Security SG



- **Request the IEEE 802 Executive Committee to create an IEEE 802.21 study group to address multi-radio power management issues on mobile devices for idle mode, paging, wake on wireless and location update with the intent to create necessary PAR and 5 Criteria**
  - Moved: Vivek Gupta
  - Seconded: Steve Shellhammer
  
  - Approve:
  - Disapprove
  - Abstain:
  
  - Result:

**Moved: to create an IEEE 802.21 study group to address multi-radio power management issues on mobile devices for idle mode, paging, wake on wireless and location update with the intent to create necessary PAR and 5 Criteria.**

**Moved: Gupta/Shellhammer**

5

Paul asked whether this is in scope of 802.21. Vivek indicated that this power management issue does bear on handover, as radios are operating independently. Vivek indicated that there is not any intention to specify the management of power in any individual standard (or radio). He indicated the the study group would investigate the coordination of operation of the various media, as related to media independent handover. A question was asked as to how this proposed work relates to DYSPAN. Vivek indicated that this is not yet known.

10

**Passes: 14/0/1**

6.16			-			
7.00		Break	-	10		02:45 PM
8.00		IEEE-SA Items		-		
8.01	II	802 Task Force update	-	Nikolich	5	03:00 PM

15

# TASK FORCE MINUTES

## 18 July, San Francisco CA

SOM: 1:05 pm PT

EOM: 1:46 pm PT

Attendees: B.Labelle, M.Kipness, M.Turner, G.Parsons, P.Nikolich, J.Hawkins, K.Kenney, C.Camp, G.Thompson, E.Rigsbee, S. Mills

- 1) Ombudsman feedback -Kenney - nothing new - will keep running
- 2) Get IEEE 802™ update -Hawkins/Kenney – ongoing analysis (profit and loss), recommendation - extend program with:
  - a) revert to 6 month period effective immediatelyKaren will bring this to the BOG
- 3) IEEE Audit Committee Response : Audit committee is satisfied with 802 response. They will review at June BOD. Paul to send note to IEEE Audit Cmte chair requesting feedback from June Audit Committee meeting
- 4) Attendance Software update – Camp - 400 hits on attendance software. Good feedback so far
- 5) myBallot/myProject update – Geoff recommended Clyde share attendance SW alpha test URL with EC members, it was agreed
- 6) Future programs that may impact 802 - Staff - - Conformance testing--802 will request SA deliver a tutorial on the subject when the SA is ready  
- patent license pools--802 will request SA deliver a tutorial on the subject when the SA is ready
- 7) Other 802 complaints -Geoff indicated anonymous complaint letter was received by the SA and the submitter could appeal if they so desired

8.02 MI Get IEEE 802 program 2008 agreement

- Hawkins

10

03:08 PM

# IEEE 802 P&L Analysis

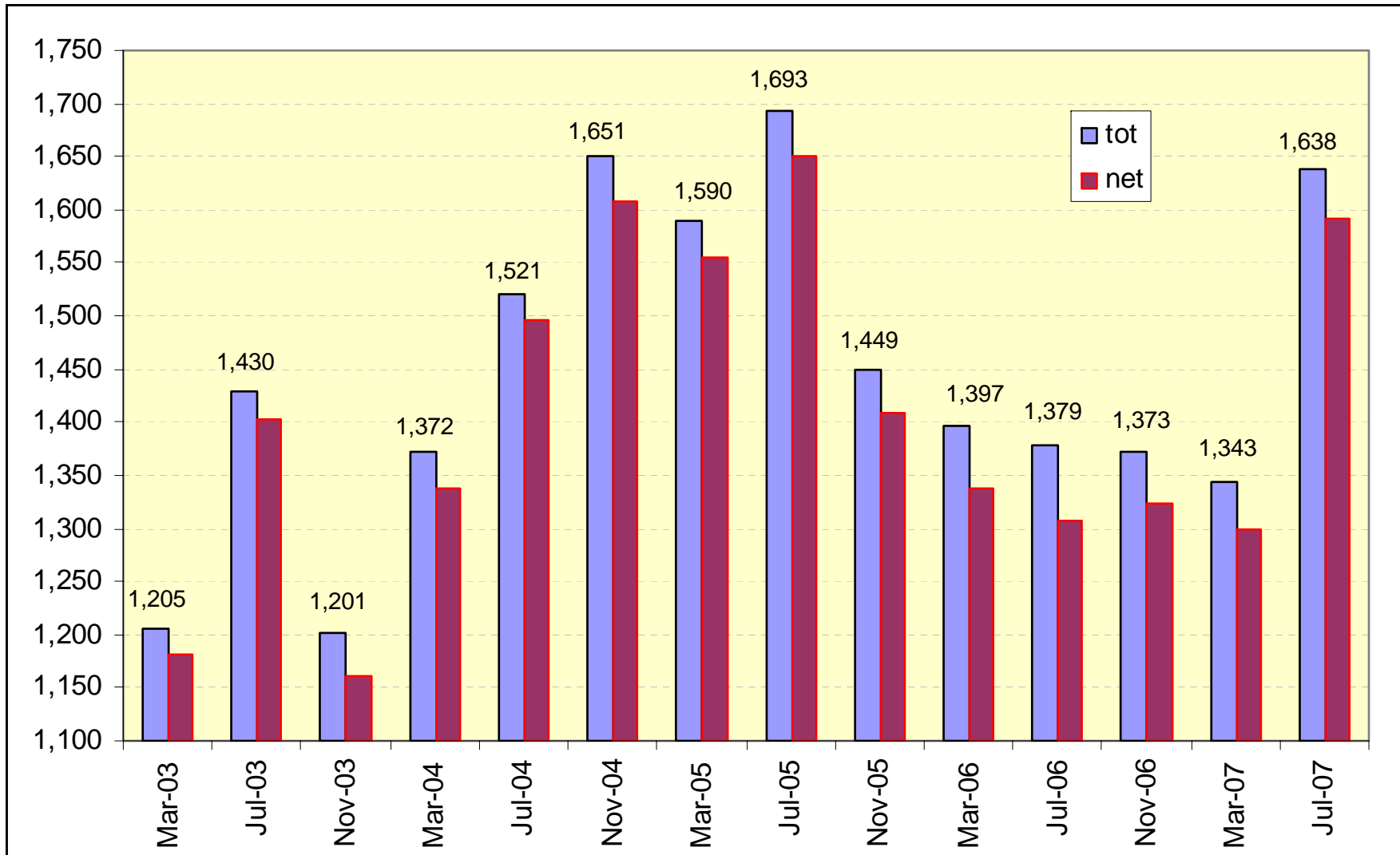
# Program Review Findings So Far

- Staff conducted a comprehensive review of the 802 P&L
  - Not surprisingly, the analysis shows moderating revenues and increasing costs (largely due to legal expenditures)
- Also conducted a similar review of the P&L for Standards Information Network and RAC activities (“802 related” activities)
  - Together, these activities show a healthy and growing net revenue
- However, questions remain:
  - Is it reasonable to combine some portion of these P&Ls?
  - What should be considered adequate contribution of 802 activities to SA (net revenue)?
  - How are cost assignment, investment decisions, and revenue expectations made at the SA/BOG level to each of its constituent units?
- Further analysis underway to understand these
  - Similar analysis to be conducted for Power Engineering, Software Engineering, and NESC (for example)

# Going Forward

- In the meantime, a get802 program budget is needed for 2008
- Recommendation:
  - Revert to the 6 month wait period for posting docs
    - 12 month waiting period shows no significant potential of driving incremental revenue
    - has a significant detrimental effect to the program
  - Eliminate the 1500 “minimum attendance guarantee” provision
    - an “incentive” to complete the analysis and proposed long-term solutions ASAP
  - Continue the \$75/attendee contribution to the program
- Note: the BOG may well find this unacceptable.

# Attendance Trend





# Motion

- That IEEE 802 approve a proposal for funding the Get802 program in the amount of \$75 per attendee for the 2008 plenary sessions (w/ no guaranteed minimum or limited maximum), and resume posting of standards 6 months following publication date per original program agreement.

**Moved: That IEEE 802 approve a proposal for funding the Get802 program in the amount of \$75 per attendee for the 2008 plenary sessions (w/ no guaranteed minimum or limited maximum), and resume posting of standards 6 months following publication date per original program agreement.**

5 **Moved: Hawkins/Lemon**

This would be proposed on the August 6 BOG telecon.

**Passes: 13/0/1**

10

8.03			-					
9.00		<table border="1"><tr><td>LMSC Liaisons &amp; External Interface</td></tr></table>	LMSC Liaisons & External Interface	-				
LMSC Liaisons & External Interface								
9.01	II	Get IEEE 802 Program Update	-					
9.02	ME	What to do about ISO/IEC 8802-2	-	Thompson	5	03:27 PM		

# 802 EC Motion

Move for 802 to recommend to  
ISO/IEC JTC1 SC6 that:

ISO/IEC 8802-2 be advanced to  
“Stabilized” status

Move: Tony Jeffree

2<sup>nd</sup>: Pat Thaler

Y: 15 N: 0 Ab: 0

**Moved: 802 to recommend to ISO/IEC JTC1 SC6 that: ISO/IEC 8802-2 be advanced to “Stabilized” status.**

**Moved: Jeffree/Thaler**

- 5 Geoff indicated that “stabilized” means that it is still available, but no longer subject to maintenance.

**Passes: 15/0/0**

9.03 ME Liaison recommendation on PDTR 8802-1

- Thompson

5

03:50 PM

# 802 EC Motion

Move that 802 support the approval of  
PDTR 8802-1  
(Cooperative agreement between IEEE  
802 and SC6)

(via its liaison status in SC6)

Move: Tony

2<sup>nd</sup>: n

Y: 15 N: 0 Ab: 0

**Moved: that 802 support the approval of PDTR 8802-1 (Cooperative agreement between IEEE 802 and SC6) (via its liaison status in SC6).**

**Moved: Jeffree/Stevenson**

**5 Passes: 15/0/0**

**9.04 II 802.11 interaction with SC6 - Kerry 2 03:40 PM**

10 Stuart reported that the PAR for 802.11y states that there will be cooperation with SC6 in the sponsor ballot process. MyBallot makes it very difficult to allow participation of the members of the JTC1 SC6 National Bodies (NBs). Work is ongoing with the balloting service to provide a solution.

**9.05 ME Approval of China Liaison - Marks 5 03:43 PM**

# IEEE 802 LAN/MAN Standards Committee

**Roger B. Marks**  
IEEE 802 China Liaison Official  
r.b.marks@ieee.org

**To:** • Wen Ku, MII

**CC:** • Zhou Baoxin, CCSA  
• Lin Ning, CESI  
• Liu Shuangqiu, SAC  
• Paul Nikolich, Chair, IEEE 802

**SUBJECT:** Update on IEEE 802 Activities

**DATE:** 20 July 2007

IEEE 802 would like to update you on some of its recent activities.

The IEEE 802 Plenary took place in San Francisco, CA, USA on 16-20 July 2007. The attendance was approximately 1600. For a high-level summary of the results, I refer you to the session reports at:

<http://ieee802.org/minutes/jul2007>

I would like to call your particular attention to the proposed initiation of a new project P802.15.4c in the 802.15 Working Group. If granted final approval, this project would be authorized to amend IEEE Std 802.15.4 (on Low Rate Wireless Personal Area Networks) by specifying an “Alternative Physical Layer Extension to support one or more of the Chinese 314-316 MHz, 430-434 MHz, and 779-787 MHz bands.”

Please note also that the IEEE 802 Working Groups have been appreciating their recent opportunities to meet within China and are looking forward to future such sessions. For example, the IEEE 802.16 Working Group has this week accepted an invitation to hold its session of September 2008 in China.

Given the significant interest from within China in IEEE 802 standardization, we would like to solicit your views regarding the possibility of holding a future IEEE 802 Plenary in China. Opportunities are available as soon as March 2009. We welcome your views on your interest and the suitability of facilities. We are happy to provide further details regarding our meeting requirements.

Best regards,

Roger B. Marks  
IEEE 802 China Liaison Official

**Moved: to approve the liaison letter to MII.**  
**Moved: Marks/Stevenson**

**Passes: 15/0/0**

5

9.06 ME Response to OFCOM consultation

- Lynch

5

03:47 PM



802.18 Motion to SEC

**Agenda:** 9.06

**Date:** 07/20/2007

**Time:** 3:47 p.m.

**Motion by:** Lynch

**Seconded by:**

**Moved:**

To approve document:

18-07-0063-00-0000\_IEEE\_LEFR\_Response.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 U.K. OFCOM.

**Informative:** This document is a response to a U.K. OFCOM consultation regarding License-Exempt Framework Review.

**Approve: 15 Do Not Approve: 0 Abstain: 0 Motion: Approved**

## Cover sheet for response to an Ofcom consultation

**BASIC DETAILS**

Consultation title: **Licence Exempt Framework Review**

To (Ofcom contact): **Reza Karimi**

Name of respondent: **Michael Lynch**

Representing (self or organisation/s): **IEEE 802**

Address (if not received by email):

**CONFIDENTIALITY**

Please tick below what part of your response you consider is confidential, giving your reasons why

Nothing	<input checked="" type="checkbox"/>	Name/contact details/job title	<input type="checkbox"/>
Whole response	<input type="checkbox"/>	Organisation	<input type="checkbox"/>
Part of the response	<input type="checkbox"/>	If there is no separate annex, which parts?	

If you want part of your response, your name or your organisation not to be published, can Ofcom still publish a reference to the contents of your response (including, for any confidential parts, a general summary that does not disclose the specific information or enable you to be identified)?

**DECLARATION**

I confirm that the correspondence supplied with this cover sheet is a formal consultation response that Ofcom can publish. However, in supplying this response, I understand that Ofcom may need to publish all responses, including those which are marked as confidential, in order to meet legal obligations. If I have sent my response by email, Ofcom can disregard any standard e-mail text about not disclosing email contents and attachments.

Ofcom seeks to publish responses on receipt. If your response is non-confidential (in whole or in part), and you would prefer us to publish your response only once the consultation has ended, please tick here.

Name Michael Lynch      Signed (if hard copy)

# IEEE 802 Response to the Ofcom Licence Exempt Framework Review

## 1. Summary

The purpose of this document is to provide IEEE 802's response to questions of the License Exempt Framework Review.

## 2. Responses to specific questions

*Question 1: Do you agree that the spectrum commons model should be the preferred approach for licence-exempt use of spectrum, and that application-specific allocations should only be considered where technical constraints or safety issues require this?*

IEEE 802 agrees that licence exempt use on a commons model should be the preferred approach, rather than an application specific basis. The commons model allows technological innovation to flourish, and consumers have widely benefited from this technological innovation.

Spectrum commons models are preferable to application-specific allocations except where required by technical constraints or safety issues. As an example, several different technology standards were developed with the intention of using the 2.4 GHz band, including HomeRF, HIPERLAN & IEEE 802.11, and it was left to market forces to determine which became the preferred technology in the band.

*Question 2: Do you agree with the proposal for multiple classes of spectrum commons?*

IEEE 802 supports the proposal for multiple classes of spectrum commons where those classes simplify and clarify the regulations.

*Question 3: Do you agree with the distinction made between the licence-exemption and light-licensing regimes?*

We understand principle of light licensing to include some conditions where for example, registration of terminals is required, both to provide the ability to identify the location and operation of terminals for the protection of existing (primary) users, and also to enable co-ordination to be undertaken if interference is experienced between lightly licensed users. In the case of licence-exemption, no such registration and coordination is required and devices must contend on their own for spectrum usage. While the latter is most convenient for the licence exempt user, the former is most convenient for the primary user to resolve interference conditions.

IEEE 802 prefers that end users (consumers) are not burdened with licensing requirements.

*Question 4: Do you agree with the view that the licence-exemption and light-licensing regimes will converge in the future?*

It is not clear that the two regimes will converge in the future. The various conditions of the primary and secondary (or tertiary) users of the bands will in some cases necessitate continuance of light licensing for sharing resolution. Taking the 5725 – 5875 MHz band as an example, this band would not have been

made available for wireless access applications, had the lightly licensed process not been available, due to the concerns of interference to MoD systems. Furthermore, the presence of a lightly licensed process continues to provide some confidence to primary users of the band that significant interference problems were to be experienced, then there may be an opportunity to identify and co-operate with the fellow users of the band, to everyone's mutual benefit. In the alternate context, spectrum that is not shared with a primary user, may be satisfactory with a licence exempt scheme.

Consequently, it seems that both the licence exempt and the light licensing regime are appropriate in various circumstances. Hence, we support the retention of both schemes as alternative applications when conditions warrant. We also support an ongoing review of the balance between light licensing and licence exempt regimes, as technology develops.

If it is the intention for light licensing to be used as a transition to licence exempt operation, it would be advisable to notify the licensees of this from the outset, or well in advance of this transition, as it may affect deployment and technology development decisions for the operators and equipment manufacturers.

*Question 5: Do you agree with the proposed mixture of licence-exempt and light-licensed use of the 105–275 GHz spectrum? Do you agree with the bands that have been identified for such use?*

We agree that there should be a mixture of licence exempt and light licensing, but have no comment on the proportions.

*Question 6: Do you agree with the view that the use of the 275–1000 GHz spectrum should be licence-exempt?*

At this time there are significant technical challenges to widespread use of the 275-1000 GHz spectrum. IEEE 802 does not see any advantage to proposing specific regulations for these bands at this time.

*Question 7: Do you agree with the view on the levels of future demand for licence-exempt usage in the 40–105 GHz spectrum? Do you agree that the Group-A bands identified above should be considered for licence-exempt use? Do you agree that licence-exempt and light-licensed use of the Group-C bands identified above should only be considered when there is evidence of demand for such use?*

IEEE 802 supports the 8 GHz identified as Group A bands, with particular support for the 59 – 64 GHz band, since there is ongoing standards development work on multi-gigabit WPANs in these bands in IEEE 802.15 for licence exempt use.

Looking at the Group C bands, we would favor making these bands licence exempt, as far as possible.

*Question 8: Do you think it could be desirable for transmissions at levels below certain power spectral density limits to be exempt from licensing?*

(no comment)

*Question 9: Do you agree with the transmission limits proposed in this document?*

(no comment)

*Question 10: Do you agree with the harmonisation strategy discussed above in the context of licence-exempt devices?*

The IEEE 802 supports the harmonisation strategy proposed by Ofcom.

*Question 11: Do you agree with the view that no additional regulatory instruments, beyond those available today, are required for the protection of licence-exempt equipment?*

(no comment)

END

**References:**

**Moved: To approve document: 18-07-0063-00-0000\_IEEE\_LEFR\_Response.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 U.K. OFCOM.**

5 **Informative: This document is a response to a U.K. OFCOM consultation regarding License-Exempt Framework Review.**

**Moved: Lynch/Stevenson**

**Passes: 15/0/0**

10 9.07 ME Liaison to ITU-R Working Party 8F - Lynch 5 03:55 PM

802.18 Motion to SEC

**Agenda:** 9.07

**Date:** 07/20/2007

**Time:** 3:52 p.m.

**Motion by:** Lynch

**Seconded by:** Marks

**Moved:**

To approve document:

L80216-07\_049d1.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 ITU-R WP8F.

**Informative:** This document provides information for WP8F to use at their special meeting in August, 2007.

**Approve: 15 Do Not Approve: 0 Abstain: 0 Motion: Approved**





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Received:

Subject: [Question ITU-R 229-1/8](#)

Technology

## Institute of Electrical and Electronics Engineers (IEEE)

### OFDMA TDD WMAN (IP-OFDMA) SUPPORT OF MINIMUM REQUIREMENTS

#### 1 Introduction

This contribution was developed by IEEE Project 802, the Local and Metropolitan Area Network Standards Committee (“IEEE 802”), an international standards development committee organized under the IEEE and the IEEE Standards Association (“IEEE-SA”).

The content herein was prepared by a group of technical experts in IEEE 802 and industry and was approved for submission by the IEEE 802.16 Working Group on Wireless Metropolitan Area Networks, the IEEE 802.18 Radio Regulatory Technical Advisory Group, and the IEEE 802 Executive Committee, in accordance with the IEEE 802 policies and procedures, and represents the view of IEEE 802.

#### 2 Discussion

IEEE takes note of the “Special Meeting of Working Party 8F to Complete Consensus on the Addition of a New IMT-2000 Radio Interface” described by Study Group 8 in [Document 8F/1335](#), and announced in ITU-R [Circular Letter 8/LCCE/155](#).

We note that the specified terms of reference for that meeting are related to the OFDMA TDD WMAN (IP-OFDMA) radio interface, including “Resolve the situation with regard to 3 of the 7 the Minimum Performance Capabilities (multimedia, handover, and circuit switched) as per Attachment 6 of 8/LCCE/47; using the Technology Working Group, the M.1457 Sub-Working Group and M.1457 Drafting Group 2 reports of the Kyoto WP 8F meeting, as captured in Document 8F/1322 Attachments 6.1, 6.2 and particularly 6.4 to provide guidance.”

In that light, we particularly focus on the Minimum Performance Capabilities and Attachment 6.4 of Document 8F/1322. As stated in that attachment, “Step 6 is the review of the evaluation reports and the assessment of the submitted radio transmission technology for compliance with the minimum performance capabilities.” Regarding Step 6, Attachment 6.4 states the following conclusion:

*Thanks to the detailed technical discussion that was held, consensus was reached on the capability of the proposed new radio interface to meet 4 of 7 the minimum performance capabilities (see Table 2). On the three remaining capabilities it was not possible to achieve full consensus, as reflected in the notes in the table below:*

Table 2

Minimum performance requirements

**Minimum Performance Capabilities for IMT-2000 Candidate  
Radio Transmission Technologies**

Test environments	Indoor Office	Outdoor to Indoor and Pedestrian	Vehicular
<b>Mobility considerations</b>	mobility type (low)	mobility type (medium)	mobility type (high)
Handover	<b>Note A</b> *1	<b>Note A</b> *1	<b>Note A</b> *1
<b>Support of general service capabilities</b>			
Packet data	<b>Y</b>	<b>Y</b>	<b>Y</b>
Asymmetric services	<b>Y</b>	<b>Y</b> *2	<b>Y</b> *2
Multimedia	<b>Note B</b>	<b>Note B</b>	<b>Note B</b>
Variable bit rate	<b>Y</b>	<b>Y</b>	<b>Y</b>
<b>Data services key capabilities</b>	user bit rates	user bit rates	user bit rates
	BER	BER	BER
Circuit-switched low and long delay	at least 2 048 kbit/s	at least 384 kbit/s*3	at least 144 kbit/s
	<b>Note C</b>	<b>Note C</b>	<b>Note C</b>
Packet	at least 2 048 kbit/s	at least 384 kbit/s*3	at least 144 kbit/s
	<b>Y</b>	<b>Y</b>	<b>Y</b>

BER = Bit Error Ratio

\*1 / \*2 / \*3 see Att. 6 of LCCE/47

**Note A** reference to handover according to LCCE47 has been investigated different by different evaluation groups

**Note B** Some groups indicated concern with the specific latency involved in the multimedia services

Note C No consensus could be reached due to different understandings of the meaning of "circuit switched services"

We observe from this conclusion that consensus was reached on four of the seven minimum performance capabilities but that consensus was not reached on three others. We here present information regarding the three minimum performance capabilities in question.

For reference, we have included, as Annex 1, the relevant content of Attachment 6 of 8/LCCE/47, which completely specifies the Minimum Performance Capabilities for IMT-2000 Candidate Radio Transmission Technologies.

### **(1) Handover**

#### **(a) Minimum Performance Capability:**

Attachment 6 of 8/LCCE/47 indicates that handover is required, with the following note:

*Seamless handover required within the environment, for multi-environment technologies proposed for use in more than one test environment seamless inter-environment handovers required for services which can be handled in more than one relevant environment.*

#### **(b) Conclusion of Working Party 8F:**

Note A: *reference to handover according to LCCE47 has been investigated different by different evaluation groups*

(c) IEEE View: OFDMA TDD WMAN does support this Minimum Performance Capability. From Working Party 8F's note, it appears that different evaluation groups have taken different understandings of the meaning of handover. It is clear that OFDMA TDD WMAN does support seamless handover<sup>1</sup>.

Indeed, Doc. 8/186 makes the support of handover very clear; for example, Section 5.6.1.2.1 reads "the radio interface also provides specifications to allow handover of an SS from one BS to another." The detailed MAC layer handover procedures are specified in Section 6.3.22 of the IEEE 802.16 standard.

Additional information can be found in Doc. 8F/1183 regarding the requirement in Rec. ITU-R M.1034, §12.2.3: "Support seamless handover between different IMT-2000 environments such that service quality is maintained and signalling is minimized"; as follows: "Handover schemes are supported using Simple Hard Handover or Optimized Hard Handover. Also both inter-sector (inter-FA) and intra-sector (intra-FA) handovers are supported. Quality of service is maintained by management of the service flows and the MAC connections across the handovers. Also Mobile Station initiated, Base Station initiated and Network initiated Handovers are supported."

---

<sup>1</sup> One key question regards the meaning of "seamless handover." This term is not clearly defined with IMT-2000 sources. The ITU-R / ITU-T Terms and Definitions database, "providing access to all the abbreviations and acronyms, terms and definitions contained in the ITU-R and ITU-T Publications," includes only one definition: "The process by which latency and data loss incurred during handover is within a range acceptable to users (e.g., below a certain limit) for real-time services." No limit is specified as part of the Minimum Performance Capabilities.

## **(2) Multimedia**

### **(a) Minimum Performance Capability:**

Attachment 6 of 8/LCCE/47 indicates that multimedia is required, under the category of “Support of general service capabilities.” No additional details are indicated.

Recommendation ITU-R M.1224 defines multimedia service as follows: “A service in which the interchanged information consists of more than one type (e.g. video, data, voice, graphics). Multimedia services have multivalued attributes which distinguish them from traditional telecommunication services such as voice or data. A multimedia service may involve multiple parties, multiple connections, the addition/deletion of resources and users within a single communication session.”

### **(b) Conclusion of Working Party 8F:**

Note B: *Some groups indicated concern with the specific latency involved in the multimedia services*

### **(c) IEEE View:**

Working Party 8F conclusion implicitly acknowledges that OFDMA TDD WMAN does support multimedia services. Indeed, it supports multimedia services as defined in Rec. ITU-R M.1224, as the OFDMA TDD WMAN support for interchange of more than one type of information is specified in Section 6.3.5 of the IEEE 802.16 standard. Different multimedia services can be scheduled using these capabilities. The standard enables systems providing communications between multiple parties and supports multiple connections as well as the addition/deletion of resources and users within a single session. The Working Party 8F conclusion indicates concern with the specific latency in OFDMA TDD WMAN. However, the relevant criterion is simply support for multimedia service capability. No multimedia performance requirements are specified. Given the understanding that OFDMA TDD WMAN supports multimedia service, this Minimum Performance Capability is met.

## **(3) Circuit-switched low and long delay**

### **(a) Minimum Performance Capability:**

Attachment 6 of 8/LCCE/47 indicates the “Data services key capabilities.” Regarding “Circuit-switched low and long delay” services, the requirements are to support (with bit error ratio  $\leq 10^{-6}$ ) user bit rates of at least 2048, 384, and 144 kbit/s, respectively, in the Indoor Office, Outdoor to Indoor, and Pedestrian Vehicular test environments.

### **(b) Conclusion of Working Party 8F:**

Note C: *No consensus could be reached due to different understandings of the meaning of "circuit switched services"*

### **(c) IEEE View:**

OFDMA TDD WMAN does support all of the required data rates at the given bit error ratio. We do not belabor the point, as the Working Party 8F conclusion implicitly acknowledges that fact. Indeed, the table indicates that Working Party 8F concluded that the radio interface supports these same data rates (at the given BER) as packet-switched services.

Therefore it is clear that the Working Party 8F conclusion indicates a lack of consensus solely due to different understandings of the meaning of “circuit switched services.”

While 8/LCCE/47 does not define “circuit switched services,” additional information is provided in Rec. M.1225, which says (A1.2.20): “See Recommendation ITU-R M.1224 for the definition of “circuit transfer mode”, “packet transfer mode”, “connectionless service”, and for the aid of understanding “circuit switched” and “packet switched” data services. Therefore, to assist in our understanding of “circuit switch services”, we turn to ITU-R M.1224, which offers this definition:

***Circuit transfer mode***

*A transfer mode in which transmission and switching functions are achieved by permanent or quasi-permanent allocation of channels, bandwidth or codes between identified points of a connection.*

Rec. ITU-R M.1224 is the only Vocabulary document cited as a reference in 8/LCCE/47 (see Attachment 5: “List of Recommendations and Task Group 8/1 Documents for IMT-2000 Relevant to the Evaluation Process”). Therefore, it is clear that this is the appropriate definition for use in understanding the Minimum Performance Capabilities in 8/LCCE/47. We believe that this should resolve any uncertainty within Working Party regarding the meaning of “circuit switched services.”

Having clarified the appropriate definition, IEEE submits that OFDMA TDD WMAN supports this Minimum Performance Capability. IEEE 802.16, which forms the basis of OFDMA TDD WMAN, specifies (6.3.5) “scheduling services” that “represent the data handling mechanisms supported by the MAC scheduler for data transport on a connection.” In particular, the Unsolicited Grant Service (UGS) “is designed to support real-time uplink service flows that transport fixed-size data packets on a periodic basis, such as T1/E1 and Voice over IP without silence suppression. The service offers fixed-size grants on a real-time periodic basis, which eliminate the overhead and latency of SS requests and assure that grants are available to meet the flow’s real-time needs. The BS shall provide Data Grant Burst IEs to the SS at periodic intervals based upon the Maximum Sustained Traffic Rate of the service flow. The size of these grants shall be sufficient to hold the fixed-length data associated with the service flow (with associated generic MAC header and Grant management subheader) but may be larger at the discretion of the BS scheduler.”

As noted in Doc. 8/186 (5.1.9, Table 94), support for UGS is explicitly mandatory and required for implementation of both the base station and the mobile station.

Therefore, OFDMA TDD WMAN satisfies this Minimum Performance Capability.

**3 Conclusion**

OFDMA TDD WMAN satisfies all seven Minimum Performance Capabilities defined in 8/LCCE/47.

**4 Proposal**

We propose that entries in Table 2 where the Notes A, B and C are shown be replaced with “Yes” and the notes be deleted. We support the draft revision of Recommendation ITU-R M.1457-6 as shown in Doc. 8/186 and support its approval at the earliest opportunity.

**Annex 1: Attachment 6 of 8/LCCE/47 (Satellite Test Environment excluded)**

**Table of Minimum Performance Capabilities for IMT-2000 Candidate  
Radio Transmission Technologies**

Task Group 8/1 will consider candidate radio transmission technologies that meet the following minimum performance capabilities in at least one test environment, as indicated in Step 6 of the IMT-2000 radio interface development process described in Attachment 1 to this circular.

**1 Terrestrial Test Environments**

**Minimum Performance Capabilities for IMT-2000 Candidate  
Radio Transmission Technologies**

<b>Test environments</b>	<b>Indoor Office</b>	<b>Outdoor to Indoor and Pedestrian</b>	<b>Vehicular</b>
<b>Mobility considerations</b>	mobility type (low)	mobility type (medium)	mobility type (high)
Handover	Required* <sup>1</sup>	Required* <sup>1</sup>	Required* <sup>1</sup>
<b>Support of general service capabilities</b>	Required / Not required	Required / Not required	Required / Not required
Packet data	Required	Required	Required
Asymmetric services	Required	Required* <sup>2</sup>	Required* <sup>2</sup>
Multimedia	Required	Required	Required
Variable bit rate	Required	Required	Required
<b>Data services key capabilities</b>	user bit rates BER	user bit rates BER	user bit rates BER
Circuit-switched low and long delay	at least 2 048 kbit/s $\leq 10^{-6}$	at least 384 kbit/s* <sup>3</sup> $\leq 10^{-6}$	at least 144 kbit/s $\leq 10^{-6}$
Packet	at least 2 048 kbit/s $\leq 10^{-6}$	at least 384 kbit/s* <sup>3</sup> $\leq 10^{-6}$	at least 144 kbit/s $\leq 10^{-6}$

BER = Bit Error Ratio

- \*1 Seamless handover required within the environment, for multi-environment technologies proposed for use in more than one test environment seamless inter-environment handovers required for services which can be handled in more than one relevant environment.
- \*2 The evaluated technologies close but not quite capable to meet the minimum performance capabilities for user bit rates (not less than 64 kbit/s) as specified in the table in one direction for this test environment, but meeting the minimum performance capabilities in the other direction, will also be considered in the consensus building process (Step 7), if:
  - it is compliant with the requirements and objectives for IMT-2000 which are summarised in Attachment 4; and
  - ITU-R Task Group 8/1 acknowledges it offers advantages of other criteria for evaluation of IMT-2000 technologies such as spectrum efficiency, technology complexity, quality, flexibility, implication on network interfaces, or handportable performance optimization capabilities.
- \*3 Maximum user bit rate for data is one of the important key criteria for evaluation of IMT-2000 technologies. It is strongly desirable that IMT-2000 technologies are capable of 384 kbit/s or higher user bit rates for data services in the outdoor to indoor and pedestrian test environments. The evaluated technology for this environment which is capable of at least 144 kbit/s user bit rate but not capable of 384 kbit/s will be also considered in the further consensus building process (Step 7), if:
  - it is compliant with the requirements and objectives for IMT-2000 which are summarised in Attachment 4; and
  - it fulfils the minimum performance capabilities for the vehicular test environment in this table; and
  - ITU-R Task Group 8/1 acknowledges it offers advantages of other criteria for evaluation of IMT-2000 technologies such as spectrum efficiency, technology complexity, quality, flexibility, implication on network interfaces, or handportable performance optimization capabilities.

**Moved: To approve document: L80216-07\_049d1.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 ITU-R WP8F.**

**Informative: This document provides information for WP8F to use at their special meeting in August, 2007.**

**Moved: Lynch/Marks**

**Passes: 15/0/0**

9.08 II Liaison contribution to IEEE 1588 - Jeffree 5 03:57 PM

Tony reported that various members of 802.1 have been interacting with 1588 for the work in 802.1 on AV bridging. They will be sending a invitation for 1588 to comment on the AV bridging draft.

9.09 II Liaison responses to MEF, ITU-T SG15 (2 off) and IETF CCAMP - Jeffree 5 03:58 PM

802.1 will be sending liaison responses.

9.10 ME 802.20 Liaison to ARIB - Greenspan 5 03:59 PM

**Moved: To approve the establishment of a liaison between the 802.20 working group and the 802.20 sub-working Group under the Broadband Wireless Access Subcommittee (BWA) of the Association of Radio Industries and Business (ARIB)**

**Moved: Greenspan/Hawkins**

**Passes: 7/0/0 (only the nonconflicted EC members)**

10.00 LMSC Internal Business -  
10.01 II TREASURER'S REPORT - Hawkins 10 04:06 PM



**IEEE Project 802  
Statement of Operations  
Jan 2007 Interim Session  
London, England  
As of July 20, 2007**

Session Income	Est/Act	Budget	Deviation
Net Registrations	772	1,000	(228)
64% 497 Early Registrations @ \$600	298,200		
20% 151 Registrations @ \$750	113,250		
16% 123 On-site registrations @ \$900	110,700		
0% 1 Student @ \$350	350		
1 Early cancellations @ \$600	(600)		
10 Cancellations @ \$500	(5,000)		
11 Late cancellations @ \$350	(3,850)		
11 Special Cancellation @ \$150	(1,650)		
1 Special Cancellation @ \$650	(650)		
5% 3 Special Cancellation @ \$500	(1,500)		
0 Other credits @ \$100	0		
<b>Registraion Subtotal</b>	<b>509,250</b>	<b>\$ 509,250</b>	<b>675,000</b>
0 Deadbeat Payment @			0
Interest			0
Other (Hotel comps and commission)	27,598	110,703	(83,105)
<b>TOTAL Session Income</b>	<b>\$ 536,848</b>	<b>785,703</b>	<b>(248,855)</b>
Session Expenses	Actual	Budget	
Audio Visual Rentals	17,914	35,000	17,086
Audit			0
Bank Charges			0
Copying	1,734	10,000	8,266
Credit Card Discounts & Fees	14,399	19,575	5,176
Equipment Expenses	117	1,200	1,083
Get IEEE 802 Contribution			0
Insurance			0
Meeting Administration	81,874	98,088	16,214
Misc Expenses	30,618 *	24,825	(5,793)
Networking	84,171	88,203	4,032
Phone & Electrical	20,577	20,093	(484)
Refreshments	234,959	304,736	69,777
Shipping	19,823	27,500	7,677
Social	19,360	60,278	40,918
Supplies	147	2,000	1,853
<b>TOTAL Session Expense</b>	<b>\$ 525,693</b>	<b>691,498</b>	<b>165,805</b>
Other Income/Expense			
<b>NET Session Surplus/(Deficit)</b>	<b>11,154</b>	<b>94,205</b>	<b>(83,051)</b>
<b>Analysis</b>			
Refreshments per registration	304	305	0
Social per registration	25	60	35
Meeting Admin per registration	106	98	(8)
Surplus/(Loss) per registration	14	94	(80)

\* Misc items: Hotel gratuity, 802.20 travel reimb, hotel meeting rm fees

**IEEE Project 802  
Statement of Operations  
Mar 2007 Plenary Session  
Orlando, FL  
As of July 20, 2007**

Session Income	Est/Act	Budget	Deviation
<b>Net Registrations</b>	1,319	1,200	119
70% 921 Early Registrations @ \$400	\$ 368,400		
13 Early cancellations @ \$400	(5,200)		
21 Cancellations @ \$350	(7,350)		
30% 398 Registrations @ \$500	199,000		
8 Cancellation @ \$450	(3,600)		
2% 1 Special Cancellation @ \$500	(500)		
0 Student @ \$100	0		
0 Special Registration @ \$400	0		
13 Other credits @ \$100	(1,300)		
<b>Registraion Subtotal</b>	<b>\$ 549,450</b>	\$ 510,247	\$ 39,203
0 Deadbeat Payment @ \$500	0	0	0
Interest	300	200	100
Other (Hotel comps and commission)	77,527	50,000	27,527
<b>TOTAL Session Income</b>	<b>\$ 627,277</b>	<b>\$ 560,447</b>	<b>\$ 66,830</b>
<b>Session Expenses</b>	<b>Actual</b>	<b>Budget</b>	
Audio Visual Rentals	22,883	18,000	(4,883)
Audit	6,000	6,000	0
Bank Charges	500	500	0
Copying	2,500	3,500	1,000
Credit Card Discounts & Fees	16,012	14,549	(1,463)
Equipment Expenses	16,340	11,000	(5,340)
Get IEEE 802 Contribution	95,775	112,500	16,725
Insurance	2,713	2,500	(213)
Meeting Administration	82,993	75,064	(7,929)
Misc Expenses	4,713 *	2,500	(2,213)
Networking	61,768	60,000	(1,768)
Phone & Electrical	2,122	2,500	378
Refreshments	118,219	120,500	2,281
Shipping	16,779	15,000	(1,779)
Social	43,885	45,000	1,115
Supplies	629	1,000	371
<b>TOTAL Session Expense</b>	<b>\$ 493,830</b>	490,113	(3,717)
<b>NET Session Surplus/(Deficit)</b>	<b>133,448</b>	70,334	63,113
<b>Analysis</b>			
Refreshments per registration	90	100	11
Social per registration	33	38	4
Meeting Admin per registration	63	63	(0)
Surplus/(Loss) per registration	101	59	43
Cash on hand as of Jul 9, 2007	\$ 677,527		
Reserve for unpaid expenses for prior sessions	(2,000)	(Xerox)	
Reserve for other outstanding commitments	(5,600)	(Avilar fees,est)	
Income received for current session	(20,800)		
Expenses prepaid for current session	42,623		
Expenses prepaid for future session:	0		
<b>Operating Reserve following this session</b>	<b>\$ 691,750</b>		

\* Misc items: Hotel gratuity 802.20 travel reimb

**IEEE Project 802  
Statement of Operations  
July 2007 Plenary Session  
San Francisco, CA**

<b>Session Income</b>	<b>Estimate</b> (07/20/07)	<b>Budget</b>	<b>Variance</b>
<b>Registrations</b>	1,620	1,200	420
Early Registrations	\$ 473,600	\$ 288,000	\$ 185,600
Registrations	211,000	240,000	(29,000)
Other	600		600
	<u>\$ 685,200</u>	<u>\$ 528,000</u>	<u>\$ 157,620</u>
<b>Cancellations</b>	49		
Early cancellations			-
Cancellations			-
Other credits			-
	<u>\$ 18,000</u>	<u>\$ 10,560</u>	<u>\$ 7,440</u>
<b>Net Registration Income</b>	<u>\$ 667,200</u>	<u>\$ 517,440</u>	<u>\$ 150,180</u>
<b>Interest</b>	300	60	240
<b>Other</b>	60,000	-	60,000
	<u>\$ 727,500</u>	<u>\$ 517,500</u>	<u>\$ 210,420</u>
<b>TOTAL Session Income</b>	<b>\$ 727,500</b>	<b>\$ 517,500</b>	<b>\$ 210,420</b>
<b>Session Expenses</b>	<b>Estimate</b>	<b>Budget</b>	<b>Variance</b>
<b>Audio Visual Rentals</b>	\$ 16,200	\$ 15,000	\$ (1,200)
<b>Audit</b>	0	0	0
<b>Bank Charges</b>	400	278	(122)
<b>Copying</b>	2,800	3,500	700
<b>Credit Card Discounts &amp; Fees</b>	18,843	10,800	(8,043)
<b>Equipment Expenses</b>	9,000	9,000	0
<b>Get IEEE 802 Contribution</b>	121,500	93,750	(27,750)
<b>Insurance</b>	0	0	0
<b>Meeting Administration</b>	92,865	76,838	(16,027)
<b>Misc Expenses</b>	6,800	2,000	(4,800)
<b>Networking</b>	72,375	54,388	(17,987)
<b>Phone &amp; Electrical</b>	600	2,100	1,500
<b>Refreshments</b>	172,000	125,000	(47,000)
<b>Shipping</b>	12,000	4,500	(7,500)
<b>Social</b>	116,000	100,000	(16,000)
<b>Supplies</b>	5,000	500	(4,500)
	<u>\$ 646,383</u>	<u>\$ 497,654</u>	<u>\$ (148,729)</u>
<b>TOTAL Session Expense</b>	<b>\$ 646,383</b>	<b>\$ 497,654</b>	<b>\$ (148,729)</b>
<b>NET Session Surplus/(Deficit)</b>	<b>\$ 81,117</b>	<b>\$ 19,846</b>	<b>\$ 61,691</b>

# Fees

- Current reserve is intended to cover an untimely session cancellation
  - Currently \$400-500k range is seen as sufficient
  - Going forward, given the increases we are seeing in room rates, we feel we should increase the reserve closer to \$750k for this purpose.
- We would like to build our reserves in order to support non-NA venues
  - Several scenarios we've studied show that such sessions will require an additional spend of \$300k (approx) per session.
  - Propose to build our reserves by that amount. This should allow us to finance a non-NA venue (hopefully) without an exorbitant increase in registration fees – essentially a subsidy for future non-NA sessions
- Together, this would result in a reserve approaching \$1M
- Current status
  - Our current reserve is approx \$692k (see Treas report)
  - Estimate for San Francisco (07Jul) is net of + \$81k
  - This puts us in the \$780k range
  - Recommend: keep fees stable for now, and build towards the \$1M number

10.02 MI Meeting site selection

- Rigsbee

10 04:37 PM

<u>DATES AVAILABLE:</u>	<u>LOCATION:</u>	<u>VENUE/HOTEL:</u>	<u>RATES/REG FEES:</u>	<u>OTHER:</u>	
March 8-13, 2009 16	<b>Geneva, Switzerland</b>	Geneva CICG+ITU+CCV Approx 10 hotels within the area for guest rooms	\$110US S or D/T to \$240US S or D/T *ITU special hotel rates. Reg Fees: \$0.00 with ITU sponsorship ~\$300K for IEEE-802 meeting costs which must come from 802 Treasury	All hotels within a tram/bus ride of Convention Center Easy airport access Meetings in 3 locations.	Would spread out over many hotels Otherwise a candidate  Yes, equivalent to U of Twente.
March 8-13, 2009 11	<b>Rome, ITALY</b>	Rome Marriott Park Hotel (located 11 km from Rome/ Leonardo Da Vinci (1000 guest rooms peak nt)	\$220US S or D/T (subject to change based on exchange rate)  Reg Fees: \$600US/\$750US/\$900	All meeting rooms in hotel Meeting space ~\$175KUS 20 minutes from Central Rome Hotel Shuttle to/fm airport	Non-starter Rome not a feature at 20 minutes What is actually near the hotel?  Mostly other hotels, restaurants, shopping. The train into Rome is easy walk fm hotel.
March 8-13, 2009 0	<b>London, UK</b>	Hilton London Metropole (700 guest rooms peak nt) Hilton London Paddington (250 guest rooms peak nt)	£154+VAT/ S includes EB at the HLM (\$315US+/nt) £189+VAT/ S includes EB at the HLPaddington (\$385US+/nt)  Reg Fees: \$600US/\$750US/\$900	All meeting space in both hotels Includes EB-english breakfast in room rate Morning/Afternoon/Lunch Pkg £47+VAT/day/delegate (\$95US+tax/day) Easy access via train/airport	NO !!  ???
March 8-13, 2009 4	<b>Honolulu, Hawaii</b>	Hilton Hawaiian Village (Honolulu, Oahu) (1200 guest rooms peak night)	\$239-\$299US S or D/T \$149US Govt Rate  Reg Fees: \$400US/\$500US	All meeting space and guest rooms in the hotel (34 meeting rooms)	Although Honolulu is better from travel accessibility esp from the Orient, Honolulu is a pit  Agree but HHV is self-contained on pvt beach.
March 8-13, 2009 13	<b>Maui, Hawaii</b>	Hyatt Regency Maui (500 guest rooms peak night) Westin Maui (200 guest rooms peak night) Sheraton Maui (300 guest rooms peak night)	\$199-\$259US S or D/T (room rates for all hotels)  Reg Fees: \$400US/\$500US	All meeting space and guest room in both hotels.	What is distance between hotels?  All at Whaler's Village Ka'anapali, <400yds between. An easy walk on paved beachwalk back & forth.

<u>DATES AVAILABLE:</u>	<u>LOCATION:</u>	<u>VENUE/HOTEL:</u>	<u>RATES/REG FEES:</u>	<u>OTHER:</u>
March 8-13, 2009 7	<b>Kauai, Hawaii</b>	Grand Hyatt Kauai (500 guest rooms peak night) Sheraton Kauai (400 guest rooms peak night) Embassy Suites Kauai (100 guest rooms peak night)	\$199-\$259US S or D/T (room rates for all hotels)  Reg Fees: \$400US/\$500US	Meeting space at the Hyatt and Sheraton Both hotels are newly renovated
March 8-13, 2009 12	<b>Vancouver, Canada</b>	Hyatt Regency Vancouver (550 guest rooms peak nt)  Fairmont Hotel Vancouver (400 guest rooms peak nt)	\$175CAD S or D/T (approx. \$165US* * based on current exchange rate)  Reg Fees: \$400US/\$500US	HRV/FNV - comp internet in all guest rooms Meeting rooms in both hotels
March 8-13, 2009 9	<b>Portland, OR</b>	Hilton Portland & Exec. Towers (600 guest rooms peak night) Portland Marriott (500 guest rooms peak night)	\$149US S or D/T Main Tower \$174US S or D/T Exec. Tower (both hotels)  Reg Fees: \$400US/\$500US	All meeting space and guest room in both hotels.
March 8-13, 2009 1	<b>Chicago, IL</b>	Hyatt Regency Chicago (downtown location) (1000 guest rooms peak nt)	\$189US S or D/T \$199US D/T  Reg Fees: \$400US/\$500US	All meeting rooms in hotel
<b>Other Possible Options</b>	Singapore Sydney, Australia Bangkok, Thailand Cancun, Mexico (Moon Palac Tel Aviv, Israel Taipei ROC Beijing PRC	14 2 11 10 7 15 16		

Too far between hotels

We will have continuous shuttle service between.

YES !!

Right On !!!

What is distance between hotels??

Six blocks walk and will have shuttle too.

Chicago in March??

No way, weather to chancey!!

I totally agree but I could go for July or November.

The other problems is major Union concerns.

Investigate further OK

Suspicious on quan of hotel space. Not enough nearby.

Investigate further OK

Investigate further OK

Too plitically sensitive Agree

Can PRC folks access easily Good Q

Can ROC folks access easily Good Q

Straw poll on desirability of pursuing each location for future meetings.

	Geneva	16
	Rome	11
5	London	0
	Honolulu	4
	Maui	13
	Kauai	7
	Vancouver	12
10	Portland	9
	Chicago	1
	Singapore	14
	Sydney	2
	Bangkok	11
15	Cancun	10
	Tel Aviv	7
	Taipei	15
	Beijing	16

20      **10.03 MI P&P revision adoption**      -      **Sherman**      **15**      **04:34 PM**



# EC Motion

To approve the P&P revision titled  
“AudCom” as described in the file  
named:

- 802.0-AudCom\_-\_LMSC\_P&P\_Proposed  
Resolution\_070720.pdf

Moved: Matthew Sherman

For:

Against:

2nd:

Abstain:

**Moved: To approve the P&P revision titled “AudCom” as described in the file named:  
802.0-AudCom\_-\_LMSC\_P&P\_Proposed Resolution\_070720.pdf  
Moved: Sherman/Marks**

**5 Passes: 14/0/1**

**10.04 MI Approval to ballot P&P revision "P&P revision process" - Sherman 5 04:35 PM**

# Go Forward Process for AudCom P&P Revision

- Develop updated draft of P&P including AudCom revision and previously approved editorial revision
- Provide draft to EC for 30 day review
- Provide document to AudCom for approval and posting after review

# Posting of P&P

- AudCom has posted our ‘interim’ P&P at
  - Can’t find the link yet but I’ve asked
- AudCom should post the updated P&P we provide once they approve it

Then What?

## Process for Future P&P Revisions

- Current Process for updating P&P in our P&P is in contradiction with Standards Board Operations Manual (SBOM)
  - SBOM takes precedence
- We still need to bring the two into agreement
- Also, AudCom only wants update once per year
  - Suggest providing AudCom a wrap up draft for all approved revisions Jan 1<sup>st</sup> of each year
  - Don't think a formal change in P&P revision process is required to support this

# Current SBOM

## 5.1.1.1 AudCom review of Sponsor P & P

... The IEEE Standards Sponsor P & P document accepted by AudCom shall be the official policies of that Sponsor and shall reside online on the IEEE-SA Standards Board AudCom website. No other copy shall be designated as the official copy. Links to the IEEE-SA Standards Board AudCom website are encouraged.

# Current LMSC P&P

## *7.1.5.4 LMSC Approval*

... P&P revisions become effective at the end of the plenary session at which they are approved. An up-to-date LMSC P&P should be maintained on the IEEE 802 website.

# EC Motion

To approve for distribution and executive committee ballot the P&P Revision titled “P&P Revision Process” as described in the file named:

- 802.0-P&P Revision Process\_-  
\_Proposed\_LMSC\_P&P\_Revision\_Ballot\_070720\_r0.pdf

Moved: Matthew Sherman

For:

Against:

2nd:

Abstain:

**Moved: To approve for distribution and executive committee ballot the P&P Revision titled “P&P Revision Process” as described in the file named:**

**802.0-P&P Revision Process - \_Proposed\_LMSC\_P&P\_Revision\_Ballot\_070720\_r0.pdf**

**Moved: Sherman/Marks**

5

**Moved: to ammend by inserting “compliance” between “P&P” and “revision”**

**Moved: Stevenson/Lynch**

**Moved: to table**

10 **Rigsbee/Grow**

**Passes: 7/6/0, the motion is tabled.**

10.05 MI Approve NC EC draft minutes of 20 June 2007 telecon (NC EC only) - Nikolich 5 04:55 PM

15

**Moved: to approve the public and private minutes of the 20 June 2007 telecon of the nonconflicted executive committee members.**

**Moved: Greenspan/Rigsbee**

20 **Passes: 7/0/0**

10.06 MI Approve NC EC draft minutes of 16 July 2007 executive session (NC EC only) - Nikolich 5 04:56 PM

25

**Moved: to approve the public minutes of the 16 July 2007 executive session of the nonconflicted members of the executive committee.**

**Moved: Greenspan/Rigsbee**

**Passes: 7/0/0**

10.07 MI Name of 802.3 working group - Grow 1 04:58 PM



# Name of 802.3 working group

---

- Multiple versions (802 web, 802.3 web, myProject)
- EC has approved PARs with various names
- IEEE 802.3 motion #6                      Y: 83, N: 1, A: 0  
IEEE 802.3 will use 'Ethernet' as the name of the IEEE 802.3 Working Group and request IEEE 802 EC affirmation of this.

This motion has no effect on titles of standards.

# EC Motion – Name of IEEE 802.3

---

The LMSC EC affirms IEEE 802.3 working group using the name “Ethernet”; and that this change has no effect on titles of IEEE 802.3 standards.

M: Bob Grow

S: Tony Jeffree

**Moved: The LMSC EC affirms IEEE 802.3 working group using the name “Ethernet”; and that this change has no effect on titles of IEEE 802.3 standards.**

**Moved: Grow/Jeffree**

5 A question was asked whether there are issues with trademark on the name. Bob responded that there are not any issues with the use of the name.

**Passes:14/1/0**

10.08 MI 2008 802 CD-ROM Alternative - O'Hara 10 05:08 PM

10 **Moved: to allocate funds, not to exceed \$2,000, to prepare a web interface to allow meeting registrants (only) to download the content that has formerly been distributed annually by 802 on CD-ROM.**

**Moved: O’Hara/Marks**

15 There was a lot of discussion on the mechanism for this electronic distribution, in particular the lack of a durable, physical medium for long term storage.

**Passes: 10/6/0**

20 10.09 -  
10.10 -  
10.11 -  
10.12 -  
10.13 -  
10.14 -  
10.15 -  
11.00 

Information Items
-------------------

 -  
11.01 II P&P revision process - future - Sherman 2  
11.02 II Network Services Report - Alvin 5 05:23 PM

25 Rick reported that early problems with high packet loss were discovered and addressed. There was a discussion of use of a sponsor, particularly one that provides very high bandwidth pipes to the meeting facility.

**IEEE 802 Plenary Session  
Hyatt Embarcadero, San Francisco, CA**

**Network Services Report**  
**July 19, 2007**

**Summary**

VeriLAN Event Services, Inc. (VeriLAN) is providing comprehensive network services for the IEEE 802 July 2007 Plenary meeting in San Francisco, CA. We are pleased to report that after resolving significant issues with the onsite infrastructure, the network is stabilized and supporting in excess of 1600 wireless clients.

**Issue:** VeriLAN observed persistent 2% to 9% packet loss across the hotel infrastructure at the beginning of the week.

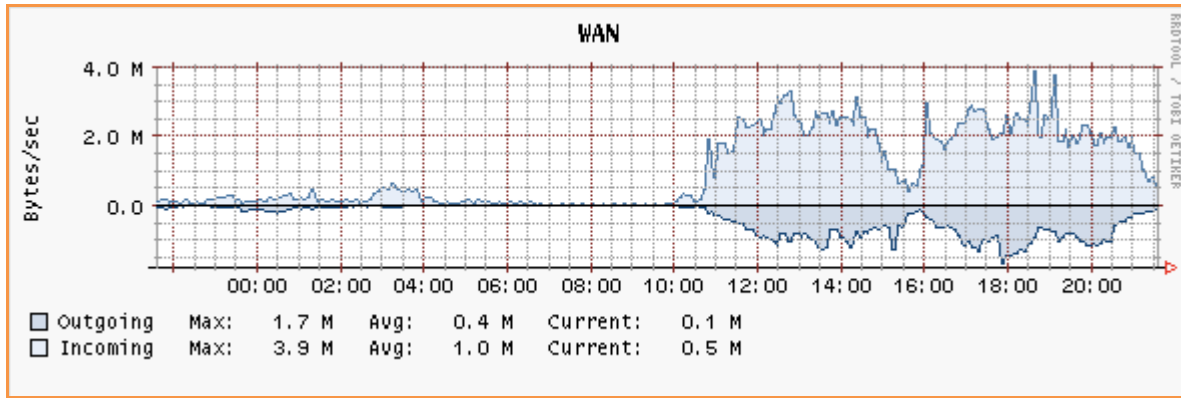
**Resolution:** VeriLAN engineers teamed with the Swisscom onsite staff to bring about a rapid solution to the problem. Extensive diagnostic were performed to isolate the source of the problem, identifying a malfunctioning core switch in the hotel MDF. VeriLAN replaced mission critical portions of the core switching network with two 24-port managed switches configured by VeriLAN's network engineers. The switches installed by VeriLAN are providing the VLANs required to support the IEEE 802 plenary session.

The VeriLAN Network Help Desk provided support for all attendees during scheduled meeting hours. All Help Desk support requests were addressed and fully resolved by VeriLAN staff.

The property is fed by a 45Mbps symmetrical DS3 connection to the Internet. We were given unrestricted access to the bandwidth, which is shared with the guest rooms and administrative offices. The shared Internet bandwidth was provided at no charge to IEEE guest rooms over the hotel's wireless network. The measured network latency is low, indicating that we are fitting well within the line capacity. Network traffic statistics are shown in Figure 1. Internet usage for the last 24 hour period is shown in Figure 2.

Traffic statistics - Thu Jul 19 21:38:20 2007							
Interface	Period	Direction	Current rate	Hour	Day	Week	Month
LAN-SECURE (3)	Current	In	28.1 Kbits/s	3.7 MB	2.0 GB	38.0 GB	38.1 GB
		Out	91.9 Kbits/s	22.2 MB	4.9 GB	14.7 GB	14.8 GB
	Previous	In		20.4 MB	449.5 MB	61.9 MB	0.0 KB
		Out		286.5 MB	2.3 GB	166.1 MB	0.0 KB
Manage	Current	In	6.4 Kbits/s	3.4 MB	903.8 MB	3.0 GB	3.2 GB
		Out	32.1 Kbits/s	42.2 MB	1.3 GB	17.0 GB	20.0 GB
	Previous	In		8.5 MB	152.9 MB	97.2 MB	0.0 KB
		Out		54.7 MB	1.1 GB	1.0 GB	0.0 KB
OPEN	Current	In	522.6 Kbits/s	338.8 MB	25.0 GB	158.8 GB	158.8 GB
		Out	2.1 Mbits/s	1.8 GB	72.8 GB	309.8 GB	310.1 GB
	Previous	In		2.4 GB	80.7 GB	43.8 MB	0.0 KB
		Out		5.9 GB	85.3 GB	361.0 MB	0.0 KB
WAN	Current	In	2.2 Mbits/s	1.8 GB	79.0 GB	341.6 GB	345.1 GB
		Out	548.0 Kbits/s	344.0 MB	27.8 GB	166.1 GB	166.4 GB
	Previous	In		6.3 GB	88.9 GB	1.5 GB	0.0 KB
		Out		2.4 GB	81.2 GB	184.8 MB	0.0 KB

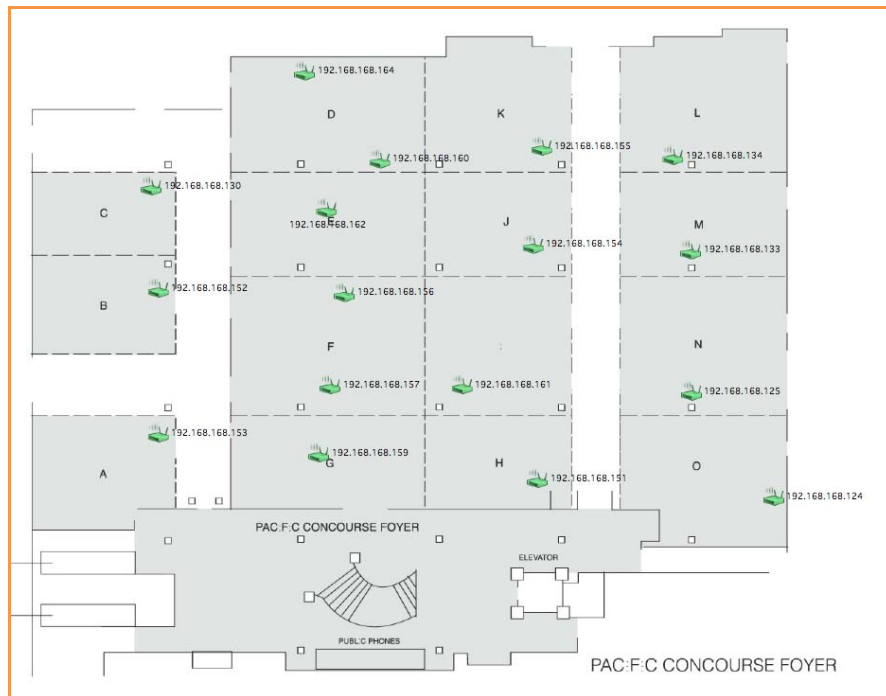
**Figure 1. Internet Traffic Statistics**



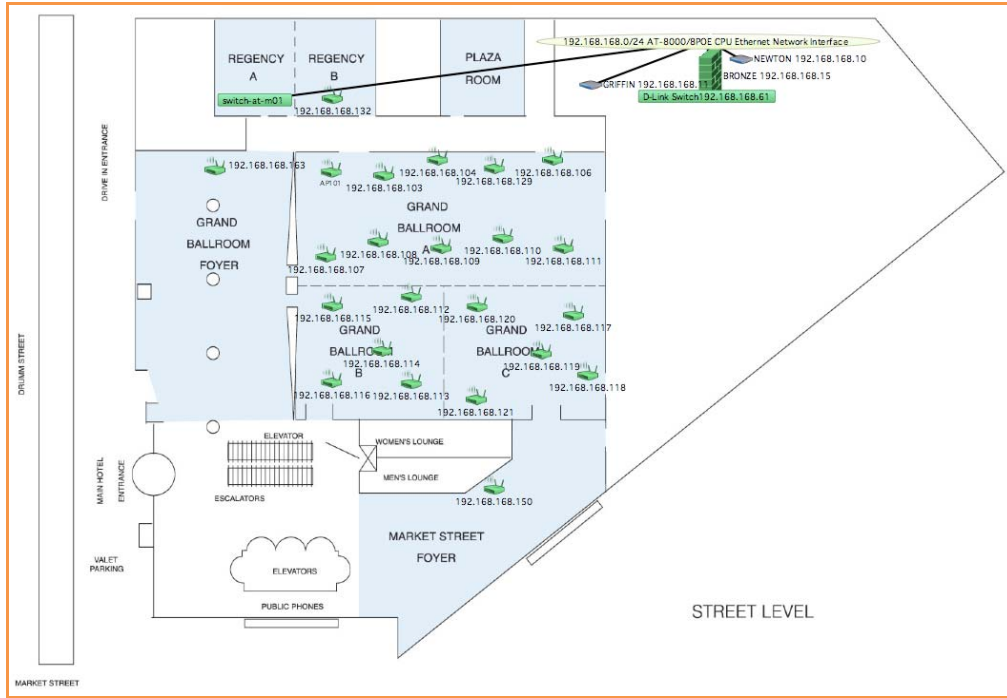
**Figure 2. Internet Usage: last 24 hours (EST)**

**Network Deployment & Coverage**

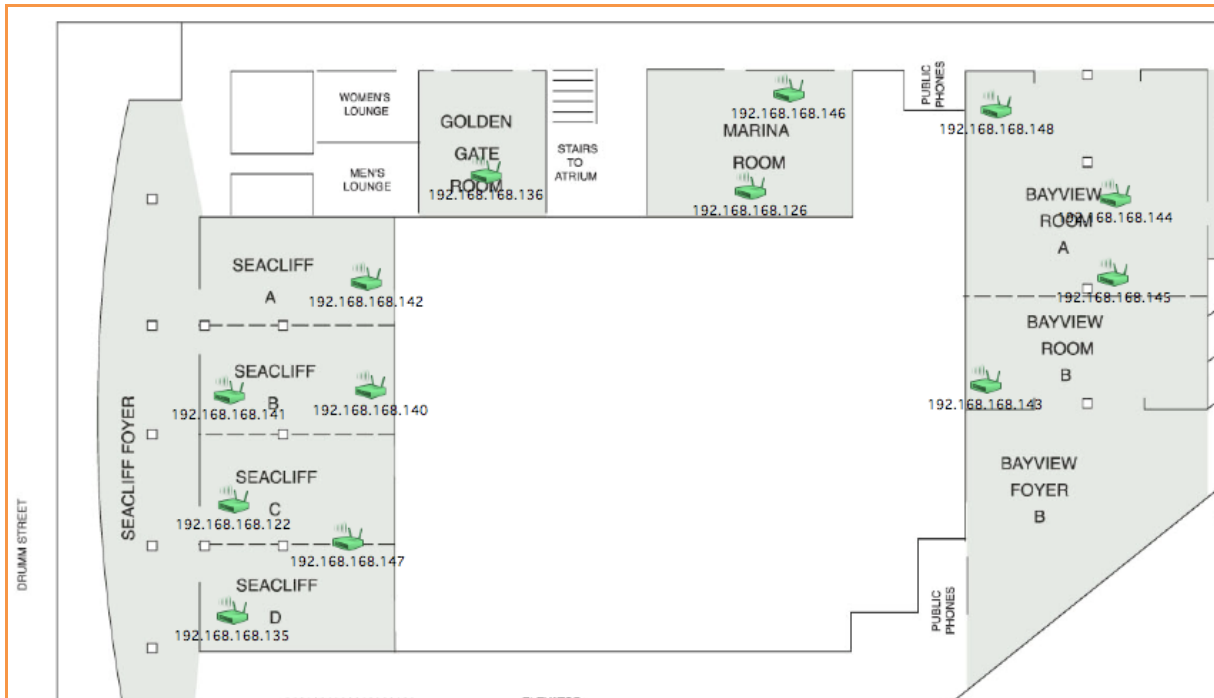
VeriLAN deployed 70 enterprise grade tri-modal IEEE 802.11a/b/g wireless access points across four floors to provide coverage for all meeting spaces. Target association density was 40 clients per WAP. VeriLAN is providing both Open and Secure (802.1x) networks to registered attendees. Figures 2 through 5 illustrate the location of the WAP deployments.



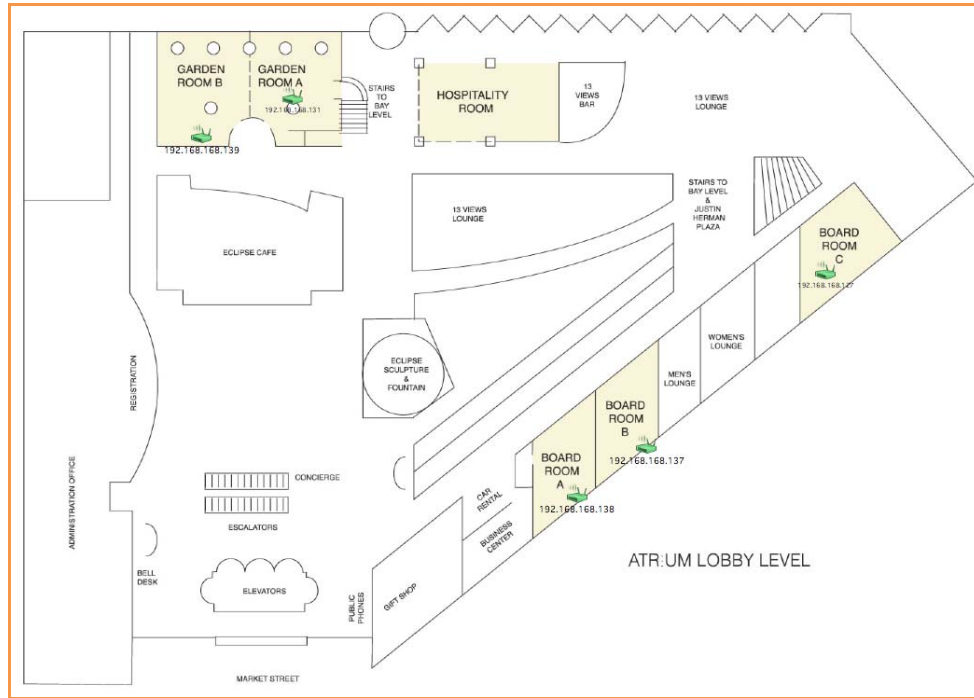
**Figure 3. Pacific Concourse Level Access Point Deployment Plan**



**Figure 4. Street Level Access Point Deployment Plan**




**Figure 5. Bay Level Access Point Deployment Plan**



**Figure 6. Atrium Lobby Level Access Point Deployment Plan**





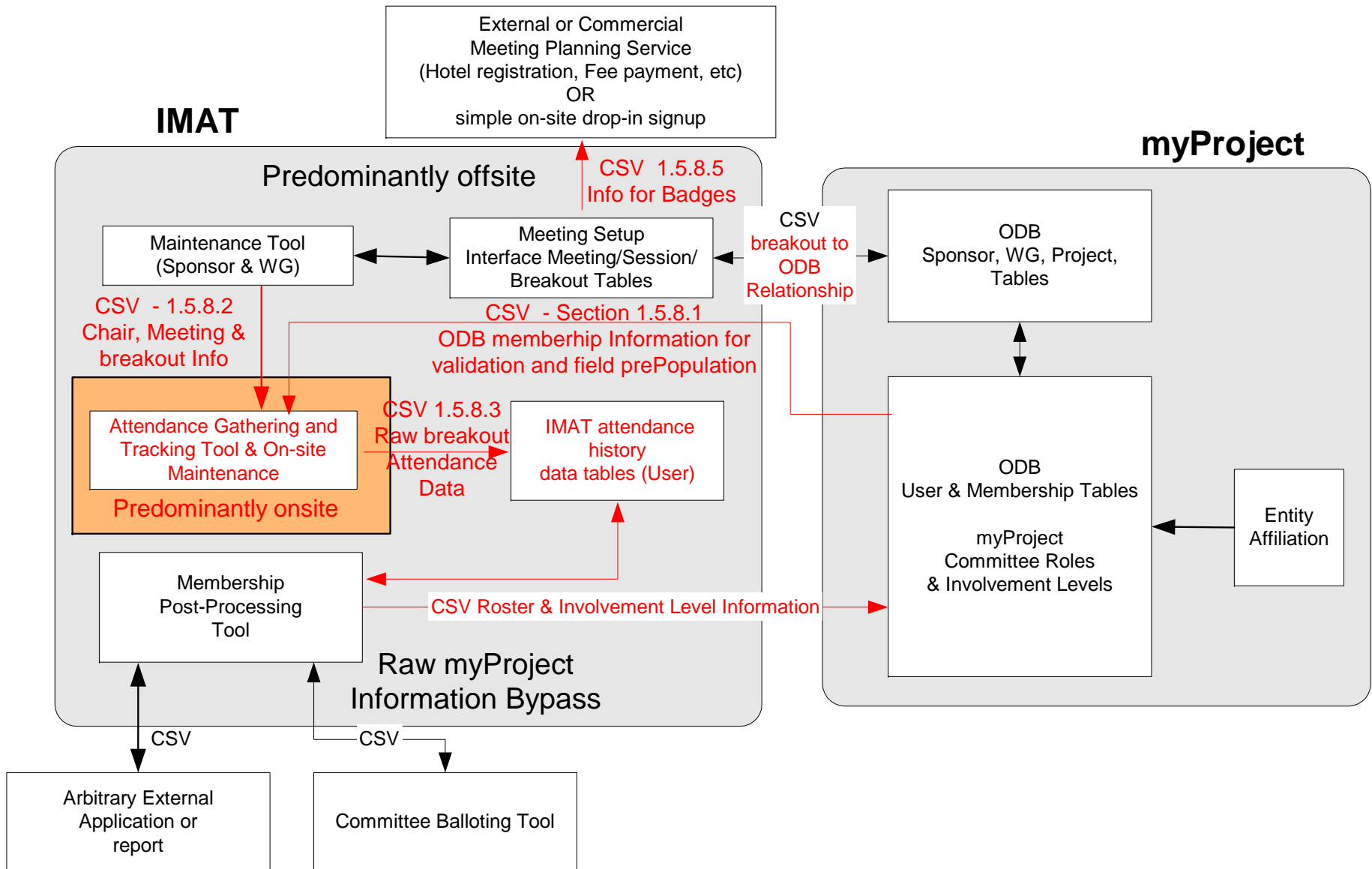


# IMAT Status Report & Future Plans

(Subject to change)

LMSC Executive Committee  
July 19, 2006  
Clyde Camp  
Mike Kipness  
Bob Labelle





# IMAT Attendance vs myProject Rosters

- Now ... the official Roster for committees (projects & WGs) is via manual roster uploads by the WG/Sponsor chairs on an annual basis
  - Those not in myProject cannot participate in formal Sponsor Ballots
  - They can still fully participate in committee work
  - IMAT tracks committee attendance by breakout & calculates WG voting rights which are then fed to the myProject rosters for Sponsor/WG/project
- Soon ... myProject registration will likely become a requirement for all IEEE-SA committee work in the near future as the central 'clearing house' for
  - Contact information & official Sponsor/WG/project rosters
  - Copyright, Ethics, Participation agreements
  - Committee Roles and authorities (chairs, secretaries, etc)
  - Employer & Affiliation records
  - WG participant Voting status (Involvement Level)
- IMAT helps facilitate the latter of these

# IMAT July Performance

- Some minor initial hostname and URL issues
- Big bug early Tuesday morning but fixed within an hour of its being reported
- We received virtually no negative feedback or reported problems
  - The bug previously mentioned
  - A security issue which will be fixed by September
  - Several suggestions/comments today from Gilb & McInnis

	802.11	802.15
Users	11(9)	81(62)
Monday	25	105
Tuesday	28	198
Wednesday	28	176
Total	81	479

# September Plans based on July Performance

- Go to full 100% official usage for .11 and .15
  - Use duplicate entries on existing systems as backup
- If September data and post-processing calculations are successful, the old .11 and .15 systems will likely be decommissioned
- The Spec'd membership rule-set will apply across all LMSC users of IMAT
  - Non-users will eventually have to upload their final rosters/memberships directly to myProject

# For September (pre-Beta)

- **Attendees/WG Officers**

- All .11 and .15 attendees must have acquired a WebID
- All .11 and .15 attendees must have logged into myProject and registered their Interest Areas

- **Bivio/Azgaard**

- Complete attendance collector details identified in July
- Complete bulk of needed IMAT/myProject functionality including
  - The system Breakout/Timeslot builder
  - The local maintenance functionality including Real-time attendance percentage display
  - The myProject IMAT bypass (for those not using IMAT) for uploading/downloading off-line maintained rosters
  - Lots of details with respect to roles and authorities for access

# For November (Beta)

- Complete the Spec'd functionality
  - Complete external meeting planner interface for badge printing
  - Complete rest of maintenance interface
  - Complete integration and user GUI with respect to myProject WG and Sponsor Rosters
- Open system to all 802 WGs that wish to use it (802.11 & 802.15 must)

# Production Release Plan

- January still planned for production release but it depends on how the September and November tests go
- At the time that decision was made, Taipei was not in the works for the main test group
- Other groups that plan to use IMAT at the same time in other venues
  - Need to have IMAT s/w on their local servers ... OR
  - Use their existing mechanisms and upload as CSV ... OR
  - Use a public web-based instance of the IMAT s/w (of course, this option is not available if there is a network outage) ... OR
  - Use whatever they are using now as a backup



# Breakout Signup Notes

- *All* breakouts will be listed on the signup sheet
  - TGs, SGs & composite meetings  
(e.g. Wireless Chair meeting or 802.11 project chair meeting)
  - Executive Committee & tutorial breakouts
  - Adhoc breakouts
- Only a single breakout in a single time-slot will be accepted
  - Impossible to double up
  - Some minor issues with multiple breakouts occurring in a single timeslot
- Each breakout has a credit-value associated with it
  - We will visually distinguish between 0-credit and for-credit breakouts but it's ultimately up to attendee to decide if multiple options
- IMAT tracks and retains attendance data on a by-breakout basis to calculate WG membership and voting status
- myProject retains membership and voting status on a by-WG basis
- Breakout changes/additions require web access to myProject (for now)


# Login and User Validation

- We are validating users based on email address and WebID
- If a walk-in does not have a WebID
  - Attendance will still be collected based on email address/local password ... But
  - No credit applied until WebID obtained

# Affiliation

- Following a breakout signup the user will be asked to provide his affiliation
  - If user is in myProject, his affiliation there will pre-populate the field
  - Affiliation will be remembered for each TG/WG once entered and will pre-populate each request for entry
  - Affiliation at the end of the meeting will overwrite the affiliation for that project/WG in myProject
  - For now, affiliation entry is freeform field. Eventually, it will be the same setup as myProject

# Sign-in Page



## Attendance Log

HOME Tue Jul 17 23:42:02 2007  
[Logout](#)

**IEEE 802.11 Attendance Log**  
*c.camp@ieee.org*

Changes are not saved until you press "Update"!

[Monday](#) [Tuesday](#) [Wednesday](#) [Thursday](#) [Friday](#)

There are no active timeslots on this day.

Track	AM1	AM2	PM1	PM2	EVE
WG MTG			●		
JT WIRELESS					
WG CAC					
EDITORS					
WIRELESS LEADER					
NEW MBR ORIENTATION					
WNG SC					
TGK	○			○	
TGMB				○	
TGN	○			●	
TGP		○			
TGR					
TGS	○	○			
TGT	○	○			
TGU	○				
TGV				○	

- Only one timeslot is active
- Only one breakout (for credit or not) can be checked per active timeslot

# Data Log

WebID	Email	Employer	Affiliation	Breakout ID	Time Stamp
	clint.chaplin@gmail.com	TBD	Samsung Electronics	1:Monday:AM1:TGN(1)	2007-07-16 11:14:29
	tom@azgaard.com	TBD	Azgaard Systems	1:Monday:AM1:TGK(4)	2007-07-16 11:17:07
	ganesh.venkatesan@intel.com	TBD	Intel Corporation	1:Monday:AM1:TGK(4)	2007-07-16 12:01:40
	ganesh.venkatesan@intel.com	TBD	Intel Corporation	1:Monday:AM2:VHT SG(6)	2007-07-16 14:11:26

"" , "clint.chaplin@gmail.com" , "TBD" , "Samsung Electronics" , "1:Monday:AM1:TGN(1)" , 2007-07-16 11:14:29

"" , "tom@azgaard.com" , "TBD" , "Azgaard Systems" , "1:Monday:AM1:TGK(4)" , 2007-07-16 11:17:07

"" , "ganesh.venkatesan@intel.com" , "TBD" , "Intel Corporation" , "1:Monday:AM1:TGK(4)" , 2007-07-16 12:01:40

"" , "ganesh.venkatesan@intel.com" , "TBD" , "Intel Corporation" , "1:Monday:AM2:VHT SG(6)" , 2007-07-16 14:11:26

# Meeting/Time-Slot/Breakout Setup

## Meeting Detail

C/LM Local and Metropolitan Area Networks  
London 2010 Plenary  
15-Jul-2010  
Europe/London Time Zone

[Add a new session](#)

Start Time	End Time	Session Name	
06:00	08:00	Pre	<a href="#">delete</a>
08:00	10:00	AM1	<a href="#">delete</a>
10:00	12:00	AM2	<a href="#">delete</a>

[Add a new breakout](#) [View all attendance](#) [Upload attendance](#)

Time Period	Group	Breakout Name	Attendance	
15-Jul-2010 08:00 - 10:00	C/LM/WG802.19 Coexistence TAG	TG76	0	<a href="#">view attendance, delete</a>
15-Jul-2010 08:00 - 12:00	C/LM/WG802.15 Wireless Personal Area Network (WPAN) Working Group	TG45	0	<a href="#">view attendance, delete</a>

# WG Chair Project Summary

Project<sup>tm</sup> - Manage WG Projects for: *WG Name*

Sponsor P&P Link [Email Sponsor Chair](#) [WG Roster](#) [Change WG Officers](#)

Perform Action on Selection:

Select View:  Published Projects  All active Projects  All Projects

Select for Action	Parent	Committee, Project or Standard	Qualifier (See Note 2)	Type	Status	Date PAR Approved or Standard Published	PAR Expiration Date	Roster	View/Change Contacts
<input type="radio"/>	PE/TR	<a href="#">1636</a>	HVAC	New	<a href="#">WGDraft</a>	30-May-2002	May 5, 2008	<a href="#">25</a>	<a href="#">Contacts</a>
<input type="radio"/>	<a href="#">C/LM/802.3</a>	<a href="#">802.3am</a>	REV	Revision	<a href="#">Ballot Recirc#3</a>	1-Jan-2003	June 22, 2009	<a href="#">25</a>	<a href="#">Contacts</a>
<input type="radio"/>	<a href="#">C/LM</a>	<a href="#">802.3</a>						<a href="#">17</a>	<a href="#">Officers</a>
<input type="radio"/>	<a href="#">C/MM</a>	<a href="#">754</a>	FUBAR	Revision	<a href="#">Revision</a>	3-Mar-2003	December 31, 2012	<a href="#">12</a>	<a href="#">Contacts</a>

# WG Chair Project Roster

 myProject<sup>tm</sup> - Manage Project Roster for *P123*

The following individuals participate in the P123 Project -- [Change Project Contacts](#)

[Download Roster as CSV](#)

[Upload Membership Update](#)

Name	Phone	Email	Project Role(s)	Role Assignment	Participant	Non-Voting Member	Voting Member	Tx Columns (See Note 9)
<a href="#">Frank Sutton</a>	888-782-0099	<a href="mailto:frank@sutton.com">frank@sutton.com</a>	Secretary, L50	<a href="#">Change Role</a>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<a href="#">Sally Treste</a>	345-2289-00	<a href="mailto:treste@treste.it">treste@treste.it</a>	Treasurer	<a href="#">Change Role</a>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<a href="#">Iggly Trevor</a>	123 458 111	<a href="mailto:iggy@ieee.org">iggy@ieee.org</a>		<a href="#">Change Role</a>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<a href="#">Eve Fall</a>	455 789 8888	<a href="mailto:falleve@ieee.org">falleve@ieee.org</a>		<a href="#">Change Role</a>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

[Submit Changes](#)



Concern was expressed about the “internet connected” method for access to the attendance server allowing anyone with internet access to be able to sign in for attendance credit.

**11.04 II Emergency Services - next steps - Nikolich 10 05:45 PM**

5 Paul reported that Stephen McCann is willing to continue developing this concept in 802. Perhaps an EC study group is appropriate. Pat Thaler will work with Stephen to develop the study group. There was some concern expressed about the scope of such work, since much of the material at the tutorial was presented at the application layer. Pat indicated that the study group would not be given carte blanche to produce whatever PAR they want. The study group would decide if any work would fit within the scope of 802.

10

**11.05 II Send 802.20 OC draft reports to NC EC email ballot - Nikolich 5 05:50 PM**

Paul indicated he is delinquent in sending the reports produced by the Oversight Committee to ballot of the nonconflicted EC members for approval. He will begin sending them out.

**11.06 DT Ex officio discussion - Nikolich 5 05:51 PM**

15

Paul asked for feedback on the email discussion of his request for ex officio membership in the WGs and TAGs. He asked for guidance on including this topic in a future P&P change. Pat asked what Paul is actually seeking. He responded that he primarily wants to be a member of LMSC. Secondarily he wants to have voting rights.

20

**11.07 II Reminder of 802 elections in March 2008 - Grow 5 05:57 PM**

EC elections are coming up in March 2008. If you don't have election procedures in your P&P, make sure you have agreed to them in a meeting where you have a quorum, before you start to use them.

**11.08 II Update to IMT Advanced activities - Lynch 5 05:58 PM**

25

## EC IMT-Advanced Update

- RR-TAG was directed to take this project
  - Normal route for outputs to ITU-R
  - Has experience with developing “joint” views
- First meeting held during Londonium interim
  - Well attended, definite interest in moving forward
- Work was done F2F and by conference calls
  - IMT-Advanced Requirements input to ITU-R WP8F submitted 15 May to IEEE-SA ITU-R liaison

# 17 July Meeting Agenda

- Updated work done at most recent WP8F meeting
  - Provided by Adam Pollard – chair of the WP8F drafting group
- Discussion/decision on further requirements input to WP8F
  - Same work method as previously used
  - Interested WGs develop inputs, harmonize in 802.18
  - Completion date Q4 2007
  - Work to start in September

## Timeline - Requirements

- July IEEE 802 plenary
  - Decision on IMT-Advanced Requirement made
  - 802.18 requirements correspondence group continues
- September wireless interim
  - Work begins and continues with conference calls if needed
- November 2007 IEEE 802 Plenary
  - Contribution completed and approved
  - Submitted to ITU-R

## 17 July Meeting Agenda con't

- Discussion/decision on submission of a joint IEEE 802 technology input to ITU-R WP8F
  - Same work method as used for requirements
  - Tentative completion date Q4 2008
  - No decision taken
    - Some expressed the view that it would be too difficult to achieve a joint IEEE 802 input
    - Will be considered again at the November plenary

## Proposed Timeline - Technology

- July IEEE 802 plenary
  - Decision on IMT-Advanced Technology made
- September wireless interim
  - 802.18 technology correspondence group established and scope of work defined
- November 2008 IEEE 802 Plenary
  - Contribution completed and approved
  - Submitted to ITU-R

11.09 II DYSPAN SCC update - Nikolich/Shellhammer 5 05:59 PM

Steve and Paul met with the new co-chair of DYSPAN.

11.10 DT Decorum during meetings - Nikolich 5 05:59 PM

5

There are some members who are being disruptive during the session. Paul will be working with Bob Grow to develop methods to deal with this.

11.11 II Potential press release - Stevenson 1 05:59 PM

10 Carl will send this to the EC reflector.

- 11.12 -
- 11.13 -
- 11.14 -
- 11.15 -
- 11.16 -
- 11.17 -
- 11.18 -
- 11.19 -
- 11.20 -
- 11.21 -

<b>ADJOURN SEC MEETING</b>		- Nikolich	<b>06:00 PM</b>
<b>ME - Motion, External</b>	<b>MI - Motion, Internal</b>		
<b>DT- Discussion Topic</b>	<b>II - Information Item</b>		
<b>Special Orders</b>			

15 The meeting was adjourned at 6:00pm.

Respectfully submitted,

Bob O'Hara

20 Recording Secretary, 802 LMSC