

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

Friday March 21, 2008 1:00 PM – 6:00 PM

5 Orlando, FL

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

Paul Nikolich called the meeting to order at 1:01 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
- 15 John Hawkins - Treasurer, IEEE 802 LAN/MAN Standards Committee
- Tony Jeffree - Chair, IEEE 802.1 - HILI Working Group
- Bob Grow - Chair, IEEE 802.3 - CSMA/CD Working Group
- Stuart Kerry - Chair, IEEE 802.11 - Wireless LANs Working Group
- Bob Heile - Chair, IEEE 802.15 – Wireless PAN Working Group
- 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
- 25 Vivek Gupta - Chair, IEEE 802.21 – Media Independent Handover
- Carl Stevenson - Chair, IEEE 802.22 – Wireless Regional Area Networks
- Geoff Thompson - Member Emeritus (non-voting)

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

r04 AGENDA - IEEE 802 LMSC EXECUTIVE COMMITTEE MEETING
Friday, March 21, 2008 - 1:00PM -6:00PM

1.00	MEETING CALLED TO ORDER	-	Nikolich	1	01:00 PM
2.00	MI APPROVE OR MODIFY AGENDA	-	Nikolich	9	01:01 PM
2.01	MI Confirmation of Tony Jeffree UC-EC membership	-	Nikolich	5	01:10 PM
3.00	MI WG and TAG Officer Confirmation	-	Nikolich	30	01:15 PM
3.01	MI EC Chair Election	-	Nikolich	5	01:45 PM
3.02	MI Confirmation of EC appointed positions	-	Nikolich	10	01:50 PM
4.00	II Announcements from the Chair	-	Nikolich	5	02:00 PM
4.01	II Declaration of potential dominance in 802.11	-	O'Hara	5	02:05 PM
Category (* = consent agenda)					
5.00	IEEE Standards Board Items	-			02:10 PM
5.01	ME	-			02:10 PM
5.02	ME 802.22 PAR extension to NESCOM	-	Stevenson	2	02:10 PM
5.03	ME 802.11p PAR extension to NESCOM	-	Kerry	2	02:12 PM
5.04	ME 802.11s PAR extension to NESCOM	-	Kerry	2	02:14 PM

5.05	ME	802.11u PAR extension to NESCOM	-	Kerry	2	02:16 PM
5.06	ME	802.11v PAR extension to NESCOM	-	Kerry	2	02:18 PM
5.07	ME	802.20 PICS PAR to NESCOM	-	Greenspan	5	02:20 PM
5.08	ME	802.20 Minimum Performance PAR to NESCOM	-	Greenspan	2	02:25 PM
5.09	ME	802.1Q-REV PAR to NESCOM	-	Jeffree	2	02:27 PM
5.10	ME	802.1aj PAR extension to NESCOM	-	Jeffree	2	02:29 PM
5.11	ME	802.1BA PAR to NESCOM	-	Jeffree	2	02:31 PM
5.12	ME	802.1Qav PAR to NESCOM	-	Jeffree	2	02:33 PM
5.13	ME	802.1Qbb PAR to NESCOM	-	Jeffree	2	02:35 PM
5.14	ME	802.11aa (VTS) PAR to NESCOM	-	Kerry	2	02:37 PM
5.15	ME	Conditional approval of 802.15.3 reaffirmation to RevCom	-	Heile	10	02:39 PM
5.16	ME	802.11r to RevCom	-	Kerry	5	02:49 PM
5.17	ME	802.11y to RevCom	-	Kerry	5	02:54 PM
5.18	ME	Conditional approval of 802.11w to RevCom	-	Kerry	10	02:59 PM
5.19	ME	802.1AX/802.3 to RevCom	-	Grow	5	03:09 PM
5.20	ME	Conditional approval of 802.20 to RevCom	-	Greenspan	15	03:14 PM
5.21	ME	Conditional approval of 802.1ah to RevCom	-	Jeffree	10	03:29 PM
5.22	ME		-			03:39 PM
5.23	ME	Conditional approval of 802.16j to sponsor ballot	-	Marks	10	03:39 PM
5.24	ME	Approval of 802.1ak-Cor 1 to sponsor ballot	-	Jeffree	5	03:49 PM
6.00		Executive Committee Study Groups, Working Groups, TAGs	-			03:54 PM
6.01	MI*	802.15 RFID SG Extension (1st extension)	-	Heile		03:54 PM
6.02	MI	802.11 Very high Throughput SG (2nd Extension)	-	Kerry	2	03:54 PM
6.03	MI	802.11 Video Transport Streams SG (2nd Extension)	-	Kerry	2	03:56 PM
6.04	MI	802.21 Security SG (2nd extension)	-	Gupta	2	03:58 PM
6.05	MI	802.21 Multi Radio Power Management SG (2nd extension)	-	Gupta	2	04:00 PM
6.06	MI	Formation of 802.15 Visible Light Communication SG	-	Heile	3	04:02 PM
6.07	MI	Formation of 802.21 Emergency Services SG	-	Gupta	3	04:05 PM
6.08	MI	formation of 802.21 Handover with Broadcast Services SG	-	Gupta	3	04:08 PM
6.09			-			04:11 PM
6.10			-			04:11 PM
7.00		Break	-		10	04:11 PM
8.00		IEEE-SA Items	-			04:21 PM
8.01	II	802 Task Force update	-	Nikolich	10	04:21 PM
8.02	II		-			04:31 PM
8.03			-			04:31 PM
9.00		LMSC Liaisons & External Interface	-			04:31 PM
9.01	II		-			04:31 PM
9.02	ME		-			04:31 PM
9.03	ME	Liaison to ITU-R WP1A on Status of 275-3000HGz Band	-	Lynch	2	04:31 PM
9.04	ME	Proposed Amendments to Section 4 of ITU-R/IMT-Advanced/IMT-Tech document	-	Lynch	5	04:33 PM
9.05	ME	Proposed Amendments to Sections 5&6 of ITU-R/IMT-Advanced/IMT-Tech document	-	Lynch	5	04:38 PM
9.06	ME	Update of Subclause 5.6 of Rec. ITU-R M.1457	-	Lynch	2	04:43 PM
9.07	ME	Revision of M.1457 Introduction	-	Lynch	2	04:45 PM
9.08	ME	Revision of M.1457 Administrative Procedures	-	Lynch	2	04:47 PM
9.09	ME	Request for Clarification on Steps 2 & 3 of the Submission and Evaluation Procedure for IMT-Advanced	-	Lynch	2	04:49 PM
9.10	ME	Request For Clarification of the Formula in the WP5D Liaison Statement on OFDMA TDD WMAN BS and MS ACS Values	-	Lynch	2	04:51 PM
9.11	ME	Liaison approval - ITU-T SG 15	-	Grow	2	04:53 PM
9.12	ME	802.16 Liaison to WiMAX Forum	-	Marks	2	04:55 PM
9.13	II	802.16 Liaison to 802.11/802.15	-	Marks	2	04:57 PM
9.14	ME	802.16 Liaison to Bluetooth	-	Marks	2	04:59 PM

			-		05:01 PM
10.00		LMSC Internal Business	-		05:01 PM
10.01	II	Treasurer's Report	-	Hawkins	5 05:01 PM
10.02	MI	Meeting Planner RFP	-	Hawkins	15 05:06 PM
10.03	MI	Network Management Strategy	-	Hawkins	10 05:21 PM
10.04	MI*		-		05:31 PM
10.05	MI*	Approval of 802.20 report on Taiwan meeting (UCEC)	-	Greenspan	05:31 PM
10.06	MI*	Approval of 802.20 report on OC Activities in 2007 (UCEC)	-	Greenspan	05:31 PM
10.07	MI	nNA RFP Process Report and Motion	-	Rigsbee	5 05:31 PM
10.08	MI	Approval to Ballot P&P Revision Titled "Creation of Operations Manual"	-	Sherman	10 05:36 PM
10.09			-		05:46 PM
10.10			-		05:46 PM
11.00		Information Items	-		05:46 PM
11.01	II		-		05:46 PM
11.02	II	Network Services Report	-	Rigsbee	5 05:46 PM
11.03	II	Future meeting sites	-	Rigsbee	10 05:51 PM
11.04	II	802.17 Status	-	Lemon	5 06:01 PM
11.05	II	Attendance Software	-	Gilb	10 06:06 PM
11.06	II	Update on IMT-Advanced	-	Lynch	3 06:16 PM
11.07			-		06:19 PM
11.08			-		06:19 PM
11.09			-		06:19 PM
11.10			-		06:19 PM
		ADJOURN SEC MEETING	-	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: Hawkins/Rigsbee

Passes: 15/0/0

5

2.01 MI Confirmation of Tony Jeffree UC-EC membership - Nikolich 5 01:10 PM

Jerry Upton requested that we reconsider the appointment of Tony Jeffree to the UC-EC, given his sponsorship by Cisco and Cisco's closing of the acquisition of Navini, a WiMAX supplier. He states that this request is strictly to avoid the perception of conflict in the UC-EC.

10

Tony responded that he is sponsored by four organizations. The sponsorships are strictly to support his work as chair and editor. He accepts no direction from them in the area of responsibility of the UC-EC.

15

Pat clarified that Broadcom has retained Tony's services solely as an editor in 802.1. She also objects procedurally to how this is being handled. In particular all previous such discussions, the discussion has been in executive session, due to the personnel related discussion.

Motion: to exclude Tony Jeffree from the UC-EC.

Moved: Heile/O'Hara

20

Voting is by members of the UC-EC.

Fails: 2/3/2 (eight members of the UC-EC present, seven voting)

3.00 MI WG and TAG Officer Confirmation - Nikolich 30 01:17 PM

802 EC officer confirmations

WG/TAG officer confirmations

- 802.1
 - Chair: Tony Jeffree 52-0-0
 - Vice Chair: Paul Congdon 36-0-0
- 802.3
 - Chair: David Law 91-0
 - Vice Chair: Wael Diab 98-0
- 802.11
 - Chair: Bruce Kraemer 145
 - Vice Chair A: Adrian Stephens 81-21-29 in 3 way runoff
 - Vice Chair B: Jon Rosdahl 68-26-40 in 4 way runoff

WG/TAG officer confirmations

- 802.15
 - Chair: Bob Heile 53-1-1
 - Vice Chair: Rick Alfvin 53-1-1
 - Vice Chair: Pat Kinney 53-1-1
- 802.16
 - Chair: Roger Marks 162 of 163 ballots cast
 - Vice Chair: Jose Puthenkulam 145 of 163 ballots cast
- 802.17
 - Chair: John Lemon 6-0-0
 - Vice Chair: Refael Ram 6-0-0

WG/TAG officer confirmations

- 802.18
 - Chair: Mike Lynch 6-0-0
 - Vice Chair: Peter Murray 6-0-0
- 802.19
 - Chair: Steve Shellhammer 7-0-0
 - Vice Chair: Ivan Reede 6-0-1
- 802.20
 - Chair: Mark Klerer 8-0-2
 - Vice Chair: Radhakrishna Canchi 9-1-0

WG/TAG officer confirmations

- 802.21
 - Chair: Vivek Gupta 34-0-0
 - Vice Chair: Subir Das 26 (v Mwilliams 11)
- 802.22
 - Chair: Carl Stevenson ~30ish
 - Vice Chair: Gerald Chouinard ~30ish

Confirmation of 802.1 Officers

Moved: to confirm Tony Jeffree as chair of 802.1

Moved: Lemon/Greenspan

5 **Passes: 15/0/1**

Moved: to confirm Paul Congdon as vice chair of 802.1

Moved: Jeffree/Grow

Passes: 16/0/0

10

Confirmation of 802.3 Officers

Moved: to confirm David Law as chair of 802.3

Moved: Grow/Kerry

Passes: 16/0/0

15

Moved: to confirm Wael Diab as vice chair of 802.3

Moved: Grow/Kerry

Passes: 16/0/0

20

Confirmation of 802.11 Officers

Moved: to confirm Bruce Kraemer as chair of 802.11

Moved: Kerry/Heile

Passes: 16/0/0

25

Moved: to confirm Adrian Stephens as vice chair of 802.11

Moved: Kerry/Rigsbee

Passes: 16/0/0

30

Moved: to confirm Jon Rosdahl as vice chair of 802.11

Moved: Kerry/Lynch

Passes: 16/0/0

35

Confirmation of 802.15 Officers

Moved: to confirm Bob Heile as chair of 802.15

Moved: Stevenson/Greenspan

Passes: 15/0/1

40

Moved: to confirm Rick Alfvn as vice chair of 802.15

Moved: Heile/Stevenson

Passes: 16/0/0

45

Moved: to confirm Pat Kinney as vice chair of 802.15

Moved: Heile/Greenspan

Passes: 16/0/0

Confirmation of 802.16 Officers

5

Moved: to confirm Roger Marks as chair of 802.16

Moved: Sherman/Rigsbee

Passes: 15/0/1

10 **Moved: to confirm Jose Puthenkulam as vice chair of 802.16**

Moved: Marks/Gupta

Passes: 16/0/0

15 **Confirmation of 802.17 Officers**

Moved: to confirm John Lemon as chair of 802.17

Moved: Hawkins/Rigsbee

Passes: 15/0/1

20

Moved: to confirm Refael Ram as vice chair of 802.17

Moved: Lemon/Heile

Passes: 16/0/0

25

Confirmation of 802.18 Officers

Moved: to confirm Mike Lynch as chair of 802.18

Moved: Hawkins/Sherman

30 **Passes: 15/0/1**

Moved: to confirm Peter Murray as vice chair of 802.18

Moved: Lynch/Stevenson

Passes: 16/0/0

35

Confirmation of 802.19 Officers

Moved: to confirm Steve Shellhammer as chair of 802.19

40 **Moved: Heile/Greenspan**

Passes: 15/0/1

Moved: to confirm Ivan Reede as vice chair of 802.19

Moved: Shellhammer/Stevenson

45 **Passes: 16/0/0**

Confirmation of 802.20 Officers

Moved: to confirm Mark Klerer as chair of 802.20

Moved: Greenspan/Heile

Passes: 8/0/0 (UC-EC only)

5 **Moved: to confirm Radhakrishna Canchi as vice chair of 802.20**

Moved: Greenspan/Heile

Passes: 8/0/0 (UC-EC only)

10 **Confirmation of 802.21 Officers**

Moved: to confirm Vivek Gupta as chair of 802.21

Moved: Sherman/Rigsbee

Passes:15/0/1

15

Moved: to confirm Subir Das as vice chair of 802.21

Moved: Gupta/Rigsbee

Passes: 16/0/0

20

Confirmation of 802.22 Officers

Moved: to confirm Carl Stevenson as chair of 802.22

Moved: Lemon/Greenspan

25

Bob Grow raised the issue that counts of the votes cast for the candidates in the 802.22 elections are not available.

Passes: 13/0/2

30

Moved: to confirm Gerald Chouinard as vice chair of 802.21

Moved: Stevenson/Greenspan

Passes: 14/0/2

35

3.01 MI EC Chair Election

- Nikolich 5 01:59 PM

Moved: to elect Paul Nikolich as chair of 802 LMSC

Moved: Lemon/Grow

Passes: 15/0/0

40

3.02 MI Confirmation of EC appointed positions

- Nikolich 10 02:04 PM

Appointed EC officer confirmations

- Member Emeritus
 - Geoff Thompson
- 1st Vice Chair
 - Chair: Matthew Sherman
- 2nd Vice Chair
 - Patricia Thaler
- Treasurer
 - John Hawkins
- Executive Secretary
 - Buzz Rigsbee
- Recording Secretary
 - James Gilb

Moved: to confirm Geoff Thompson as Member Emeritus.
Moved: Grow/Rigsbee

Geoff stated that he has not yet provided his letter of support.

5

Passes: 16/0/0

Moved: to confirm Mat Sherman as first vice chair.

Moved: Greenspan/Shellhammer

10

Passes: 12/0/1

Moved: to confirm Pat Thaler as second vice chair.

Moved: Sherman/Rigsbee

Passes: 15/0/1

15

Moved: to confirm John Hawkins as Treasurer

Moved: Rigsbee/Lemon

Passes: 15/0/1

20

Moved: to confirm Buzz Rigsbee as Executive Secretary

Moved: Greenspan/Lemon

Passes: 15/0/1

Moved: to confirm James "Train Wreck" Gilb as recording secretary

25

Moved: O'Hara/Stevenson

Passes: 16/0/0

4.00 II Announcements from the Chair - Nikolich 5 02:12 PM

Paul presented gifts of appreciation to the departing EC members, Arnie Greenspan, Bob Grow, Stuart Kerry, and Bob O'Hara, for their service to the LMSC.

30

4.01 II Declaration of potential dominance in 802.11 - O'Hara 5 02:20 PM

Bob O'Hara reported that he has observed behavior that is consistent with attempts to dominate the standards process in at least two 802.11 task groups, 802.11n and 802.11v. The incidents he observed directly and additional incidents reported to him by other 802.11 members involved a large number of individuals with a single common affiliation attempting to block resolution of comments on Working Group letter ballots.

35

In at least one incident, individuals with one affiliation comprised nearly one third of the participants voting in a task group.

40

He reports he has observed other large groups of individuals with common affiliations in the same industry sector behaving similarly.

45

Mr. O'Hara makes this report so that the chair of the 802.11 Working Group and the Sponsor are aware of the behavior and can take responsibility for making an official determination and taking the

appropriate actions to eliminate dominance if it is determined to be present, as is required by the 802 Policies & Procedures and the IEEE Standards Board Operations Manual.

5 Stuart Kerry stated that he had informed the LMSC chair and will work with the 802.11 chair-elect to conduct the investigation.

Geoff indicated that he believed this was an issue for the working group to handle.

Category (* = consent agenda)						-
						-
5.00	IEEE Standards Board Items					-
5.01	ME					-
5.02	ME	802.22 PAR extension to NESCOM		Stevenson	2 02:36 PM	

10

Extension Request for P802.22, Approved on 2004-09-23**Submitter Email:** wk3c@wk3c.com**PAR Expiration Date:** 2008-12-31**Number of Previous Extensions Requested:** 0 **Last Extension Approval Date:** 0000-00-00**Number of Years being requested:** 2**Sponsor:** IEEE Computer Society/Local and Metropolitan Area Networks(C/LM)**Chair:** Paul Nikolich

18 Bishops Lane

Lynnfield, MA 01940

US

Email: p.nikolich@ieee.org**Working Group:** Wireless Regional Area Networks Working Group(C/LM/WG802.22)**Chair:** Carl Stevenson

4991 Shimerville Road

Emmaus, PA 18049-4955

US

Email: wk3c@wk3c.com**Title:** Standard for Information Technology -Telecommunications and information exchange between systems – Wireless Regional Area Networks (WRAN) - Specific requirements - Part 22: Cognitive Wireless RAN Medium Access Control (MAC) and Physical Layer (PHY) specifications: Policies and procedures for operation in the TV Bands**Scope:** This standard specifies the air interface, including the medium access control layer (MAC) and physical layer (PHY), of fixed point-to-multipoint wireless regional area networks operating in the VHF/UHF TV broadcast bands between 54 MHz and 862 MHz.**Purpose:** This standard is intended to enable deployment of interoperable 802 multivendor wireless regional area network products, to facilitate competition in broadband access by providing alternatives to wireline broadband access and extending the deployability of such systems into diverse geographic areas, including sparsely populated rural areas, while preventing harmful interference to incumbent licensed services in the TV broadcast bands.**Do the title, scope and purpose match that of the current draft?** Yes

Why is an extension required? The WG has conducted its initial studies, completed and approved its Functional Requirements Document (FRD) and Channel Models, accepted 10 original technical proposals, forged consensus to merge elements of those proposals into a single technical baseline, and approved conducting a WG ballot on its Draft 1.0.

As the first cognitive radio-based standard in the IEEE 802 family, a great many complex issues unique to this developing area of technology have had to be studied and resolved before the WG could create a Draft mature enough for formal balloting. (The WG has conducted informal ballots and comment resolution to develop consensus on a working document prior to approving it as Draft 1.0 and starting formal WG ballots.) Realistically, the P802.22 WG needs an extension of its PAR beyond December 2008 to complete the process of WG ballot, comment resolution, Sponsor Ballot, Sponsor Ballot comment resolution, and submission to RevCom.

A dedicated group of volunteers (approximately 60 voting members affiliated with a broad range of entities from the semiconductor, network equipment, and broadcasting communities - all of the stakeholders) have accomplished a great deal of high-quality work towards a standard that deserves to be afforded sufficient time to allow its completion.

Document Development Information:

- a. What date did you begin writing the first draft? 2006-07-15
- b. How many people are actively working on the project? 58
- c. How many times a year does the working group meet:
 - 1. In person? 6
 - 2. Via teleconference? 30
- d. How many times a year is a draft circulated to the working group via electronic means? 6
- e. What percentage of the Draft is stable? 75%
- f. How many significant work revisions has the Draft been through? 3

Project Plan:

- When will IEEE sponsor balloting begin? 2009-01-01
- When do you estimate that the final IEEE Sponsor ballot will be completed? 2009-07-25
- When do you expect to submit the proposed standard to RevCom? 2009-09-01

Adoption:

Will this document be adopted by another source? Do not know at this time

Explanation:

Contact the [NesCom Administrator](#)

Moved: to approve the PAR extension request for 802.22.
Moved: Stevenson/Kerry

Passes: 15/0/0

5

5.03 ME 802.11p PAR extension to NESCOM

- Kerry

2 02:12 PM

Agenda#:

Date:

Time:

IEEE 802 LMSC RESOLUTION

Motion By: KERRY

Seconded By: GROW

**Approve the 802.11p PAR extension request
to NESCOM for approval.**

Moved by Lee Armstrong on behalf of the Task Group.

TG: 12/0/0 Moved by: Wayne Fischer 2nd: Dick Roy

WG Results: Moved by: Lee Armstrong 2nd

Results (56/10/2)

Approve:

Do Not Approve:

Abstain:

Moved: Approve the 802.11p PAR extension request to NESCOM for approval.
Moved: Kerry/Grow

Passes:15/0/0

5

5.04 ME 802.11s PAR extension to NESCOM

- Kerry

2 02:46 PM

Agenda#:

Date:

Time:

IEEE 802 LMSC RESOLUTION

Motion By: KERRY

Seconded By: GROW

- **Move to approve 802.11s PAR extension 11-08/432r0 to NESCOM for consideration of the extension of the PAR**
- TGs Result: Moved: Dee Dentener 2nd: Guido Hiertz (13/0/4) Approved
- **WG Results: Moved by Donald Eastlake on behalf TGs**
- **Results: (48/0/1)**

Approve:

Do Not Approve:

Abstain:

Moved: to approve 802.11s PAR extension 11-08/432r0 to NESCOM for consideration of the extension of the PAR
Moved: Kerry/Grow

5 Passes: 15/0/0

5.05 ME 802.11u PAR extension to NESCOM

- Kerry

2 02:47 PM

Agenda#:

Date:

Time:

IEEE 802 LMSC RESOLUTION

Motion By: KERRY

Seconded By: GROW

Move Forward the 802.11u PAR extension document 11-08-0434-00-000u-PAR-Extension.ppt to NESCOM for consideration of the extension of the PAR TGU PAR Extension

TG Results: Moved by Jesse Walker 2nd David Stephenson (12/0/0) Approved

WG Results: Move by: Steven McCain 2nd Harry Worstell

Results: (47/0/1) Approved

Approve:

Do Not Approve:

Abstain:

Moved: Forward the 802.11u PAR extension document 11-08-0434-00-000u-PAR-Extension.ppt to NESCOm for consideration of the extension of the PAR TGU PAR Extension
Moved: Kerry/Grow

5 Passes: 16/0/0

5.06 ME 802.11v PAR extension to NESCOm

- Kerry

2 02:49 PM

Agenda#:

Date:

Time:

IEEE 802 LMSC RESOLUTION

Motion By: KERRY

Seconded By: GROW

Move to approve 802.11v PAR extension in 11-08-0322-01-000v-PAR Extension to NESCOM for consideration of the extension of the PAR.

WG Results: Move by Dorothy Stanley 2nd Roger Durand

WG Results: (45/0/3) Approved

Approve:

Do Not Approve:

Abstain:

Moved: to approve 802.11v PAR extension in 11-08-0322-01-000v-PAR Extension to NESCOM for consideration of the extension of the PAR.

Moved: Kerry/Grow

5 Passes: 16/0/0

5.07 ME 802.20 PICS PAR to NESCOM

- Greenspan

5 02:51 PM

Motion: Forward PAR 802.20-08 -03
Standard for Conformance to IEEE802.20
Systems Protocol Implementation
Conformance Statement (PICS) Pro-
Forma to NESCOM

Moved by: Arnie Greenspan
Second by: John Hawkins

Working Group approved the PAR
including revisions based on other
WG comments by:
6-0-0

802.20 CONF01 – PICS Proforma

Draft 5 Criteria Document

February, 2008

Broad Market Potential

- **Broad Sets of Applicability**
- **Multiple Vendors and numerous users**
- **Balanced Costs**
 - *IEEE 802.20 is broadly applicable to many application environments. A standardized PICS ProForma will enable equipment manufacturers to state their products' features in a non-ambiguous way.*
 - *802.20 is envisioned to have many different vendors and users. A standardized PICS Proforma will help to enhance the relationships between vendors and users by clarifying the capabilities of 802.20 products*
 - *Since this standard will be based on the features in the initial version of 802.20, it does not change existing cost models for devices or infrastructure*

Compatibility with IEEE 802.1

- **Conformance with 802 Overview and Architecture**
- **Conformance with 802.1D, 802.1Q**
- **Conformance with 802 Functional Requirements**
 - *The proposed standard will be based on the approved version of IEEE 802.20. IEEE 802.20 conforms with the 802 Overview, the 802 Architecture, and the 802 Functional Requirements.*
 - *IEEE 802.20 also supports 802.1D and 802.1Q*

Distinct Identity

- **Substantially different from other 802 standards**
- **Unique solution for problem (not two alternatives)**
- **Easy for document reader to select relevant spec.**
 - *There is no existing 802 standard or approved project that provides a PICS Proforma for 802.20 devices.*
 - *The proposed standard will provide pointers to the relevant parts of 802.20; it will therefore be a clear starting point for those wishing to state the features of their products in a standardized way.*

Technical Feasibility

- **Demonstrated system, feasibility; reports & working models**
- **Proven technology, reasonable testing**
- **Confidence in reliability**
 - *Since this standard will reference parts of an existing IEEE standard, the feasibility of the baseline standard also applies to this standard.*
 - *The existing IEEE standard serving as the baseline for this work constitutes a proven, reliable technology.*

Economic Feasibility

- **Known cost factors, reliable data**
- **Reasonable cost for performance expected**
- **Consideration of installation costs**

- *Cost factors are no different from those known cost factors of the baseline standard*

- *Cost for performance expected is no different from the cost for performance expected of the baseline standard*

- *Installation costs are no different from those of the baseline standard*

Moved: Forward PAR 802.20-08 -03 Standard for Conformance to IEEE802.20 Systems Protocol Implementation Conformance Statement (PICS) Pro-Forma to NesCom
Moved: Greenspan/Hawkins

- 5 Much discussion of the desirability and utility of having a PICS in the original draft standard submitted to RevCom was heard. It was pointed out that the PAR is for a new standard, not an amendment.

Passes: 5/3/0 (UC-EC only, eight members total, eight members voting)

5.08 ME 802.20 Minimum Performance PAR to NESCOM - Greenspan 2 03:09 PM

10

IEEE P802.20.3

Draft PAR and 5 Criteria - Standard for Minimum Performance Characteristics of 802.20 Terminals and Base Stations

Date: February 12, 2008

This PAR was discussed by the 802.20 Working Group in the November 2007 Plenary. The Scope, Purpose, Need and key dates were reviewed and agreed by the Working Group at the January 2008 Interim session. The PAR and Five Criteria will be reviewed and voted on by the Working Group at the March 2008 Plenary.

Abstract

This document provides a proposed PAR and 5 Criteria for IEEE P802.20.3 The PAR form is copied from the IEEE web site official PAR submission form.

Draft PAR Confirmation Number:
Submittal Email: jerry.upton@ieee.org
Type of Project: PAR for a New Standard
1.1 Project Number: P802.20.3
1.2 Type of Document: Standard for
1.3 Life Cycle: Full
1.4 Is this project in ballot now? No
1.5 Is the balloting group aware of the PAR modification?
2.1 Title of Standard: Standard for Minimum Performance Characteristics of 802.20 Terminals and Base Stations
3.1 Name of Working Group: Mobile Broadband Wireless Access (MBWA) Working Group(C/LM/WG802.20) Contact information for Working Group Chair Arnold Greenspan 15961 Loch Katrine Trail #7105 Delray Beach, FL 33446 US a.greenspan@ieee.org
3.2 Sponsoring Society and Committee: IEEE Computer Society/Local and Metropolitan Area Networks(C/LM) Contact information for Sponsor Chair: Paul Nikolich 18 Bishops Lane Lynnfield, MA 01940 US p.nikolich@ieee.org Contact information for Standards Representative:
4.1 Type of Ballot: Individual
4.2 Expected Date of Submission for Initial Sponsor Ballot: 2009-07
4.3 Projected Completion Date for Submittal to RevCom: 2010-07
5.1 Approximate number of people expected to work on this project: 50
5.2 Scope of Proposed Standard: This standard details definitions, method of measurements and minimum performance characteristics for 802.20 MBWA terminals and base stations. The test methods are specified in this document; however, methods other than those specified may suffice for the same purpose.
5.3 Is the completion of this standard is dependent upon the completion of another standard: Yes If yes, please explain: The standard will relate to the 802.20 standard(P802.20.1). Though work may begin under this PAR based on the 802.20 draft, the work cannot be completed until the 802.20 standard is complete. The 802.20 draft is currently in Sponsor Ballot and completion is expected in the near future.

5.4 Purpose of Proposed Standard: The purpose of this standard is to specify minimum performance characteristics for 802.20 implementations. Service providers deploying equipment meeting this specification can expect to meet a particular service level with user terminals that also comply with this specification.

5.5 Need for the Project: This standard is needed so that independent suppliers building 802.20 compliant equipment can provide systems that will meet minimum service levels.

5.6 Stakeholders for the Standard: 802.20 equipment suppliers and service providers utilizing the 802.20 standard are the principle stakeholders.

Intellectual Property

6.1.a. Has the IEEE-SA policy on intellectual property been presented to those responsible for preparing/submitting this PAR prior to the PAR submittal to the IEEE-SA Standards Board? Yes

If yes, state date: 2008-03-17

If no, please explain:

6.1.b. Is the Sponsor aware of any copyright permissions needed for this project? No

If yes, please explain:

6.1.c. Is the Sponsor aware of possible registration activity related to this project? No

If yes, please explain:

7.1 Are there other standards or projects with a similar scope? No

If yes, please explain:

and answer the following: Sponsor Organization:

Project/Standard Number:

Project/Standard Date: 0000-00-00

Project/Standard Title:

7.2 Future Adoptions

Is there potential for this standard (in part or in whole) to be adopted by another national, regional, or international organization? Do not know at this time

If Yes, the following questions must be answered:

Technical Committee Name and Number:

Other Organization Contact Information:

Contact person:

Contact Email address:

7.3 Will this project result in any health, safety, security, or environmental guidance that affects or applies to human health or safety? No

If yes, please explain:

7.4 Additional Explanatory Notes: (Item Number and Explanation)

Five Criteria – P802.20.3

17.5.1 Broad Market Potential

A standards project authorized by IEEE 802 shall have a broad market potential. Specifically, it shall have the potential for:

a) Broad sets of applicability.

IEEE 802.20 standard is broadly applicable to many application environments.

b) Multiple vendors and numerous users.

This standard relates to the P802.20.1 which is envisioned to have many different equipment supplier, users and service providers.

c) Balanced costs (LAN versus attached stations).

Since this standard will be based on P802.20.1, it does not change existing cost models for devices or infrastructure.

17.5.2 Compatibility

IEEE 802 defines a family of standards. All standards shall be in conformance with the IEEE 802.1 Architecture, Management, and Interworking documents as follows: 802. Overview and Architecture, 802.1D, 802.1Q, and parts of 802.1f. If any variances in conformance emerge, they shall be thoroughly disclosed and reviewed with 802.

Each standard in the IEEE 802 family of standards shall include a definition of managed objects that are compatible with systems management standards.

The proposed standard will be based on the approved version of IEEE P802.20.1. IEEE P802.20.1 conforms to the 802 Overview, the 802 Architecture, and the 802 Functional Requirements. IEEE P802.20.1 also supports 802.1D and 802.1Q.

IEEE P802.2.1 is in sponsor ballot.

17.5.3 Distinct Identity

Each IEEE 802 standard shall have a distinct identity. To achieve this, each authorized project shall be:

a) Substantially different from other IEEE 802 standards.

There is no existing 802 standard or approved project that address this scope or purpose as it specifically relates to P802.20.1.

b) One unique solution per problem (not two solutions to a problem).

This project is unique as it specifically relates to P802.20.1.

c) Easy for the document reader to select the relevant specification.

The proposed standard will provide pointers to the relevant parts of P802.20.1, as needed for ease of reading and use.

17.5.4 Technical Feasibility

For a project to be authorized, it shall be able to show its technical feasibility. At a minimum, the proposed project shall show:

- a) Demonstrated system feasibility.**
- b) Proven technology, reasonable testing.**
- c) Confidence in reliability.**

Since this standard relates to the existing IEEE P802.20.1 standard, the feasibility of the baseline standard also applies to this standard. The existing IEEE standard serving as the baseline for this work constitutes a proven, reliable technology.

Development of definitions, method of measurements and minimum performance characteristics for terminals and base stations based on other wireless standards is a known and proven process. Such standards are regularly developed in other wireless standards organizations.

17.5.4.1 Coexistence of 802 wireless standards specifying devices for unlicensed operation

A working group proposing a wireless project is required to demonstrate coexistence through the preparation of a Coexistence Assurance (CA) document unless it is not applicable. The Working Group will create a CA document as part of the WG balloting process. If the Working Group elects not to create a CA document, it will explain to the EC the reason the CA document is not applicable.

This does apply as the new standard relates to P802.20.1 which does not support an unlicensed operation.

17.5.5 Economic Feasibility

For a project to be authorized, it shall be able to show economic feasibility (so far as can reasonably be estimated) for its intended applications. At a minimum, the proposed project shall show:

- a) Known cost factors, reliable data.**

Cost factors are no different from those known cost factors of the P802.20.1 standard.

- b) Reasonable cost for performance.**

Cost for performance expected is no different from the cost for performance expected of the P802.20.1 standard. Standards of this type typically provide a good cost return for equipment suppliers versus having each service provider create their own definitions, method of measurements and minimum performance characteristics.

- c) Consideration of installation costs.**

Installation costs are no different from those of the P802.20.1 standard

Five Criteria – P802.20.3

17.5.1 Broad Market Potential

A standards project authorized by IEEE 802 shall have a broad market potential. Specifically, it shall have the potential for:

a) Broad sets of applicability.

IEEE 802.20 standard is broadly applicable to many application environments.

b) Multiple vendors and numerous users.

This standard relates to the P802.20.1 which is envisioned to have many different equipment supplier, users and service providers.

c) Balanced costs (LAN versus attached stations).

Since this standard will be based on P802.20.1, it does not change existing cost models for devices or infrastructure.

17.5.2 Compatibility

IEEE 802 defines a family of standards. All standards shall be in conformance with the IEEE 802.1 Architecture, Management, and Interworking documents as follows: 802. Overview and Architecture, 802.1D, 802.1Q, and parts of 802.1f. If any variances in conformance emerge, they shall be thoroughly disclosed and reviewed with 802.

Each standard in the IEEE 802 family of standards shall include a definition of managed objects that are compatible with systems management standards.

The proposed standard will be based on the approved version of IEEE P802.20.1. IEEE P802.20.1 conforms to the 802 Overview, the 802 Architecture, and the 802 Functional Requirements. IEEE P802.20.1 also supports 802.1D and 802.1Q.

IEEE P802.2.1 is in sponsor ballot.

17.5.3 Distinct Identity

Each IEEE 802 standard shall have a distinct identity. To achieve this, each authorized project shall be:

a) Substantially different from other IEEE 802 standards.

There is no existing 802 standard or approved project that address this scope or purpose as it specifically relates to P802.20.1.

b) One unique solution per problem (not two solutions to a problem).

This project is unique as it specifically relates to P802.20.1.

c) Easy for the document reader to select the relevant specification.

The proposed standard will provide pointers to the relevant parts of P802.20.1, as needed for ease of reading and use.

17.5.4 Technical Feasibility

For a project to be authorized, it shall be able to show its technical feasibility. At a minimum, the proposed project shall show:

- a) Demonstrated system feasibility.**
- b) Proven technology, reasonable testing.**
- c) Confidence in reliability.**

Since this standard relates to the existing IEEE P802.20.1 standard, the feasibility of the baseline standard also applies to this standard. The existing IEEE standard serving as the baseline for this work constitutes a proven, reliable technology.

Development of definitions, method of measurements and minimum performance characteristics for terminals and base stations based on other wireless standards is a known and proven process. Such standards are regularly developed in other wireless standards organizations.

17.5.4.1 Coexistence of 802 wireless standards specifying devices for unlicensed operation

A working group proposing a wireless project is required to demonstrate coexistence through the preparation of a Coexistence Assurance (CA) document unless it is not applicable. The Working Group will create a CA document as part of the WG balloting process. If the Working Group elects not to create a CA document, it will explain to the EC the reason the CA document is not applicable.

This does apply as the new standard relates to P802.20.1 which does not support an unlicensed operation.

17.5.5 Economic Feasibility

For a project to be authorized, it shall be able to show economic feasibility (so far as can reasonably be estimated) for its intended applications. At a minimum, the proposed project shall show:

- a) Known cost factors, reliable data.**

Cost factors are no different from those known cost factors of the P802.20.1 standard.

- b) Reasonable cost for performance.**

Cost for performance expected is no different from the cost for performance expected of the P802.20.1 standard. Standards of this type typically provide a good cost return for equipment suppliers versus having each service provider create their own definitions, method of measurements and minimum performance characteristics.

- c) Consideration of installation costs.**

Installation costs are no different from those of the P802.20.1 standard

Moved: to approve the PAR for minimum performance requirements

Moved: Greenspan/Hawkins

5 There was much discussion of the need to include the material that this PAR addresses into the base standard. It was pointed out that the market that is the target of the 802.20 standards separates their standards as is done with this PAR.

Further consideration of this item was postponed until after the break.

10 Arnie made the editorial changes to the PAR for to address inconsistencies found during discussion.

Passes: 8/0/0 (UC-EC only, eight members present, eight voting)

5.09 ME 802.1Q-REV PAR to NESCOM

- Jeffrey

2

03:27 PM

15

MOTION

- P802.1Q-REV:
<http://www.ieee802.org/1/files/public/docs2008/q-p802-1q-revision-par-0308-v2.pdf>
- 802.1 requests EC approval to forward the draft PAR for 802.1Q Revision to NesCom.
- 802.1: Proposed: Haddock Second: wright
- For: 41 Against: 0 Abstain: 0
- EC proposed: Jeffree second:

Close Window

Print

Draft PAR Confirmation Number: xxxxxxxxxxxx	
Submittal Email: tony@jeffree.co.uk	
Type of Project: PAR for a revision to existing Standard 802.1Q-2005	
1.1 Project Number: P802.1Q	
1.2 Type of Document: Standard for	
1.3 Life Cycle: Full	
1.4 Is this project in ballot now? No	
1.5 Is the balloting group aware of the PAR modification?	
2.1 Title of Standard: Standard for Local and Metropolitan Area Networks---Media Access Control (MAC) Bridges and Virtual Bridged Local Area Networks	Old Title: IEEE Standard for Local and Metropolitan Area Networks---Virtual Bridged Local Area Networks
3.1 Name of Working Group: Higher Layer LAN Protocols Working Group(C/LM/WG802.1)	
Contact information for Working Group Chair Anthony Jeffree 11a Poplar Grove Sale, Cheshire M33 3AX GB tony@jeffree.co.uk	
Working Group Vice Chair: Paul Congdon 9489 Treelake Road Granite Bay, CA 95746 US, Email: paul.congdon@hp.com	
3.2 Sponsoring Society and Committee: IEEE Computer Society/Local and Metropolitan Area Networks(C/LM)	
Contact information for Sponsor Chair: Paul Nikolich 18 Bishops Lane Lynnfield, MA 01940 US p.nikolich@ieee.org	
Contact information for Standards Representative:	
4.1 Type of Ballot: Individual	
4.2 Expected Date of Submission for Initial Sponsor Ballot: 2009-12	
4.3 Projected Completion Date for Submittal to RevCom: 2010-12	
5.1 Approximate number of people expected to work on this project: 50	
	Old Scope: For the purpose of compatible interconnection of information technology equipment using the IEEE 802 MAC Service supported by interconnected IEEE 802 standard LANs using different or

5.2 Scope of Proposed Standard: This standard specifies Media Access Control (MAC) Bridges that interconnect individual Local Area Networks (LANs), each supporting the IEEE 802 MAC service using a different or identical media access control method, to provide Bridged Local Area Networks and Virtual LANs (VLANs).

identical media access control methods, this standard specifies the operation of MAC Bridges that support Virtual LANs (VLANs). To this end it

- a) Positions the support of VLANs within an architectural description of the MAC Sublayer;
- b) Defines the principles of operation of the VLAN-aware Bridge in terms of the support and preservation of the MAC Service, and the maintenance of Quality of Service;
- c) Specifies an Enhanced Internal Sublayer Service provided to the Media Access Independent functions that provide frame relay in a VLAN-aware Bridge;
- d) Establishes the principles and a model of Virtual Bridged Local Area Network operation;
- e) Identifies the functions to be performed by VLAN-aware Bridges, and provides an architectural model of the operation of a Bridge in terms of Processes and Entities that provide those functions;
- f) Specifies a frame format that allows a VLAN Identifier (VID) and priority information to be carried by VLAN tagged user data frames;
- g) Specifies the rules that govern the addition or removal of VLAN tags to and from user data frames;
- h) Specifies the rules that govern the ability to carry user data in either Canonical format or Noncanonical format in VLAN-tagged frames;
- i) Establishes the requirements for automatic configuration of VLAN topology;
- j) Establishes the requirements for VLAN-aware Bridge Management in a Virtual Bridged Local Area Network, identifying managed objects and defining management operations;
- k) Defines the operation of the Multiple Spanning Tree algorithm and protocol (MSTP);
- l) Describes the protocols and procedures necessary to support interoperation between MST and SST Bridges in the same Virtual Bridged Local Area Networks;
- m) Specifies the requirements to be satisfied by equipment claiming conformance to this standard.

5.3 Is the completion of this standard is dependent upon the completion of another standard: No

If yes, please explain:

5.4 Purpose of Proposed Standard: **MAC Bridges, as specified by this standard, allow the compatible interconnection of information technology equipment attached to separate individual LANs.**

Old Purpose: The standard provides common interoperable solutions to the establishment of Virtual LAN Bridged infrastructures. Revision is needed in order to deal with editorial and technical corrections, to remove obsolete material, and also to reflect changes necessary as a result of enhancements to IEEE Std 802.1D - Standard for Local and Metropolitan Area Networks: Media Access Control (MAC) Bridges, upon which IEEE Std 802.1Q depends.

5.5 Need for the Project: This revision project is needed in order to incorporate approved amendments and to ensure that consistency is maintained in the consolidated text. It is also necessary to merge the MAC bridging technology defined in IEEE Std 802.1D with the VLAN Bridging technology defined in IEEE Std 802.1Q in order to create a single standard for IEEE 802 Bridging technologies. This will have benefits both for the users of these standards and also in terms of the long-term maintainability of the resultant standard.

5.6 Stakeholders for the Standard: Manufacturers, distributors, vendors, and users of Virtual LAN bridging equipment and components thereof.

Intellectual Property

6.1.a. Has the IEEE-SA policy on intellectual property been presented to those responsible for preparing/submitting this PAR prior to the PAR submittal to the IEEE-SA Standards Board?

Yes

If yes, state date: 2008-03-17

If no, please explain:

6.1.b. Is the Sponsor aware of any copyright permissions needed for this project? No

If yes, please explain:

6.1.c. Is the Sponsor aware of possible registration activity related to this project? No

If yes, please explain:

7.1 Are there other standards or projects with a similar scope? No

If yes, please explain:

and answer the following: Sponsor Organization:

Project/Standard Number:

Project/Standard Date: 0000-00-00

Project/Standard Title:

7.2 Future Adoptions

Is there potential for this standard (in part or in whole) to be adopted by another national, regional, or international organization? No

If Yes, the following questions must be answered:

Technical Committee Name and Number:

Other Organization Contact Information:

Contact person:

Contact Email address:

7.3 Will this project result in any health, safety, security, or environmental guidance that affects or applies to human health or safety? No

If yes, please explain:

7.4 Additional Explanatory Notes: (Item Number and Explanation)

Contact the [NesCom Administrator](#)

Moved: 802.1 requests EC approval to forward the draft PAR for 802.1Q Revision to NesCom
Moved: Jeffrey/Grow

Passes: 15/0/0

5

5.10 ME 802.1aj PAR extension to NESCOM

- Jeffrey

2 03:28 PM

MOTION

- P802.1aj PAR extension:
<http://www.ieee802.org/1/files/public/docs2008/aj-p802-1aj-par-extension-0308.pdf>
- 802.1 requests EC approval to forward the draft PAR extension for 802.1aj to NesCom.
- 802.1: Proposed: haddock Second: wright
- For: 37 Against: 0 Abstain: 4
- EC proposed: Jeffree second:

Extension Request for P802.1aj, Approved on 2004-12-08(xxxxxxxxxx)	
Submitter Email: tony@jeffree.co.uk	<input type="button" value="Change Submitter Email"/>
PAR Expiration Date: 2008-12-31	
Number of Previous Extensions Requested: 0 Last Extension Approval Date: 0000-00-00	
Number of Years being requested: 2	
Sponsor: IEEE Computer Society/Local and Metropolitan Area Networks(C/LM) Chair: Paul Nikolich 18 Bishops Lane Lynnfield, MA 01940 US Email: p.nikolich@ieee.org	
Working Group: Higher Layer LAN Protocols Working Group(C/LM/WG802.1) Chair: Anthony Jeffree 11a Poplar Grove Sale, Cheshire M33 3AX GB Email: tony@jeffree.co.uk <input type="button" value="Reassign Working Group"/>	
Title: Standard for Local and Metropolitan Area Networks – Virtual Bridged Local Area Networks - Amendment 08: Two-port Media Access Control (MAC) Relay Scope: This standard specifies the function of a MAC Relay with two MACs, and the protocols and procedures to support its operation. A MAC Relay is transparent to all frame-based media independent protocols except those explicitly addressed to this device. It is remotely manageable through at least one of its external MACs, and signals a failure of either MAC's LAN through the other MAC. Purpose: The wide and growing deployment of Ethernet Provider Services has created a demand for simple two-port demarcation devices that connect two 802 media or 802 media emulations. The lack of standards for such devices, and particularly for link-loss signalling and remote diagnosis, is impeding the growth of this industry. This standard will greatly improve this situation.	
Do the title, scope and purpose match that of the current draft? Yes	
Why is an extension required? The project has developed 9 drafts so far. The majority of the technical work is complete; the remaining work involved is to finish the remaining technical work at working group ballot level, and start Sponsor balloting. Main reason for the work not completing in the allotted time is the generally high workload of the 802.1 working group.	
Document Development Information: a. What date did you begin writing the first draft? 2005-05-01 b. How many people are actively working on the project? 50 c. How many times a year does the working group meet: 1. In person? 6 2. Via teleconference? 0 d. How many times a year is a draft circulated to the working group via electronic means? 2 e. What percentage of the Draft is stable? 80% f. How many significant work revisions has the Draft been through? 9	
Project Plan: When will IEEE sponsor balloting begin? 2008-11-30 When do you estimate that the final IEEE Sponsor ballot will be completed? 2010-02-28	

When do you expect to submit the proposed standard to RevCom? 2009-03-31

Adoption:

Will this document be adopted by another source? No

Explanation:

Submit to NesCom

Save and Come Back Later

Contact the [NesCom Administrator](#)

Moved: 802.1 requests EC approval to forward the draft PAR extension for 802.1aj to NesCom
Moved: Jeffrey/Grow

Passes: 16/0/0

5

5.11 ME 802.1BA PAR to NESCOM

- Jeffrey

2 03:29 PM

MOTION

- P802.1BA PAR/5C:

<http://www.ieee802.org/1/files/public/docs2008/new-avb-systems-ba-draft-par-0208-v5.pdf>

<http://www.ieee802.org/1/files/public/docs2008/new-avb-systems-ba-draft-5c-0208-v2.pdf>

- 802.1 requests EC approval to submit the draft PAR for P802.1BA Audio Video Bridging Systems to NesCom.
- Proposed: teener Second: pannell
- For: 31 Against: 0 Abstain: 18
- EC proposed: Jeffree second:

Close Window

Print

Draft PAR Confirmation Number: xxxxxxxxxxxxxxxxxxxx
Submittal Email: tony@jeffree.co.uk
Type of Project: PAR for a New Standard
1.1 Project Number: P802.1BA
1.2 Type of Document: Standard for
1.3 Life Cycle: Full
1.4 Is this project in ballot now? No
1.5 Is the balloting group aware of the PAR modification?
2.1 Title of Standard: Standard for Local and Metropolitan Area Networks – Audio Video Bridging (AVB) Systems
3.1 Name of Working Group: Higher Layer LAN Protocols Working Group(C/LM/WG802.1) Contact information for Working Group Chair Anthony Jeffree 11a Poplar Grove Sale, Cheshire M33 3AX GB tony@jeffree.co.uk Working Group Vice Chair: Paul Congdon 9489 Treelake Road Granite Bay, CA 95746 US, Email: paul.congdon@hp.com
3.2 Sponsoring Society and Committee: IEEE Computer Society/Local and Metropolitan Area Networks(C/LM) Contact information for Sponsor Chair: Paul Nikolich 18 Bishops Lane Lynnfield, MA 01940 US p.nikolich@ieee.org Contact information for Standards Representative:
4.1 Type of Ballot: Individual
4.2 Expected Date of Submission for Initial Sponsor Ballot: 2011-06
4.3 Projected Completion Date for Submittal to RevCom: 2011-12
5.1 Approximate number of people expected to work on this project: 60
5.2 Scope of Proposed Standard: This standard defines profiles that select features, options, configurations, defaults, protocols and procedures of bridges, stations and LANs that are necessary to build networks that are capable of transporting time sensitive audio and/or video data streams.
5.3 Is the completion of this standard is dependent upon the completion of another standard: Yes If yes, please explain: This standard will make use of the specifications that are under

development in P802.1AS, P802.1Qat, and P802.1Qav.

5.4 Purpose of Proposed Standard: The purpose of this standard is to specify defaults and profiles that manufacturers of LAN equipment can use to develop AVB-compatible LAN components, and to enable a person not skilled in networking to build a network, using those components, that does not require configuration to provide working Audio and/or Video services.

5.5 Need for the Project: The performance requirements of Audio Video Bridging (AVB) over various media prevents the use of some portions of those standards, and requires the selection of default operating parameters; these must be defined in order to meet the needs of the users of components built to those standards. Detection of non-AVB equipment must be defined so the performance of AVB equipment can be maintained. The configuration parameters of various 802.1 standards (such as 802.1AS and MSTP), need to be defined in order to achieve automatic configuration of AVB networks. This standard will satisfy these needs.

5.6 Stakeholders for the Standard: The stakeholders are developers, distributors, installers, and users of Audio and/or Video Bridging equipment.

Intellectual Property

6.1.a. Has the IEEE-SA policy on intellectual property been presented to those responsible for preparing/submitting this PAR prior to the PAR submittal to the IEEE-SA Standards Board?

Yes

If yes, state date: 2008-01-28

If no, please explain:

6.1.b. Is the Sponsor aware of any copyright permissions needed for this project? No

If yes, please explain:

6.1.c. Is the Sponsor aware of possible registration activity related to this project? No

If yes, please explain:

7.1 Are there other standards or projects with a similar scope? No

If yes, please explain:

and answer the following: Sponsor Organization:

Project/Standard Number:

Project/Standard Date: 0000-00-00

Project/Standard Title:

7.2 Future Adoptions

Is there potential for this standard (in part or in whole) to be adopted by another national, regional, or international organization? No

If Yes, the following questions must be answered:

Technical Committee Name and Number:

Other Organization Contact Information:

Contact person:

Contact Email address:

7.3 Will this project result in any health, safety, security, or environmental guidance that affects or applies to human health or safety? No

If yes, please explain:

7.4 Additional Explanatory Notes: (Item Number and Explanation)

Contact the [NesCom Administrator](#)

P802.1BA - Audio Video Bridging (AVB) Systems

Draft 5 Criteria
6 February 2008

Broad Market Potential

- **Broad set(s) of applicability**
 - **Multiple vendors and numerous users**
 - **Balanced cost (LAN vs. attached stations)**
-
- Audio and video streaming applications represent a new and very broad application space for IEEE 802 technologies. In order to properly exploit the application space, a standard is needed that defines the components and options for an 802 bridged network that supports AV applications.
 - Many vendors and users have expressed their support for a standard that describes the use of bridged LANs for AV applications.
 - As this standard will be selecting components and options based on existing 802 standards, it does not upset the existing cost model for LANs, bridges and end stations.

Compatibility with IEEE Std. 802.1

- **Conformance with 802 Overview and Architecture**
- **Conformance with 802.1D, 802.1Q**
- **Conformance with 802 Functional Requirements**
- The proposed standard will select profiles from other 802 Bridging and MAC standards, and as such, will conform to the aforementioned documents.
- The standard does not modify the existing specifications, characteristics and control protocols of 802 standard MACs and bridges.

Distinct Identity

- **Substantially different from other IEEE 802 standards**
- **Unique solution for problem (not two alternatives / problem)**
- **Easy for document reader to select relevant spec.**
- There is no existing 802 standard or approved project that provides the overall guidance needed to construct an AVB network from 802 standard components.
- The proposed standard will act as a pointer to the other standards that are relevant for the construction of equipment suitable for an AVB network; it will therefore be the obvious starting point for anyone wishing to find that information.

Technical Feasibility

- **Demonstrated system feasibility; reports – working models**
- **Proven technology, reasonable testing**
- **Confidence in reliability**
 - As this standard will be selecting components and defaults based on existing 802 standards, the feasibility of those standards will also apply to the solutions described in this standard.
 - The existing standards that will be profiled by this standard constitute proven, reliable technology.

Economic Feasibility

- **Known cost factors, reliable data**
- **Reasonable cost for performance expected**
- **Consideration of installation costs**
- Cost factors are no different from the cost factors for the component standards that will be used.
- Cost for performance is no different from the cost factors for the component standards that will be used.
- The objective of this standard is to minimize installation costs by providing profile selections that allow “plug-and-play” functionality.

Moved: 802.1 requests EC approval to submit the draft PAR for P802.1BA Audio Video Bridging Systems to NesCom
Moved: Jeffree/Grow

5 Passes: 16/0/0

5.12 ME 802.1Qav PAR to NESCOM

- Jeffree

2 03:30 PM

MOTION

- P802.1Qav PAR amendment:
<http://www.ieee802.org/1/files/public/docs2008/av-p802-1qav-par-amendment-0308-v02.pdf>
- 802.1 requests EC approval to submit the draft PAR amendment for P802.1Qav to NesCom.
- Proposed: teener Second: pannell
- For: 33 Against: 0 Abstain: 19
- EC proposed: Jeffree second:

Close Window

Print

Draft PAR Confirmation Number: xxxxxxxxxx	
Submittal Email: tony@jeffree.co.uk	
Type of Project: Modify Existing Approved PAR	
1.1 Project Number: P802.1Qav	
1.2 Type of Document: Standard for	
1.3 Life Cycle: Full	
1.4 Is this project in ballot now? No	
1.5 Is the balloting group aware of the PAR modification? No The balloting group has not been formed yet	
2.1 Title of Standard: IEEE Standard for Local and Metropolitan Area Networks---Virtual Bridged Local Area Networks - Amendment: Forwarding and Queuing Enhancements for Time-Sensitive Streams	
3.1 Name of Working Group: Higher Layer LAN Protocols Working Group(C/LM/WG802.1)	
Contact information for Working Group Chair Anthony Jeffree 11a Poplar Grove Sale, Cheshire M33 3AX GB tony@jeffree.co.uk Working Group Vice Chair: Paul Congdon 9489 Treelake Road Granite Bay, CA 95746 US, Email: paul.congdon@hp.com	
3.2 Sponsoring Society and Committee: IEEE Computer Society/Local and Metropolitan Area Networks(C/LM) Contact information for Sponsor Chair: Paul Nikolich 18 Bishops Lane Lynnfield, MA 01940 US p.nikolich@ieee.org Contact information for Standards Representative:	
4.1 Type of Ballot: Individual	
4.2 Expected Date of Submission for Initial Sponsor Ballot: 2010-07	
4.3 Projected Completion Date for Submittal to RevCom: 2010-12	
5.1 Approximate number of people expected to work on this project:	
5.2 Scope of Proposed Standard: This standard allows bridges to provide performance guarantees for time-sensitive (i.e. bounded latency and delivery variation), loss-sensitive real-time audio video (AV) data transmission (AV traffic). It specifies priority regeneration	Old Scope: This standard allows bridges to provide guarantees for time-sensitive (i.e. bounded latency and delivery variation), loss-sensitive real-time audio video (AV) data transmission (AV traffic). It specifies per priority ingress metering, priority regeneration,

and controlled bandwidth queue draining algorithms. Virtual Local Area Network (VLAN) tag encoded priority values are allocated, in aggregate, to segregate frames among controlled and non-controlled queues, allowing simultaneous support of both AV traffic and other bridged traffic over and between wired and wireless Local Area Networks (LANs).

and timing-aware queue draining algorithms. This standard uses the timing derived from IEEE 802.1AS. Virtual Local Area Network (VLAN) tag encoded priority values are allocated, in aggregate, to segregate frames among controlled and non-controlled queues, allowing simultaneous support of both AV traffic and other bridged traffic over and between wired and wireless Local Area Networks (LANs).

5.3 Is the completion of this standard is dependent upon the completion of another standard: Yes

If yes, please explain: This standard makes use of functions defined in IEEE P802.1Qat - "Standard for Local and Metropolitan Area Networks - Virtual Bridged Local Area Networks - Amendment 9: Stream Reservation Protocol (SRP).

5.4 Purpose of Proposed Standard: Bridges are increasingly used to interconnect devices that support audio and video streaming applications. This standard will specify enhancements to the bridge relay function to provide performance guarantees that allow for time-sensitive traffic in a local area network and harmonize delay, jitter, and packet loss for wired (e.g., IEEE 802.3 - "Standard for Information Technology - Telecommunications and Information Exchange Between Systems - Local and Metropolitan Area Networks - Specific Requirements Part 3: Carrier Sense Multiple Access with Collision Detection (CSMA/CD) Access Method and Physical Layer Specifications"), wireless (e.g., IEEE Std 802.11 - "Standard for Information Technology - Telecommunications and information exchange between systems - Local and Metropolitan networks - Specific requirements - Part 11: Wireless LAN Medium Access Control (MAC) and Physical Layer (PHY) specifications"), and mixed wired/wireless L2 networks.

Old Purpose: Bridges are increasingly used to interconnect devices that support audio and video streaming application. This standard will specify enhancements to bridge relay function to provide performance guarantees to allow for time-sensitive traffic in a local area network and harmonize delay jitter and packet loss for wired (e.g., IEEE 802.3 - "Standard for Information Technology - Telecommunications and Information Exchange Between Systems - Local and Metropolitan Area Networks - Specific Requirements Part 3: Carrier Sense Multiple Access with Collision Detection (CSMA/CD) Access Method and Physical Layer Specifications"), wireless (e.g., IEEE Std 802.11 - "Standard for Information Technology - Telecommunications and information exchange between systems - Local and Metropolitan networks - Specific requirements - Part 11: Wireless LAN Medium Access Control (MAC) and Physical Layer (PHY) specifications"), and mixed wired/wireless L2 networks.

5.5 Need for the Project: Most if not all entertainment media going forward is in digital form. Audio and video streaming and interactive applications over bridged LANs need to be enhanced to have comparable real-time performance of legacy out-of-band analog media distribution. There is significant vendor and end-user interest and market opportunity to consolidate layer 2 solution for both computer networking (e.g. internet access) and audio video services (e.g. home consumer electronics, professional A/V applications, etc) in mixed wired and wireless environments. The use of such consolidated network will realize operational and equipment costbenefits.

This standard defines a set of enhancements to the Virtual Bridged LAN (802.1Q - "Standards for Local and Metropolitan Area Networks - Virtual Bridged Local Area Networks"). This will enable end-to-end quality of service guarantee agreement for audio and video streaming negotiated over SRP protocol to be realized in a bridged LAN, while interoperating with existing 802.1D - "Standard for Local and Metropolitan Area Networks: Media Access Control

(MAC) Bridges" and Q bridges. There is currently no interoperability among bridges that support Audio and Video streaming, nor generally accepted means of achieving such service guarantees in a bridged LAN.

5.6 Stakeholders for the Standard: Developers and Users of bridged LAN and end-point systems supporting audio, video and other latency sensitive applications.

Intellectual Property

6.1.a. Has the IEEE-SA policy on intellectual property been presented to those responsible for preparing/submitting this PAR prior to the PAR submittal to the IEEE-SA Standards Board?

Yes

If yes, state date: 2006-09-26

If no, please explain:

6.1.b. Is the Sponsor aware of any copyright permissions needed for this project? No

If yes, please explain:

6.1.c. Is the Sponsor aware of possible registration activity related to this project? No

If yes, please explain:

7.1 Are there other standards or projects with a similar scope? No

If yes, please explain:

and answer the following: Sponsor Organization:

Project/Standard Number:

Project/Standard Date: 0000-00-00

Project/Standard Title:

7.2 Future Adoptions

Is there potential for this standard (in part or in whole) to be adopted by another national, regional, or international organization? No

If Yes, the following questions must be answered:

Technical Committee Name and Number:

Other Organization Contact Information:

Contact person:

Contact Email address:

7.3 Will this project result in any health, safety, security, or environmental guidance that affects or applies to human health or safety? No

If yes, please explain:

7.4 Additional Explanatory Notes: (Item Number and Explanation)

5.2 (Scope) has been modified to reflect the fact that this project is no longer dependent upon P802.1AS. Section 5.3 has been modified to reflect the fact that this project is no longer dependent upon P802.1AS or P802.1AB Revision.

Contact the [NesCom Administrator](#)

Moved: 802.1 requests EC approval to submit the draft PAR amendment for P802.1Qav to NesCom

Moved: Jeffree/Grow

5 Passes: 16/0/0

5.13 ME 802.1Qbb PAR to NESCOM

- Jeffree

2 03:33 PM

MOTION

- Draft PAR/5C for P802.1Qbb :

<http://www.ieee802.org/1/files/public/docs2008/new-dcb-thaler-pfc-draft-par-0308.pdf>

<http://www.ieee802.org/1/files/public/docs2008/new-dcb-thaler-draft-pfc-5c-0208-v3.pdf>

- 802.1 requests EC approval to forward the draft PAR for 802.1Qbb per-priority flow control to NesCom.
- 802.1: Proposed: Thaler Second:
- For: 33 Against: 1 Abstain: 22
- EC proposed: Jeffree second:

The PAR Copyright Release and [Signature Page](#) must be submitted by FAX to +1-732-875-0695 to the [NesCom Administrator](#).

If you have any questions, please contact the NesCom Administrator.

Once you approve and submit the following information, changes may only be made through the NesCom Administrator.

Draft PAR Confirmation Number:
Submittal Email: pthaler@broadcom.com
Type of Project: PAR for an amendment to existing Standard 802.1Q-2005
1.1 Project Number: P802.1Qbb
1.2 Type of Document: Standard for
1.3 Life Cycle: Full
1.4 Is this project in ballot now? No
1.5 Is the balloting group aware of the PAR modification?
2.1 Title of Standard: IEEE Standard for Local and Metropolitan Area Networks---Virtual Bridged Local Area Networks - Amendment: Priority-based Flow Control
3.1 Name of Working Group: Higher Layer LAN Protocols Working Group(C/LM/WG802.1) Contact information for Working Group Chair Anthony Jeffree 11a Poplar Grove Sale, Cheshire M33 3AX GB tony@jeffree.co.uk Working Group Vice Chair: Paul Congdon 9489 Treelake Road Granite Bay, CA 95746 US, Email: paul.congdon@hp.com
3.2 Sponsoring Society and Committee: IEEE Computer Society/Local and Metropolitan Area Networks(C/LM) Contact information for Sponsor Chair: Paul Nikolich 18 Bishops Lane Lynnfield, MA 01940 US p.nikolich@ieee.org Contact information for Standards Representative:
4.1 Type of Ballot: Individual
4.2 Expected Date of Submission for Initial Sponsor Ballot: 2009-03
4.3 Projected Completion Date for Submittal to RevCom: 2009-07
5.1 Approximate number of people expected to work on this project: 80

5.2 Scope of Proposed Standard: This standard specifies protocols, procedures and managed objects that enable flow control per traffic class on IEEE 802 full-duplex links. Data Center Bridging networks (bridges and end nodes) are characterized by limited bandwidth-delay product and limited hop-count. Traffic class is identified by the VLAN tag priority values. Priority-based flow control is intended to eliminate frame loss due to congestion. This is achieved by a mechanism similar to the IEEE 802.3x PAUSE, but operating on individual priorities. This mechanism, in conjunction with other Data Center Bridging technologies, enables support for higher layer protocols that are highly loss sensitive while not affecting the operation of traditional LAN protocols utilizing other priorities. In addition, PFC complements Congestion Notification in Data Center Bridging networks.



Old Scope:

5.3 Is the completion of this standard is dependent upon the completion of another standard:

No

If yes, please explain: The functions described by this project are intended to operate in conjunction with P802.1Qau and P802.1Qaz; however, no document dependency is expected.

5.4 Purpose of Proposed Standard: Data Center Bridging networks employ higher layer protocols that depend on the delivery of data frames without frame loss due to congestion. These protocols were designed for an underlying transport that approaches lossless behavior and therefore do not include appropriate response to frame loss due to congestion (e.g. back-off, slow restart, etc.). This amendment enables multiple data center networks, including those serving loss sensitive protocols (e.g. inter-processor communication, storage, etc.), to be converged onto an IEEE 802 network.

Old Purpose:

5.5 Need for the Project: There is significant customer interest and market opportunity for 802 LANs as a converged Layer 2 solution in high-speed short-range networks such as data centers, backplane fabrics, single and multi-chassis interconnects, computing clusters, and storage networks. These environments currently use Layer 2 networks that do not discard packets due to congestion (e.g., Fibre Channel, InfiniBand). This project will bring comparable frame loss characteristics to 802 LANs in Data Center Bridging environments. This in conjunction with the other Data Center Bridging technologies enable converged networks. Use of a converged network will realize operational and equipment cost benefits.

5.6 Stakeholders for the Standard: Developers and users of networking for data center environments including networking IC developers, switch and NIC vendors, and users.

Intellectual Property

6.1.a. Has the IEEE-SA policy on intellectual property been presented to those responsible for preparing/submitting this PAR prior to the PAR submittal to the IEEE-SA Standards Board? Yes

If yes, state date: 2007-11-13

If no, please explain:

6.1.b. Is the Sponsor aware of any copyright permissions needed for this project? No

If yes, please explain:

6.1.c. Is the Sponsor aware of possible registration activity related to this project? No

If yes, please explain:

7.1 Are there other standards or projects with a similar scope? No

If yes, please explain:

and answer the following: Sponsor Organization:

Project/Standard Number:

Project/Standard Date: 0000-00-00

Project/Standard Title:

7.2 Future Adoptions

Is there potential for this standard (in part or in whole) to be adopted by another national, regional, or international organization? No

If Yes, the following questions must be answered:

Technical Committee Name and Number:

Other Organization Contact Information:

Contact person:

Contact Email address:

7.3 Will this project result in any health, safety, security, or environmental guidance that affects or applies to human health or safety? No

If yes, please explain:

7.4 Additional Explanatory Notes: (Item Number and Explanation)

Submit to NesCom

Save and Come Back Later

Contact the [NesCom Administrator](#)

Priority-based Flow Control (PFC): Draft 5 Criteria

Data Center Bridging Task Group

Broad Market Potential

a) Broad sets of applicability

- ❑ Mechanisms to avoid frame loss due to congestion are essential to support the highly loss sensitive higher layer protocols used in Data Center Bridging networks for data storage, clustering, and backplane fabrics. Back-end data storage networks, clustering networks and backplane fabrics with limited number of hops are amenable to a flow control mechanism that operates hop-by-hop.
- ❑ The data traffic to be controlled by the proposed flow control mechanism will be segregated using priority values in the VLAN tag, ensuring that traffic types that are not amenable to hop-by-hop flow control may co-exist with those that are.

b) Multiple vendors and numerous users

- ❑ Multiple equipment vendors, as well as INCITS T11 Technical Committee, have expressed interest in the proposed project. In addition, multiple vendors have announced product supporting similar technologies in a proprietary way. There is strong and continued user interest in combining separate existing networks into a converged infrastructure, based on international standards, resulting in the realization of operational and equipment cost savings.

c) Balanced costs (LAN versus attached stations)

- ❑ The introduction of this flow control mechanism is not expected to materially alter the balance of costs between end stations and bridges. Significant equipment and operational costs savings are expected as compared to the use of separate networks for traditional LAN connectivity and for loss sensitive applications.
-

Compatibility

- The proposed standard will be an amendment to 802.1Q, and will interoperate and coexist with all prior revisions and amendments of the 802.1Q standard.
 - The data traffic to be controlled by the proposed flow control mechanism will be segregated using priority values in the VLAN tag, thus ensuring that traffic types already supported by VLAN Bridges are not affected.
 - The proposed amendment will contain MIB modules, or additions to existing MIB modules, to provide management operations for configuration and performance monitoring for both end stations and bridges.
 - The proposed standard will contain managed objects that will enable its use in conjunction with P802.1Qau and P802.1Qaz.
-

Distinct Identity

a) Substantially different from other IEEE 802 standards.

IEEE Std 802.1Q is the authoritative specification for priority aware Bridges and their participation in LAN protocols. No other IEEE 802 standard addresses priority-based flow control by bridges.

b) One unique solution per problem (not two solutions to a problem)

IEEE 802.3x defines a link flow control that pauses traffic on the whole link. The need to subject certain classes of traffic to flow control mechanisms, while allowing others to operate without flow control, has not been anticipated by any other IEEE 802 specification. Consequently, this proposal is the only solution to the problem of allowing a coexistence of such traffic types.

c) Easy for the document reader to select the relevant specification.

IEEE Std 802.1Q is the natural reference for priority based handling of traffic flows, which will make the capabilities added by this amendment easy to locate. The amendment will clearly state where its use is appropriate.

Technical Feasibility

a) Demonstrated system feasibility.

Similar techniques are widely deployed in other networking technologies of similar extent, such as Fibre Channel and InfiniBand, as well as in proprietary enhancements to 802.1Q bridging. These deployments have demonstrated that the proposed techniques are preferable to discarding packets during congestion for certain traffic types in networks of limited extent.

b) Proven technology, reasonable testing.

These and similar techniques have been proven in real world deployments of Fibre Channel, InfiniBand, in proprietary enhancements to 802.1Q bridging, and other networking technologies of similar extent. These techniques have been shown to be reasonably testable.

c) Confidence in reliability.

These and similar techniques have been proven reliable in real-world deployments of Fibre Channel, InfiniBand, and other networking technologies of similar extent.

d) Coexistence of 802 wireless standards specifying devices for unlicensed operation.

Not applicable.

Economic Feasibility

a) Known cost factors, reliable data.

The proposed amendment will retain existing cost characteristics of bridges including simplicity of queue structures and will not require maintenance of additional queues beyond the existing per traffic class (priority) queues for conformance to either its mandatory or optional provisions. In particular per flow queuing will not be required.

b) Reasonable cost for performance.

The proposed technology will reduce overall costs where separate networks are currently required by enabling the use of a converged network. The proposed solution allows a network to avoid frame loss due to congestion without significant throughput reduction.

c) Consideration of installation costs.

Installation costs of VLAN Bridges or end stations are not expected to be significantly affected; any increase in network costs is expected to be more than offset by a reduction in the number of separate networks required to be installed and managed.

Moved: 802.1 requests EC approval to forward the draft PAR for 802.1Qbb per-priority flow control to NesCom
Moved: Jeffree/Grow

5 Passes: 16/0/0

5.14 ME 802.11aa (VTS) PAR to NESCOM

- Kerry

2

03:34PM

Agenda#:

Date:

Time:

IEEE 802 LMSC RESOLUTION

Motion By: KERRY

Seconded By: Jeffree

**Move to approve 802.11aa PAR/5C
for submission to NESCom, with
NESCom resolutions (11-07-1972r14)
incorporated.**

SG: Moved by: David Hunter, 2nd Alex Ashley SG Results: (19/2/8) Approved

WG Moved by: Ganesh Venkatesan (on behalf of the SG) 2nd:

WG Results: (43/4/4) Approved

Approve:

Do Not Approve:

Abstain:

**IEEE P802.11
Wireless LANs**

Draft PAR and 5 Criteria for Video Transport Stream (VTS) SG

Date: February 11, 2008

Author(s):

Name	Affiliation	Address	Phone	email
Alex Ashley	NDS Ltd	One London Road, Staines, Middlesex, TW18 4EX, UK	+44 1784 848770	aashley@nds.com
Todor Cooklev	Hitachi America Ltd.	121 Miramonte Dr., Moraga, CA 94556	1-925-377-6700	cooklev@ieee.org
Sudhanshu Gaur	Hitachi America Ltd	Hitachi America, Ltd. 3403 Yerba Buena Road, San Jose, CA 95135	408-717-5813	sudhanshu.gaur@hal.hitachi.com
Sanjiv Nanda	Qualcomm, Inc.	5775 Morehouse Dr. San Diego CA 92121	+1 858 845 2375	snanda@qualcomm.com
Ed Reuss	Plantronics	Plantronics, Inc. 345 Encinal Street Santa Cruz, CA 95060	+1 831 458 7483	Ed.reuss@pabel.net
Graham Smith	DSP group	2941 Sunrise Blvd., Suite 100 Rancho Cordova, CA 95742	916 851 9191 x209	GSmith@dspgroup.com
Ganesh Venkatesan	Intel Corporation	JF3-381, 2111NE 25 th Ave Hillsboro, OR 97124	503 334 6720	Ganesh.venkatesan@intel.com

Abstract

This document provides a proposed PAR and 5 Criteria for IEEE 802.11 VTS SG project. The PAR form is copied from the IEEE web site official PAR submission form.

The PAR Copyright Release and [Signature Page](#) must be submitted by FAX to +1-732-875-0695 to the [NesCom Administrator](#).

If you have any questions, please contact the NesCom Administrator.

Once you approve and submit the following information, changes may only be made through the NesCom Administrator.

Submittal Email: ganesh.venkatesan @intel.com
Type of Project: Amendment to an Existing Standard 802.11
1.1 Project Number: aa
1.2 Type of Document: Standard
1.3 Life Cycle: Full
1.4 Is this project in ballot now? No
2.1 Title of Standard: Standard for Information Technology - Telecommunications and information exchange between systems - Local and Metropolitan Area networks - Specific requirements - Part 11: Wireless LAN Medium Access Control (MAC) and Physical Layer (PHY) specifications - Amendment: MAC enhancements for robust audio video streaming.
3.1 Name of Working Group: Wireless LAN Working Group
Contact information for Working Group Chair Stuart J Kerry Email: stuart@ok-brit.com Phone: 408-474-7356
Contact Information for Working Group Vice Chair Harry Worstell Email: hworstell@research.att.com Phone: 973-236-6915
3.2 Sponsoring Society and Committee: IEEE Computer Society/Local and Metropolitan Area Networks (C/LM) Contact information for Sponsor Chair: Paul Nikolich Email: p.nikolich@ieee.org Phone: 857-205-0050 Contact information for Standards Representative: Email: Phone:
3.3 Joint Sponsor:/ () Contact information for Sponsor Chair: Email: Phone: Contact information for Standards Representative: Email: Phone:

4.1 Type of Ballot: Individual	
4.2 Expected Date of Submission for Initial Sponsor Ballot: 2010-11	
4.3 Projected Completion Date for Submittal to RevCom: 2011-11	
5.1 Approximate number of people expected to work on this project: 50	
<p>5.2 Scope of Proposed Standard: This amendment specifies enhancements to the 802.11 MAC for robust audio video streaming, while maintaining co-existence with other types of traffic. The MAC enhancements specified in this amendment enable:</p> <p>:</p> <ul style="list-style-type: none"> • Graceful degradation of audio video streams when there is insufficient channel capacity, by enabling packet discarding without any requirement for deep packet inspection, • Increased robustness in overlapping BSS environments, without the requirement for a centralised management entity, • Intra-Access Category prioritization of transport streams by modifying EDCA timing and parameter selection without any requirement for deep packet inspection, • Improved link reliability and low jitter characteristics for multicast/broadcast audio video streams, • Interworking with relevant 802.1AVB mechanisms (802.1Qat, 802.1Qav, 802.1AS) 	<ul style="list-style-type: none"> • Old Scope:
5.3 Is the completion of this standard is dependent upon the completion of another standard: No If yes, please explain:	
<p>5.4 Purpose of Proposed Standard: This amendment specifies a standard for robust audio video stream transport over 802.11 for consumer/enterprise applications.</p>	Old Purpose:
<p>5.5 Need for the Project: 802.11 devices are widely deployed. While the devices, including 802.11n Draft 2.0 devices, provide reliable data and voice performance, the performance of video streaming is not always of acceptable quality. A set of enhancements to 802.11 MAC can improve video streaming performance significantly while maintaining data and voice performance.</p> <p>A variety of 802.11-like proprietary implementations exist in the market today causing market fragmentation, co-existence and inter-operability issues. In addition, there are several competing and</p>	

emerging wireless technologies that target this application space. Enhancing the 802.11 MAC to address video streaming performance issues will extend the applicability to 802.11 and eliminate the need for proprietary implementation and/or competing standards.

5.6 Stakeholders for the Standard: Semiconductor manufacturers, consumer electronic device manufacturers and service providers delivering entertainment content to homes.

Intellectual Property

6.1.a. Has the IEEE-SA policy on intellectual property been presented to those responsible for preparing/submitting this PAR prior to the PAR submittal to the IEEE-SA Standards Board?

Yes

If yes, state date: 2007-09-19

If no, please explain:

6.1.b. Is the Sponsor aware of any copyright permission needed for this project? No

If yes, please explain:

6.1.c. Is the Sponsor aware of possible registration activity related to this project? No

If yes, please explain:

7.1 Are there other standards or projects with a similar scope? No

If yes, please explain:

and answer the following: Sponsor Organization:

Project/Standard Number:

Project/Standard Date: 0000-00-00

Project/Standard Title:

7.2 Future Adoptions

Is there potential for this standard (in part or in whole) to be adopted by another national, regional, or international organization? No

If Yes, the following questions must be answered:

Technical Committee Name and Number:

Other Organization Contact Information:

Contact person:

Contact Email address:

7.3 Will this project result in any health, safety, security, or environmental guidance that affects or applies to human health or safety? No

If yes, please explain:

7.4 Additional Explanatory Notes: (Item Number and Explanation)

Section 5.2/5.5 Expanded titles for referenced documents:

802.1Qat: "Standard for Local and Metropolitan Area Networks - Virtual Bridged Local Area Networks - Amendment: 9: Stream Reservation Protocol (SRP)."

802.1Qav: "Standard for Local and Metropolitan Area Networks---Virtual Bridged Local Area Networks - Amendment: Forwarding and Queuing Enhancements for Time-Sensitive Streams."

802.1AS: "Standard for Local and Metropolitan Area Networks - Timing and Synchronization for Time-Sensitive Applications in Bridged Local Area Networks."

802.11n: "Standard for Information Technology - Telecommunications and information exchange between systems- Local and metropolitan area networks- Specific requirements- Part 11: Wireless LAN Medium Access Control (MAC) and Physical Layer (PHY) specifications: Amendment 4: Enhancements for HigherThroughput"

8.1 Sponsor Information:

Is the scope of this project within the approved scope/definition of the Sponsor's Charter? Yes

If no, please explain:

Five Criteria

17.5.1 Broad Market Potential

A standards project authorized by IEEE 802 shall have a broad market potential.

Specifically, it shall have the potential for:

a) Broad sets of applicability.

Video is becoming an increasingly important medium for entertainment and enterprise communication. The proliferation of 802.11 devices and the reliability of wireless performance for data and voice services have demonstrated the convenience of wireless connectivity between devices. The next logical step is to extend the reliability of wireless connections to video streams.

b) Multiple vendors and numerous users.

Video streaming is a huge market. The desire to stream video wirelessly is demonstrated by the availability of numerous proprietary solutions and the emergence of specifications based on a variety of radio technologies. Contributions to the IEEE 802.11 document server from individuals affiliated with consumer electronics companies, service providers, and equipment manufacturers are an indication of broad interest in this amendment.

c) Balanced costs (LAN versus attached stations).

WLAN equipment is recognized as having balanced costs. The new MAC layer enhancements for VTS created as part of this amendment will not disrupt the established balance.

17.5.2 Compatibility

IEEE 802 defines a family of standards. All standards shall be in conformance with the IEEE 802.1 Architecture, Management, and Interworking documents as follows: 802. Overview and Architecture, 802.1D, 802.1Q, and parts of 802.1f. If any variances in conformance emerge, they shall be thoroughly disclosed and reviewed with 802. Each standard in the IEEE 802 family of standards shall include a definition of managed objects that are compatible with systems management standards.

This amendment will not make existing implementations incompatible or non-conformant. This amendment will not impact the compatibility that has already been demonstrated by 802.11. In other words devices implementing this amendment will continue to work with legacy devices.

Devices implementing some or all the mechanisms specified in this amendment will, in addition, be able to:

- (a) Provide robust transport of video streams
- (b) Provide support for mechanisms defined in 802.1avb.

17.5.3 Distinct Identity

Each IEEE 802 standard shall have a distinct identity. To achieve this, each authorized project shall be:

a) Substantially different from other IEEE 802 standards.

This amendment will create MAC layer enhancements for robust audio video streaming over WLAN. No other IEEE 802 standard addresses this specific requirement.

b) One unique solution per problem (not two solutions to a problem).

The proposed amendment will provide a unique set of MAC layer enhancements to address specific issues observed while streaming video over 802.11 – jitter, delay and packet loss management, inter-stream Quality of Service, impairments due to overlapping BSS, interworking with 802.1avb mechanisms and multicast/broadcast QoS. Not all of these issues exist in all environments. A subset of the mechanisms specified in this amendment will be sufficient in each case. No other IEEE standard provides a solution to this.

c) Easy for the document reader to select the relevant specification.

The project will produce an amendment to the IEEE 802.11 specification. The MAC layer enhancements specified in this amendment will be clearly distinguishable.

17.5.4 Technical Feasibility

For a project to be authorized, it shall be able to show its technical feasibility. At a minimum, the proposed project shall show:

- a) Demonstrated system feasibility.**
- b) Proven technology, reasonable testing.**
- c) Confidence in reliability.**

The streaming of video over existing 802.11 networks is sensitive to network loading, interference from other networks, packet loss and latency.

Based upon test results, discussion documents and existing solutions, it is clear that robust transportation of video streams over 802.11 networks is feasible. In addition, proprietary implementation of some or all of the enhancements listed in 5.2 demonstrating improved video performance, are commercially available.

17.5.4.1 Coexistence of 802 wireless standards specifying devices for unlicensed operation

A working group proposing a wireless project is required to demonstrate coexistence through the preparation of a Coexistence Assurance (CA) document unless it is not applicable. The Working Group will create a CA document as part of the WG balloting process. If the Working Group elects not to create a CA document, it will explain to the EC the reason the CA document is not applicable.

A CA document is not necessary for this amendment. It will change neither the IEEE 802.11 channel access mechanism nor physical layer operation in such a fashion to impact coexistence with other 802 standards specifying unlicensed operation.

17.5.5 Economic Feasibility

For a project to be authorized, it shall be able to show economic feasibility (so far as can reasonably be estimated) for its intended applications. At a minimum, the proposed project shall show:

- a) Known cost factors, reliable data.**

A small set of MAC layer enhancements will be sufficient to achieve the characteristics required for robust video streaming. The proposed amendment will probably require a manufacturer to develop modified firmware and/or modified device drivers, but typically no hardware modifications. Hardware modifications, if any will be relatively small and not contribute significantly to device cost.

b) Reasonable cost for performance.

An insignificant cost is anticipated in order to support mechanisms that are part of this project. The performance gain for this cost is robust video streaming between 802.11 devices in a variety of home/enterprise environments. This increases the applicability of 802.11 to a large number of devices.

c) Consideration of installation costs.

MAC enhancements specified in this project can be implemented in the firmware and/or device driver. Some of the enhancements may be implemented as hardware changes. It is anticipated however, that the installation costs are minimal.

Moved: to approve 802.11aa PAR/5C for submission to NesCom, with NesCom resolutions (11-07-1972r14) incorporated
Moved: Kerry/Jeffrey

5 Passes: 15/0/0

5.15 ME Conditional approval of 802.15.3 reaffirmation to RevCom - Heile 10 03:36PM

802.15 Agenda Item for Conditional Approval to forward 15.3 Reaffirmation to RevCom

Conditional Approval for 15.3 Reaffirmation

Ballots Sent:	106
Ballots Returned:	81
o Affirmatives	70
o Negatives with comment	4
o Negatives without comment	1
o Abstentions	6
o Total	81
No Response	25
Total Ballots	106

Percent Returned $(70 + 4 + 6) / 106 = 76\%$

Percent Affirmative $70 / (70 + 4) = 94\%$

Percent Abstentions $6 / 106 = 7\%$

Conditional Approval for 15.3 Reaffirmation

- 5 comments received from the 4 disapproving voters (see next slide and/or Doc 15-08-0193-00-0000).
- 4 comments basically advocated that 802.15.3 be withdrawn because of failure to achieve “Broad Market Potential” and/or that 802.11 already “does it”, 1 comment objected to a lack of a Coexistence Assurance Document
- 4 comments were rejected with the following or response or similar
 - 802.15.3 provides capabilities that are different from 802.11. There is an active project, 802.15.3c, which is an amendment to 802.15.3 to add a millimeter wave PHY to the standard. This group regularly attracts more than 100 attendees to its meetings and is in the process of moving to working group letter ballot. 802.15.3c needs 802.15.3 to complete its work.
- 1 comment was rejected because a coexistence plan is already included in Annex C of the Standard

Conditional Approval for 15.3 Reaffirmation

Comment	Proposed Change	Resolution Detail
<p>Industry has superseded the requirements through IEEE 802.11 and thus 802.15.3 is now obsolete. By Palm, Stephen</p>	<p>Rescind and delete 802.15.3.</p>	<p>802.15.3 provides capabilities that are different from 802.11. There is an active project, 802.15.3c, which is an amendment to 802.15.3 to add a millimeter wave PHY to the standard. This group regularly attracts more than 100 attendees to its meetings and is in the process of moving to working group letter ballot. 802.15.3c needs 802.15.3 to complete its work.</p>
<p>Industry has superseded the requirements through IEEE 802.11 and thus 802.15.3 is now obsolete. By Palm, Stephen</p>		<p>802.15.3 provides capabilities that are different from 802.11. There is an active project, 802.15.3c, which is an amendment to 802.15.3 to add a millimeter wave PHY to the standard. This group regularly attracts more than 100 attendees to its meetings and is in the process of moving to working group letter ballot. 802.15.3c needs 802.15.3 to complete its work.</p>
<p>A large (measured in units or dollars) WPAN consumer multimedia industry has not come about. Although the standard provides data rates high enough to satisfy a set of consumer multimedia industry needs for WPAN communications, that market has preferred to use other technology. The consumer multimedia industry uses other technology for their needs and many suppliers have been shipping high rate radios for five years. The 2007 versions of some 802.11 a/b/g radios in 130 nm technology have areas under 30 sq mm. The power consumption of all volume consumer radios is being continually improved, as process improvements are paid back in a short time. By Ecclesine, Peter</p>	<p>The standard should be submitted for withdrawal.</p>	<p>802.15.3 provides capabilities that are different from 802.11. There is an active project, 802.15.3c, which is an amendment to 802.15.3 to add a millimeter wave PHY to the standard. This group regularly attracts more than 100 attendees to its meetings and is in the process of moving to working group letter ballot. 802.15.3c needs 802.15.3 to complete its work. There is significant industry interest in this area and the 802.15.3 standard is well suited to this type of PHY.</p>
<p>I would like to know if this standard shall be accompanied with the coexistence assurance document. If it is the case, I would like to see the coexistence assurance document. If not, I would like to know the reason why the document is not needed. By Takagi, Masahiro</p>		<p>The 802.15.3 standard includes a coexistence assurance document in Annex C of the standard.</p>
<p>At the time the PAR & 5 Criteria for 802.15.3 were approved in 2000 it was asserted that the proposed standard had "broad market potential". It was similarly claimed in 2004 when the 802.15.3b PAR & 5 Criteria were approved that there was "broad market potential". It is now 2008, five years after 802.15.3 was ratified. At this time there appears to be no commercially available 802.15.3 compliant devices in existence, somewhat disproving the assertions made in the PARs and 5 Criteria. It now seems safer to say that there was "no market" for 802.15.3 based on a 2.4GHz radio. The lack of a market for 802.15.3 based equipment would suggest that the standard should be immediately withdrawn. A first counter argument to this conclusion is that elements of the 802.15.3 MAC are used by non standard systems, particularly those based on UWB PHYs. This may be true but this is not something that should be taken into account without a formal and approved liaison from another recognised SDO or similar organisation. A second counter argument is that 802.15 TG3c is using the 802.15.3 MAC as the basis of its work. This is a more compelling argument. However, it would be better for the 802.15.3c TG to not be constrained by the mistakes of the past. They do not need 802.15.3 to be reaffirmed for them to continue their work. Rather, they can draw on that work to create a new standard that is unconstrained by the earlier work, and certainly does not include the 2.4GHz radio. A third counter argument is that 802.15.3 products are available but that they are not obvious or not promoted as such. This may well be the case. However, it is incumbent of those "users" of the 802.15.3 standard to demonstrate the standard should be reaffirmed. By Andrew Myles</p>	<p>Withdraw 802.15.3 and 802.15.3b, unless it can be shown there is a "substantial market" for the standard today or a liaison is approved for a normative reference to 802.15.3 from another recognised SDO or similar organisation. In the event that 802.15.3 and 802.15.3b are withdrawn, encourage 802.15.3c to extract the useful elements into a new standard that is unconstrained by history.</p>	<p>802.15.3 provides capabilities that are different from 802.11. There is an active project, 802.15.3c, which is an amendment to 802.15.3 to add a millimeter wave PHY to the standard. This group regularly attracts more than 100 attendees to its meetings and is in the process of moving to working group letter ballot. 802.15.3c needs 802.15.3 to complete its work.</p>

Conditional Approval for 15.3 Reaffirmation

Motion in the WG: *the 802.15 WG requests the 802 EC grant conditional approval to forward 802.15.3-2003 to RevCom*

Moved: Pat Kinney

Second: Rick Alfvín

23-0-0

Conditional Approval for 15.3 Reaffirmation

Move that 802.15.3-2003 be conditionally approved for forwarding to RevCom upon successful completion of the Sponsor recirculation ballot

Moved: Bob Heile

Second:

Moved: that 802.15.3-2003 be conditionally approved for forwarding to RevCom upon successful completion of the Sponsor recirculation ballot
Moved: Heile/Greenspan

5 Passes: 15/0/0

5.16 ME 802.11r to RevCom

- Kerry

5 03:40 PM

Agenda#: 5.16
Date: 03/21/2008
Time:

IEEE 802 LMSC RESOLUTION

Motion By: KERRY Seconded By: GROW

Move to approve 802.11r Draft 9.0 to go to REVCOM.

WG moved: Clint Chaplin
WG seconded: Bill Marshall
WG vote: 57-0-3: Passes

TGr had a 97.1% approval on the last SB Recirculation Ballot. There are 3 voters that are voting NO. There were no new "NO" votes
Approve: Do Not Approve: Abstain:

Moved: to approve 802.11r Draft 9.0 to go to RevCom
Moved: Kerry/Grow

Passes: 16/0/0

5

5.17 ME 802.11y to RevCom

- Kerry

5 03:42 PM

Agenda#:5.17

Date:

Time:

IEEE 802 LMSC RESOLUTION

Motion By: KERRY

Seconded By: GROW

Move to request conditional approval to send the draft of 802.11y to RevCom upon the conclusion of a Sponsor Recirculation Ballot that meets all requirements for recirculation ballots.

P802.11y Draft 8.0 had a 94.9% approval on the last Sponsor Recirculation Ballot. There were 5 voters that had voted Disapprove. 1 of the 5 NO voters changed to an Approve vote.

TGy Results Moved: Jim Raub, 2nd Richard Kennedy Approved 12/0/0

WG Results:

Moved on behalf of TGy: Peter Ecclesine Approved (47/0/2)

Approve:

Do Not Approve:

Abstain:

IEEE P802.11
Wireless LANs

802.11y Sponsor Ballot Report**Date:** 2008-03-18**Author(s):**

Name	Affiliation	Address	Phone	email
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 Sponsor Ballots on IEEE P802.11y. This report is to be submitted to the IEEE 802 Executive Committee to support the request to forward IEEE 802.11y to RevCom.

1. Introduction and Summary

This is the report to the IEEE 802 Executive Committee documenting all the Sponsor Ballots of IEEE 802.11y, including voting results, comment statistics, and unresolved negative comments.

The total number of sponsor voters on IEEE 802.11y is 128. The final results of the voters on IEEE 802.11y are 94-4-6, for an approval percentage of 95.9%, a return percentage of 81%, and an abstain percentage of 5%.

There are 16 outstanding negative comments from four remaining negative voters; nine of these outstanding negative comments are from the latest recirculation ballot, seven are previously recirculated unresolved negative comments from initial sponsor ballot.

Based on results of the Sponsor recirculation ballots about P802.11y as documented in this report, we are asking for conditional approval from the IEEE 802 Executive Committee to forward IEEE P802.11y to RevCom.

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.

Initial Sponsor Ballot was a vote on Draft 7.0, and ran for 40 days starting 21 December 2007, and ending on 30 January 2008.

104 voted, 92 yes, 7 no, 5 abstained, 92.9% approval rate

Sponsor Recirculation-1 Ballot was a recirculation vote on Draft 8.0 and resolutions in 11-08-0226-08, and ran for 10 days from 27 Feb 2008 until 8 Mar 2008.

104 voted, 93 yes, 5 no, 6 abstained, 94.9% approval rate

Sponsor Recirculation-2 Ballot on Draft 9.0 and resolutions in 11-08-0277-02 is running for 15 days from 12 March 2008 until 27 March 2008. There will be weekly comment resolution meetings after the ballot closes.

At this time there are four Negative voters, with comments recorded in the comment database.

There are five Required Comments on Draft 7.0 from a commenter who did not subsequently vote or respond about SB comment resolutions; three comments requested to define terms already defined in the base standard, the others were Accepted in Principle and changes made in Draft 8.0.

One negative voter asks P802.11y to use "DSERegisteredLocation" in place of "DSE registered location" in the clause 10 Name field, however both styles are common in clause 10. Three of the six comments were Accepted in Principle and all the Name field occurrences were changed to "DSERegisteredLocation" in Draft 9.0.

One negative voter wants P802.11y to adapt P802.11k measurements and text, but does not say how 11k measurements can be changed and communicated from the enabling STA to dependent STAs, and responses returned to the enabling STA.

One negative voter has one unsatisfied comment about the relaying of commands and status between the enabling STA and dependent STAs. We chose to change the definition to note that "An enabling STA may choose for other DSE messages to be exchanged over the air, over the DS, or by mechanisms that rely on transport via higher layers."

SB	Comment	Accept	Accept in Principle	Reject
Initial	Technical Required	5	45	16
Recirc-1		1	7	7
	Total	6	52	23

The Comment Resolution Committee responses to all of the unsatisfied comments are on the following pages:

Cl 05 SC 5.1.1.1 P14 L 40 # 111
 Palm, Stephen Individual
 Comment Type **TR** Comment Status **R**
 Mobile STA term not defined nor is the term used
 SuggestedRemedy
 Clarify and use
 Response Response Status **U**
 REJECT. the term "mobile station (STA)" is defined in section 3.86 of 802.11-2007

Cl 05 SC 5.1.1.1 P14 L 40 # 110
 Palm, Stephen Individual
 Comment Type **TR** Comment Status **R**
 Portable STA term not defined nor is the term used.
 SuggestedRemedy
 clarify
 Response Response Status **U**
 REJECT. the term "portable station (STA)" is defined in section 3.109 of 802.11-2007

Cl 05 SC 5.1.1.1 P14 L 46 # 109
 Palm, Stephen Individual
 Comment Type **TR** Comment Status **R**
 Hidden STA not defined
 SuggestedRemedy
 Clarify the term and why it is needed
 Response Response Status **U**
 REJECT. the term "hidden station (STA)" is defined in section 3.64 of 802.11-2007

Cl 07 SC 7.4.7.7 P14 L # 121
 Kwak, Joseph Individual
 Comment Type **TR** Comment Status **R**
 The DSE measurement function duplicates the functionality already defined in the TGk Frame Request measurement.
 SuggestedRemedy
 Use and modify the TGk Frame Request measurement in Tgy. A new optional sub-element in the frame measurement request may be used to specify a tailored level of detail for Tgy purposes.

Response Response Status **U**
 REJECT. TGk measurement functions are optional and within a BSS. 802.11y measurement functions are mandatory, and requests come from the enabling STA, which may be outside the BSS. Commenter is encouraged to provide a proposed resolution in sufficient detail so that the specific wording of the changes that will cause the negative voter to change his vote to "approve" can readily be determined.

Cl 09 SC 9.8.1 P28 L 60 # 145
 Palm, Stephen Individual
 Comment Type **TR** Comment Status **A**
 "across" seems to have specialized but undefined regulatory meaning

SuggestedRemedy
 Clarify
 Response Response Status **U**
 ACCEPT IN PRINCIPLE. Will delete the first insertion "that is enabled for operation across regulatory domains" as it changes no meaning of the first two paragraphs.

Cl 09 SC 9.8.4 P29 L 46 # 146
 Palm, Stephen Individual
 Comment Type **ER** Comment Status **A**
 use a non-breaking hyphen in aSlot-Time

SuggestedRemedy
 use a non-breaking hyphen in aSlot-Time
 Response Response Status **U**
 ACCEPT IN PRINCIPLE. Editor will use 'Esc n s' to surpress hyphenation of aSlotTime.

Cl 17 SC 17.3.10.5 P 47 L 62 # 132

Kwak, Joseph Individual

Comment Type TR Comment Status R

Received signal strength (RSSI) cannot be used for any quantitative and verifiable performance requirement. RSSI is not defined in base standard. CCA-ED performance (which relies on RSSI) is not defined in base standard and cannot be used for any new Tgy performance requirements.

SuggestedRemedy

Suggest that Tgy modify the TGk defined IPI measurments (in 12.3.5) to include new performance spec for accuracy of idle power measurement. Then Tgy should modify CCA-ED to rely on measurement of IPI values (in place of RSSI) for its specified and testable performance. Otherwise strike out all references to CCA-ED in the Tgy draft. Repeating the errors of the past will only further degrade the baseline standard going forward.

Response Response Status U

REJECT. Regulators decide what homologation tests to perform independent of IEEE 802.11y. RSSI for the clause 17 PHY and CCA-ED as defined for operation in 3650-3700 MHz band are testable in the same way as RSSI and CCA for the clause 17 PHY in the 5 GHz band is testable.

Cl 00 SC 0 P1 L 64 # 1
 Stephens, Adrian P Individual

Comment Type TR Comment Status A

"An enabling STA communicates an enabling signal to its dependants over the air, but all other DSE messages may be exchanged over the DS."

This assumes that a serving AP and an enabling STA can communicate over the DS. Is this always true?

I am concerned that there is the assumption DSE messages may be exchanged over the DS - because I see no mechanism that makes this work. OK we have an MLME interface, but how does an enabling STA magically cause a dependent AP's SME to generate specific MLME-DSE* primitives?

Abstract interfaces are not implementation interfaces. This interface is not exposed in an AP, and there is no interoperable way that an enabling STA can access this interface across the wire.

SuggestedRemedy

Either limit the extent of the distribution to single-hop relaying of DSE public action frames, or define an interoperable interface between an enabling STA and a dependent AP across the wire - i.e. by tunnelling DSE public action frames using a specific Ethertype.

Response Response Status U

ACCEPT IN PRINCIPLE. Will change to: "enabling STA: A registered STA that is authorized to control when and how a dependent STA can operate. An enabling STA may choose for other DSE messages to be exchanged over the air, over the DS, or by mechanisms that rely on transport via higher layers."

Cl 07 SC 7.4.7.7 P14 L # 17
 Kwak, Joseph Individual

Comment Type TR Comment Status R

Comment#121 from prior ballot: DSE measurement request not fully specified.

SuggestedRemedy

As indicated in TGk draft, there is a very high overhead of procedure specification text (see TGk 11.10.0 - 11.10.5) needed to unambiguously specify the function of any measurement; Tgy draft does not include such required procedure detail and without such detail, no "standard" STA operation will result. Modify PICS to indicate that TGy STA is required to be TGk STA and will thus implement the already defined procedures for measurement request and report. ADDITIONAL DETAIL: Need to copy TGk sections 11.10.0-11.10.5 and include tailored version of these clauses in clause 11 of TGy draft. Without these procedures important issues including scheduling of measurement, prioritization of measurement tasks vs other services, off channel measurement scheduling, non-availability of measurement resources, non-continuous measurement duration, inability to perform requested measurement and other measurement issues will remain unspecified. No "standard" measurement behavior should be expected without complete measurement procedure specification.

Response Response Status U

REJECT. There are none of the issues commenter raises, no scheduling, prioritization or non-availability of measurement resources issues in 802.11y. TGk measurement functions are optional and within a BSS. 802.11y measurement functions are mandatory, and requests come from the enabling STA, which may be outside the BSS. Details of any modification to TGk text are missing from commenter's proposed change. Commenter is encouraged to provide a proposed resolution in sufficient detail so that the specific wording of the changes that will cause the negative voter to change his vote to "approve" can readily be determined.

Cl 10 SC 10.3.10.1.2 P29 L 30 # 14
 Chaplin, Clint Individual

Comment Type ER Comment Status A

"DSE registered location"

SuggestedRemedy

"DSERegisteredLocation"

Response Response Status U

ACCEPT IN PRINCIPLE. It is the style of clause 10 to capitalize and list parameters without spaces, and to repeat them in the Name column. The Description uses the names found in other clauses. Will correct Name entries throughout clause 10.

Cl 10 SC 10.3.10.1.2 P 29 L 43 # 15
 Chaplin, Clint Individual
 Comment Type ER Comment Status A
 "DSE registered location"
 SuggestedRemedy
 "DSERegisteredLocation"
 Response Response Status U
 ACCEPT IN PRINCIPLE. It is the style of clause 10 to capitalize and list parameters without spaces, and to repeat them in the Name column. The Description uses the names found in other clauses. Will correct Name entries throughout clause 10.

Cl 10 SC 10.3.7.3.2 P 28 L 11 # 12
 Chaplin, Clint Individual
 Comment Type ER Comment Status A
 "DSE registered location"
 SuggestedRemedy
 "DSERegisteredLocation"
 Response Response Status U
 ACCEPT IN PRINCIPLE. It is the style of clause 10 to capitalize and list parameters without spaces, and to repeat them in the Name column. The Description uses the names found in other clauses. Will correct Name entries throughout clause 10.

Cl 10 SC 10.3.6.3.2 P 25 L 30 # 10
 Chaplin, Clint Individual
 Comment Type ER Comment Status R
 "DSEregisteredlocation"
 SuggestedRemedy
 "DSERegisteredLocation"
 Response Response Status U
 REJECT. It is the style of clause 10 to capitalize and list parameters without spaces, and to repeat them in the Name column. The Description uses the names found in other clauses.

Cl 10 SC 10.3.7.4.2 P 28 L 62 # 13
 Chaplin, Clint Individual
 Comment Type ER Comment Status R
 "DSEregisteredlocation"
 SuggestedRemedy
 "DSERegisteredLocation"
 Response Response Status U
 REJECT. It is the style of clause 10 to capitalize and list parameters without spaces, and to repeat them in the Name column. The Description uses the names found in other clauses.

Cl 10 SC 10.3.6.4.2 P 26 L 11 # 11
 Chaplin, Clint Individual
 Comment Type ER Comment Status R
 "DSEregisteredlocation"
 SuggestedRemedy
 "DSERegisteredLocation"
 Response Response Status U
 REJECT. It is the style of clause 10 to capitalize and list parameters without spaces, and to repeat them in the Name column. The Description uses the names found in other clauses.

CI 17 SC 17.3.10.5 P 51 L 62 # 18
Kwak, Joseph Individual

Comment Type TR Comment Status R

Comment#132 from prior ballot: Received signal strength (RSSI) cannot be used for any quantitative and verifiable performance requirement. RSSI is not defined in base standard. CCA-ED performance (which relies on RSSI) is not defined in base standard and cannot be used for any new Tgy performance requirements.

SuggestedRemedy

Suggest that Tgy modify the TGk defined IPI measurements (in 12.3.5) to include new performance spec for accuracy of idle power measurement. Then Tgy should modify CCA-ED to rely on measurement of IPI values (in place of RSSI) for its specified and testable performance. Otherwise strike out all references to CCA-ED in the TGy draft. Repeating the errors of the past will only further degrade the baseline standard going forward. ADDITIONAL DETAIL: RSSI is not specified with any unit or accuracy. RSSI is unitless and may only be used to compare relative signal levels perceived within any single STA. It is meaningless to compare a STA's subjective and unitless RSSI to any objective CCA-ED threshold specified in dBm.

Response Response Status U

REJECT. This standard does not define regulatory tests, nor what must be demonstrated. We do not agree with commenter's presumption of what those FCC tests are, and what Canada will require.

Moved: to request conditional approval to send the draft of 802.11y to RevCom upon the conclusion of a Sponsor Recirculation Ballot that meets all requirements for recirculation ballots
Moved: Kerry/Grow

5 **Passes: 16/0/0**

5.18 ME Conditional approval of 802.11w to RevCom - Kerry 10 03:50 PM

This item removed from the agenda.

5.19 ME 802.1AX/802.3 to RevCom - Grow 5 03:50 PM

10

P802.3 (802.3ay) & P802.1AX (802.3ax)

- These two projects are co-contingent to revise IEEE Std 802.3-2005
- P802.1AX has met all recirculation requirements – 100% approval (w/flip)
- P802.3 will require recirculation, 3 unresolved negative comments – 95% approval (w/flip)

P802.3 & P802.1AX WG motion

Request that IEEE 802.3 accepts the resolution to all comments received in the Sponsor recirculation ballots of IEEE 802.3ay/D2.1, and authorizes the editor to generate IEEE 802.3ay/D2.2.

Request that IEEE 802.3 authorizes the Maintenance Task Force to conduct recirculation ballots and meetings as necessary to resolve comments received during IEEE 802.3ay balloting.

Request that the IEEE 802.3 Working Group Chair request IEEE 802 EC grant conditional approval per IEEE 802 P&P Procedure 20 for IEEE 802.3ay (IEEE P802.3) revision to be submitted to RevCom.

Request that the IEEE 802.3 Working Group Chair request IEEE 802 EC approval to submit IEEE 802.3ax (IEEE P802.1AX) D2.1 to RevCom at the same time as IEEE 802.3ay.

M: D. Law, S: H. Barrass

Tech 75%, Y:87 N:0 A:15, MOTION PASSES

P802.3 & P802.1AX to RevCom

Recognizing that P802.1AX and P802.3 are co-contingent projects, the EC grants conditional approval for P802.3 (802.3ay), and approval for P802.1AX (802.3ax) submission to RevCom.

M: R. Grow

S: S. Kerry

Moved: Recognizing that P802.1AX and P802.3 are co-contingent projects, the EC grants conditional approval for P802.3 (802.3ay), and approval for P802.1AX (802.3ax) submission to RevCom.

Moved: Grow/Kerry

5

Passes: 16/0/0

5.20 ME Conditional approval of 802.20 to RevCom

- Greenspan

15

03:53 PM

Motion By: Greenspan Seconded By: Buzz Rigsbee

Approve: Do Not Approve: Abstain:

Move to conditionally approve IEEE 802.20
Working Group Draft *4.1m* to go to RevCom.

WG Vote on the motion: Passed 8 : 2 : 0

802.20 had a 75.9% approval on the last Recirculation Ballot #1. There were 14 voters that voted Disapprove. No technical changes were made to draft 4.0 based upon comment resolution in this session.

Based on results of the Sponsor recirculation ballots about P802.20 as documented in this report, we are asking for conditional approval from the IEEE 802 Executive Committee to forward IEEE P802.20 to RevCom. Agenda Items and motions requesting conditional approval to forward when the prior ballot has closed shall be accompanied by:

- Date the ballot closed

Recirculation closed March 14, 2008

- Vote tally including Approve, Disapprove and Abstain votes

Return Rate=65/70=92.8%

Approval Rate=44/44+14=44/58=75.9%

Abstain Rate=6/65=9.2%

- Comments that support the remaining disapprove votes and Working Group responses.

Separate Spreadsheet emailed.

- Schedule for recirculation ballot and resolution meeting.

15 recirculation start early April, exact date TBD; May 12-15 Interim for comment resolution.

The Sponsor Ballot for the 802.20 draft closed on March 14, 2008. as follows:

INDIVIDUAL BALLOT

B=153
Y=69
Nc=17
Nn=1
A=33

120 Votes

Return Rate= $120/153=78\%$

Approval Rate= $69/69+17=69/86=80.0\%$

Abstain Rate= $33/120=27\%$

BLOCK BALLOT

B=70
Y=39
Nc=11
Nn=1
A=8

65 Votes

Return Rate= $59/70=84.3\%$

Approval Rate= $39/39+11=39/50=78.0\%$

Abstain Rate= $8/59=13.6\%$

The **recirculation** of the Sponsor Ballot for the 802.20 draft closed on March 14, 2008.

INDIVIDUAL BALLOT

B=153
Y=75
Nc=22
Nn=1
A=31

129 Votes

Return Rate= $129/153=84.3\%$

Approval Rate= $75/75+22=75/97=77.3\%$

Abstain Rate= $31/129=24\%$

BLOCK BALLOT

B=70
Y=44
Nc=14
Nn=1
A=6

65 Votes

Return Rate= $65/70=92.8\%$

Approval Rate= $44/44+14=44/58=75.9\%$

Abstain Rate= $6/65=9.2\%$

Moved: to conditionally approve IEEE 802.20 Working Group Draft 4.1m to go to RevCom
Moved: Greenspan/Rigsbee

5 Concern was expressed at the relatively low approval percentage and the fact that the approval rate regressed from the original sponsor ballot to the first recirculation. Arnie indicated that this is due to voters participating for the first time in the recirculation ballot. Roger raised a concern that the material distributed to the EC in support of the motion for conditional approval does not include all of the outstanding comments from disapprove voters.

10 Roger indicated that he believes the Scope in the draft is significantly different from the scope in the PAR. Jerry Upton indicated that IEEE Staff have advised the 802.20 WG that the difference is editorial and the statements do not need to match.

A request for a roll call of the UC-EC was made for this vote.

15

Buzz Rigsbee – approve

John Hawkins – approve

John Lemon – approve

Bob Heile – approve

20 Mike Lynch – approve

Tony Jeffree – disapprove

Arnie Greenspan – approve

Bob O'Hara – disapprove

25 **Passes: 6/2/0 (UC-EC only, eight voters present, eight voting)**

5.21 ME Conditional approval of 802.1ah to RevCom

- Jeffree

10

04:24 PM

MOTION

- 802.1 requests conditional approval of the EC to forward P802.1ah to RevCom.
- Proposed: haddock Second: bottorff
- For: 45 Against: 0 Abstain: 7
- EC proposed: Jeffree Second:

Supporting material for P802.1ah

- First recirc ballot closed 11th March
 - 88 Voters 64 Approve, 2 Disapprove, 4 Abstain
 - 43 Comments 1 TR, 15 T, 2 GR, 0 G, 0 ER, 25 E
 - 79% response, 96% Yes, 4% No, 5% Abstain
- One “Disapprove” voter has indicated that his comments have been addressed to his satisfaction and that his vote is now “Approve”
- One “Disapprove” voter had a single comment reasserting his comment in the initial ballot (see next slide).
- So results are now:
 - 88 Voters 65 Approve, 1 Disapprove, 4 Abstain
 - 43 Comments 1 TR, 15 T, 2 GR, 0 G, 0 ER, 25 E
 - 79% response, 98% Yes, 2% No, 5% Abstain
- Some comment resolutions will need changes to the text, so will recirculate again in ~2 week timeframe. We expect that this recirc will be “clean”, but if not, will hold a ballot resolution meeting via telecon in early May.
- We intend to pre-submit the ballot package, based on the draft to be recirculated, to meet the May 1 submission deadline.

802.1ah – outstanding comment – recirc #1

- Jose Morales - Disapprove

Comment 29 - GR

I reaffirm my previous comment. Current 802.1ah is too complex and inefficient, and therefore not acceptable for a "Provider Backbone".

Suggested Remedy:

The protocol should be simplified in order to allow an efficient extension of Ethernet to the infrastructure of operators and service suppliers.

Response: Disagree.

Reject, The committee reaffirms its previous response. We believe that the commentor's suggested alternative technology is incompatible with the current 802.1Q bridge relay paradigm.

802.1ah – Morales original comment

- Jose Morales - Disapprove

- **Comment 3 - GR**

The current use of Ethernet's not foreseeable MAC addresses does not scale due to their lack of hierarchy. The transparent bridge paradigm has being modified at IEEE 802.1ah to provide scalability to big networks, but at the cost of multiple encapsulations and substantially increased frame overhead with successive encapsulations.

Using Local MAC (LMAC, U/L bit = 1) addresses to scale the address space when bridging across multiple providers, according UETS proposal, makes possible the deployment of EFR (Ethernet Fabric Routing) switches, to perform physical frame switching and routing without forwarding tables or label swapping. This solution increases dramatically speed (pure physical switching) and scalability (more than 70 trillion addresses per domain), reducing at the same time network's complexity.

Suggested Remedy:

Include the utilization of UETS/EFR architecture for networks of any size, using standard Local MAC (LMAC) addresses, linked to physical ports location, and controlled by the network administrator, providing scalable routing and extremely simple hardware based switching.

- **Response:** Disagree

REJECT.

The use of UETS/EFR is beyond the scope of the 802.1ah draft and therefore should not be explicitly referenced.

Moved: 802.1 requests conditional approval of the EC to forward P802.1ah to RevCom
Moved: Jeffree/Grow

Passes: 16/0/0

5

5.22	ME	-		03:39 PM
5.23	ME	Conditional approval of 802.16j to sponsor ballot	- Marks	10 03:39 PM

IEEE 802.16 Issue for 802 LMSC EC Meeting of Friday 21 March 2008



Agenda Item	Agenda Type	Motion (click for documentation)	Moved	Seconded	EC Result 2008-03-21 ("Yes/No/ Abstain")
	ME	Motion: To grant conditional approval, under Clause 20, to forward P802.16j to Sponsor Ballot. See 802.16-08/014 , 802.16-08/015 , and 802.16-08/016 .	Marks	Sherman	5/6/4

Roger Marks (r.b.marks@ieee.org)

Chair, IEEE 802.16 Working Group on Broadband Wireless Access Standards

Supporting report to EC for request of conditional approval to initiate sponsor ballot on P802.16j

IEEE 802.16 Presentation Submission Template (Rev. 9)

Document Number:

IEEE 802.16-08/014

Date Submitted:

2008-03-21

Source:

Mike Hart, Mitsuo Nohara, Jung Je Son
UK Broadband, KDDI, Samsung

Voice:

E-mail: mike.hart@ukbroadband.com

Venue:

Session #54

Base Contribution:

None

Purpose:

Report to the EC the status of LB28 in support of request for conditional approval to initiate sponsor ballot on the IEEE P802.16j draft.

Notice:

This document does not represent the agreed views of the IEEE 802.16 Working Group or any of its subgroups. It represents only the views of the participants listed in the "Source(s)" field above. It is offered as a basis for discussion. It is not binding on the contributor(s), who reserve(s) the right to add, amend or withdraw material contained herein.

Release:

The contributor grants a free, irrevocable license to the IEEE to incorporate material contained in this contribution, and any modifications thereof, in the creation of an IEEE Standards publication; to copyright in the IEEE's name any IEEE Standards publication even though it may include portions of this contribution; and at the IEEE's sole discretion to permit others to reproduce in whole or in part the resulting IEEE Standards publication. The contributor also acknowledges and accepts that this contribution may be made public by IEEE 802.16.

Patent Policy:

The contributor is familiar with the IEEE-SA Patent Policy and Procedures:

<<http://standards.ieee.org/guides/bylaws/sect6-7.html#6>> and <<http://standards.ieee.org/guides/opman/sect6.html#6.3>>.

Further information is located at <<http://standards.ieee.org/board/pat/pat-material.html>> and <<http://standards.ieee.org/board/pat>>.

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.

Ballot dates

Stage	Open	Close
Letter Ballot 28	10 Aug 2007	9 Sept 2007
Letter Ballot Recirc 28a	24 Dec 2007	14 Jan 2008
Letter Ballot Recirc 28b	29 Feb 2008	15 Mar 2008

Vote tally

- Approve: 255
- Disapprove: 32
- Abstain: 23 (8%)

- Return ratio: 89%
- Approve ratio: 89%

- 2 Disapprove voters with no comment in any ballot stage

Comments in support of disapprove votes

- LB 28:
 - 56 outstanding comments
 - 8 were accepted with no modification
- LB recirc 28a:
 - 24 outstanding comments
 - 2 were accepted with no modification
 - 4 were submitted as editorial
- LB recirc 28b:
 - 35 outstanding comments
 - 11 were accepted with no modification
 - 13 were submitted as editorial
- See IEEE 802.16-08/015 for those that were accepted
- See IEEE 802.16-08/016 for the others

Schedule for sponsor ballot

- 27 April: Open LB recirc 28c
- 10 May: Close LB recirc 28c
- Session #55 Resolve comments
- 26 May: Open LB recirc 28d
- 8 June: Close LB recirc 28d
- 14 June: Open sponsor ballot
- 13 July: Close sponsor ballot
- Session #56 Resolve comments

2008/08/21

IEEE 802.16-07/045r5

Comment by: robert popoli

Membership Status: Member

Date: ?

Comment # 0908

Document under Review: P802.16j/D1

Ballot ID: 28

Comment Type Technical Part of Dis Satisfied Page 167 Line 28 Fig/Table# Subclause 8.4.4.7.2.3

Access channel utilizes frequency diversity to improve link performance. Same technique would also be valuable to improve link performance on the AMC subchannels. This feature should be added.

Suggested Remedy

Contribution C802.16j-07464 should be accepted into document to achieve added link performance.

GroupResolution

Decision of Group: Accepted

Reason for Group's Decision/Resolution

Group's Notes

No objection

Editor's Notes

Editor's Actions

2008/08/21

IEEE 802.16-07/045r5

Comment by: Zhibin Lin

Membership Status: Member

Date: 9/7/2007

Comment # 0780

Document under Review: P802.16j/D1

Ballot ID: 28

Comment Type Technical Part of Dis Satisfied Page 133 Line 26 Fig/Table# Subclause 6.3.22.1.1

Because access RS can transmit MR_Generic-ACK message or ACK header , the MR-BS shall transmit MOB_SCN-RSP to the MS after it receives MR_Generic-ACK or ACK header from the access RS.

Suggested Remedy

Modify "the MR-BS shall transmit MOB_SCN-RSP to the MS after it receives MR_Generic-ACK from the access RS."
to"the MR-BS shall transmit MOB_SCN-RSP to the MS after it receives MR_Generic-ACK or ACK header from the access RS."

GroupResolution

Decision of Group: Accepted

Reason for Group's Decision/Resolution

Group's Notes

No objection

Editor's Notes

Editor's Actions

2008/08/21

IEEE 802.16-07/045r5

Comment by: Lei Wang

Membership Status: Member

Date: 9/8/2007

Comment # 0205

Document under Review: P802.16j/D1

Ballot ID: 28

Comment Type Technical Part of Dis Satisfied Page 18 Line 32 Fig/Table# Subclause 6.3.2.2.8.2

The subheaders are considered to be part of the payload, as illustrated in Figure 18 in published 802.16 specs, as well as in Figure 21a in this document. In particular, they may be encrypted.

Suggested Remedy

Change: The Allocation subheader shall be the last subheader ~~before the payload~~.

GroupResolution

Decision of Group: Accepted

Reason for Group's Decision/Resolution

Group's Notes

No objection

Editor's Notes

Editor's Actions

2008/08/21

IEEE 802.16-07/045r5

Comment by: Lei Wang

Membership Status: Member

Date: 9/8/2007

Comment # 0083

Document under Review: P802.16j/D1

Ballot ID: 28

Comment Type Technical Part of Dis Satisfied Page 6 Line 49 Fig/Table# Subclause 6.3.1.3

MPDU is not defined in this document. Moreover, this term was replaced by MAC PDU in 802.16 specs at least 4 years ago. There is no reason to introduce it back again.

Suggested Remedy

Replace "MPDU" by "MAC PDU" throughout this document.

GroupResolution

Decision of Group: Accepted

Reason for Group's Decision/Resolution

Group's Notes

No objection

Editor's Notes

Editor's Actions

2008/08/21

IEEE 802.16-07/045r5

Comment by:

Erik Colban

Membership Status: Member

Date: ?

Comment # 0165

Document under Review: P802.16j/D1

Ballot ID: 28

Comment Type Technical Part of Dis Satisfied Page 14 Line 14 Fig/Table# 19d Subclause 6.3.2.1.2.2.2.3
BS?!

Suggested Remedy

MR-BS

GroupResolution

Decision of Group: Accepted

Reason for Group's Decision/Resolution

Group's Notes

No objection

Editor's Notes

Editor's Actions

Comment by:

Erik Colban

Membership Status: MemberDate: ?Comment # 0791Document under Review: P802.16j/D1Ballot ID: 28Comment Type Technical Part of Dis Satisfied Page 136 Line 48 Fig/Table# Subclause 6.3.22.4.1.2

IP address management is outside the scope of 802.16. It is unlikely that the IP addresses would need to be renewed. Under a typical scenario, Mobile IP would be used and the MS would be assigned an address from its home network, which does not change. This should be handled by another forum. 802.16 should simply provide the hooks.

Suggested Remedy

Change: An RS, when operating in moving BS mode, ~~the RS~~ shall implement a full set of physical layer and MAC layer functions defined in ~~IEEE802.16e-2005~~ excluding the convergence sublayer. The mobile RS is also the serving station of the MS. The mobile RS shall perform handover per 6.3.22.2. After the mobile RS hands over to a new target MR-BS, ~~if the mobile RS enters into a new IP subnet, the IP addresses of all the MSs served by this mobile RS may need to be re-established.~~ A dedicated transport connection may be established between the mobile RS and its serving MR-BS to relay the IP address re-establishment related higher layer signaling between the MS and the MR-BS that may have been triggered by the mobility event.

GroupResolution**Decision of Group:** Accepted**Reason for Group's Decision/Resolution****Group's Notes**

No objection

Editor's Notes**Editor's Actions**

Comment by:

Paul Piggini

Membership Status: MemberDate: ?Comment # 0053Document under Review: P802.16j/D1Ballot ID: 28CommentType TechnicalPart of Dis Satisfied Page 5Line 11Fig/Table#Subclause 3.100

Since a relay station has multiple interfaces, RTD is ambiguous.

Suggested Remedy

Clarify that the RTD is the round trip delay between the RS and a subordinate station, by adding the following sentence to the end of the definition:

RTD is the round trip delay between the RS and its superordinate station.

Group Resolution**Decision of Group: Accepted****Reason for Group's Decision/Resolution**

Note: comment #50 adopted a general definition for RTD. This comment clarifies its interpretation in terms of R-TTG.

Group's Notes

No objection

Editor's Notes**Editor's Actions**

Comment by: Yanhong Wang

Membership Status: Member

Date: 9/8/2007

Comment # 0822

Document under Review: P802.16j/D1

Ballot ID: 28

Comment Type Technical Part of Dis Satisfied Page 143 Line 1 Fig/Table# Subclause 6.3.24

In subclause 6.3.24 (MS idle mode), there is the following description:

"FRS and NRS may have same or different Paging Groups compared to controlling MR-BS."

This is confusing. Does this mean that the FRS may be assigned a PG, which is out of scope of its controlling MR-BS? Clarification is needed here.

If FRS/NRS's paging group is different from that of the controlling MR-BS. The MR-BS will not received the paging announce message from PC. Therefore, the RS can not broadcast the paging message.

Suggested Remedy

Do the following changes:

"FRS and NRS may have same or just a subset of Paging Groups compared to their controlling MR-BS."

GroupResolution

Decision of Group: Accepted

Reason for Group's Decision/Resolution

Group's Notes

No objection

Editor's Notes

Editor's Actions

Comment by: Tzu-Ming Lin

Membership Status: Member

Date: 1/15/2008

Comment # 2036

Document under Review: P802.16j/D2

Ballot ID: LB28a

Comment Type Technical Part of Dis Satisfied Page 5 Line 14 Fig/Table# Subclause 3.105

Doubled definitions of security zone key. (3.105 and 3.116)

Suggested Remedy

3.105 security zone key (SZK): A group key shared by the MR-BS and a group of RS within the same security zone. The SZK is a head of key hierarchy used to satisfy the security requirements, such as integrity protection for relay MAC PDUs within a defined security zone.

~~3.116 security zone key (SZK): The SZK is a head of key hierarchy used to satisfy the security requirements, such as integrity protection for relay MAC PDUs within a defined security zone.~~

[editor's note]

reorder the sequence number from 3.106 to 3.118

Group Resolution

Decision of Group: Accepted

Reason for Group's Decision/Resolution

Group's Notes

Editor's Notes

Editor's Actions a) done

2008/08/21

IEEE 802.16-08/002r3

Comment by: Shulan Feng

Membership Status: Member

Date: 1/14/2008

Comment # 2042

Document under Review: P802.16j/D2

Ballot ID: LB28a

Comment Type Editorial Part of Dis Satisfied Page 5 Line 33 Fig/Table# Subclause 3

missing space between "A" and "portion".

Suggested Remedy

change "Aportion" to "A portion".

GroupResolution

Decision of Group: Accepted

Reason for Group's Decision/Resolution

Group's Notes

Editor's Notes

Editor's Actions a) done

2008/08/21

Comment by:

Jerry Chow

Membership Status: Member

Date: 3/14/2008

Comment # **026**

Document under Review: **P802.16h/D3**

Ballot ID:

Comment

Type Technical

Part of Dis



Satisfied



Page 22

Line 4

Fig/Table#

Subclause

6.3.2.1.2.2.2.7

As indicated in 6.3.6.7.1.3, DL flow control mechanism is just used for RS operating in distributed scheduling mode.

Suggested Remedy

Change the sentence as following:

The DL flow control header is used to perform DL flow control between an RS operating in distributed scheduling mode and its superordinate RS or MR-BS.

GroupResolution

Decision of Group: Accepted

Reason for Group's Decision/Resolution

Group's Notes

Editor's Notes

Editor's Actions

2008/08/21

Comment by: Shulan Feng

Membership Status: Member

Date: 3/14/2008

Comment # **260**

Document under Review: **P802.16j/D3**

Ballot ID:

Comment Type Editorial Part of Dis Satisfied Page 205 Line 19 Fig/Table# Subclause 8.4.5.10

Missing "." at the end of the sentence

Suggested Remedy

Modify the sentence as the following:

This message shall be used in non-transparent frame structure and may be used in transparent frame structure to signal the resource assignments and other control information.

GroupResolution

Decision of Group: Accepted

Reason for Group's Decision/Resolution

Group's Notes

Editor's Notes

Editor's Actions

2008/08/21

Comment by: Shulan Feng

Membership Status: Member

Date: 3/14/2008

Comment # **090**

Document under Review: **P802.16j/D3**

Ballot ID:

Comment Type Editorial Part of Dis Satisfied Page 84 Line 44 Fig/Table# Subclause 6.3.6.7.1.2

This sentence is grammatically incorrect.

Suggested Remedy

Replace as the following:

the scheduling information needs only be sent once

GroupResolution

Decision of Group: Accepted

Reason for Group's Decision/Resolution

Group's Notes

Editor's Notes

Editor's Actions

2008/08/21

Comment by: Hongyun Qu

Membership Status: Member

Date: 3/15/2008

Comment # 143

Document under Review: P802.16j/D3

Ballot ID:

Comment Type Editorial Part of Dis Satisfied Page 122 Line 42 Fig/Table# Subclause 6.3.10.3.2.1

Figure 118c and Figure 118d are not used for ranging, instead, in P133, they are used for HARQ.

Suggested Remedy

Change the sentence into:

The flow charts (Figure 115a, Figure 115b, Figure 115c, Figure 115d, Figure 118a; [and](#) Figure 118b; ~~Figure 118c and Figure 118d~~) and message sequence chart (Table 206a and Table 206b) on the following pages define the CDMA periodic ranging and adjustment process that shall be followed by compliant SSs, transparent access RSs and MR-BSs.

Renumber "Figure 118c-Example of Initial transmission of HARQ burst" and "Figure 118d-Example of initial transmission and retransmission of HARQ burst" in P133, since they don't belong to ranging procedure.

GroupResolution

Decision of Group: Accepted

Reason for Group's Decision/Resolution

Group's Notes

Editor's Notes

Editor's Actions

2008/08/21

Comment by: Hongyun Qu

Membership Status: Member

Date: 3/15/2008

Comment # 131

Document under Review: P802.16j/D3

Ballot ID:

Comment Type Technical Part of Dis Satisfied Page 107 Line 39 Fig/Table# Subclause 6.3.10.3.1.1

This paragraph describes one kind of ranging in centralized scheduling mode.

Suggested Remedy

Change this paragraph into:

When an SS performs initial ranging in systems with transparent RSs attached to non-transparent RSs that have unique BSIDs, the MR-BS, superordinate station (a non-transparent RS operating in centralized scheduling mode), and the transparent RSs shall perform the following steps:

GroupResolution

Decision of Group: Accepted

Reason for Group's Decision/Resolution

Group's Notes

Editor's Notes

Editor's Actions

2008/08/21

Comment by: Hongyun Qu

Membership Status: Member

Date: 3/15/2008

Comment # **051**

Document under Review: **P802.16j/D3**

Ballot ID:

Comment Type Technical Part of Dis Satisfied Page 59 Line 3 Fig/Table# Subclause 6.3.2.3.78

Since "RS_MOB_MEAS-RSP" message is used for MR-BS to request RSs in the RS group for reporting their measurement results. Why not call it "RS_MOB_MEAS-REQ"?

Suggested Remedy

Change all "RS_MOB_MEAS-RSP" into "RS_MOB_MEAS-REQ".

GroupResolution

Decision of Group: Accepted

Reason for Group's Decision/Resolution

Group's Notes

Editor's Notes

Editor's Actions

2008/08/21

Comment by: Hongyun Qu

Membership Status: Member

Date: 3/15/2008

Comment # **287**

Document under Review: **P802.16j/D3**

Ballot ID:

Comment Type Editorial Part of Dis Satisfied Page 240 Line 45 Fig/Table# Subclause 11.7.8.10

The font of sentence "An RS sets bit #7 to 0 to indicate that it cannot perform DL flow control and to 1 to indicate that it can perform DL flow control." is different with other paragraphs.

Suggested Remedy

Keep the font consistent.

GroupResolution

Decision of Group: Accepted

Reason for Group's Decision/Resolution

Group's Notes

Editor's Notes

Editor's Actions

2008/08/21

Comment by:

Ling Xu

Membership Status: Member

Date: 3/14/2008

Comment # 296

Document under Review: P802.16j/D3

Ballot ID:

Comment Type Editorial Part of Dis Satisfied Page 264 Line 7 Fig/Table# Subclause 11.25.1

In current text, the RS operational mode includes tunneling burst mode, which is already delted in the last meeting.

Suggested Remedy

change the text as follows.

Bit #0:RS centralized scheduling

Bit #1:RS distributed scheduling

Bit #2:RS centralized security

Bit #3:RS distributed security

Bit #4:0 = shared BSID with other

access stations, 1 = unique BSID

Bit #5:Embedded path management

Bit #6:Explicit path management

Bit #7:Burst-based forwarding

Bit #8:Tunneling packet mode

~~Bit #9:Tunneling burst mode~~

Bit #~~10~~9:Local CID allocation mode

Bit #~~11~~10: Superordinate RS of an RS group

Bit #~~12~~11~15: reserved

GroupResolution

Decision of Group: Accepted

Reason for Group's Decision/Resolution

Group's Notes

Editor's Notes

Editor's Actions

2008/08/21

Comment by: Ling Xu

Membership Status: Member

Date: 3/14/2008

Comment # 284

Document under Review: P802.16j/D3

Ballot ID:

Comment Type Editorial Part of Dis Satisfied Page 240 Line 10 Fig/Table# Subclause 11.7.8.10

In current text, the MR-BS and RS MAC feature support includes tunnel burst mode, which is already delted in the last meeting.

Suggested Remedy

change the text as follows:

Bit #0: NBR-ADV generating support

Bit #1: Tunnel packet mode support

~~Bit #2: Tunnel burst mode support~~

~~Bit #2: Superordinate RS of an RS group support~~

Bit #3: RS mobility support

Bit #4: Subordinate RS network entry support

Bit #5: Location support

Bit #6: Multicast management support

Bit #7: DL Flow control

Bit #8: RS centralized security support

Bit #9: RS distributed security support

Bit #10: Embedded path management support

Bit #11: Explicit path management support

Bit #12: Burst-based forwarding support

Bit #13: Local CID allocation support

Bit #14: MOB_SLP-RSP support

Bit #15: MOB_SCN-RSP support

~~Bit #16: Superordinate RS of an RS group support~~

Bit #~~17_16~~-#23: Reserved

GroupResolution

Decision of Group: Accepted

Reason for Group's Decision/Resolution

Group's Notes

Editor's Notes

Editor's Actions

2008/08/21

Comment by: Ling Xu

Membership Status: Member

Date: 3/14/2008

Comment # 297

Document under Review: P802.16j/D3

Ballot ID:

Comment Type Editorial Part of Dis Satisfied Page 264 Line 7 Fig/Table# Subclause 11.25.1

Tunneling packet mode and Tunnel packet mode are both used in the 16j D3.

Suggested Remedy

Replace "Tunneling packet mode" with "Tunnel packet mode"

GroupResolution

Decision of Group: Accepted

Reason for Group's Decision/Resolution

Group's Notes

Editor's Notes

Editor's Actions

2008/08/21

Comment by: Ling Xu

Membership Status: Member

Date: 3/14/2008

Comment # 265

Document under Review: P802.16j/D3

Ballot ID:

Comment Type Editorial Part of Dis Satisfied Page 217 Line Fig/Table# 496j Subclause 8.4.5.10.1.7

The "OFDMA symbol" should be "OFDMA symbol offset".

Suggested Remedy

Change "OFDMA symbol" as "OFDMA symbol offset".

GroupResolution

Decision of Group: Accepted

Reason for Group's Decision/Resolution

Group's Notes

Editor's Notes

Editor's Actions

**Moved: To grant conditional approval, under Clause 20, to forward P802.16j to Sponsor Ballot.
See 802.16-08/014, 802.16-08/015, and 802.16-08/016.
Moved: Marks/Sherman**

5 Fails: 5/6/4

5.24 ME Approval of 802.1ak-Cor 1 to sponsor ballot

- Jeffrey

5 04:41 PM

MOTION

- 802.1 requests approval of the EC to submit P802.1ak-Cor-1 for Sponsor ballot.
- Proposed: Haddock Second: wright
- For: 39 Against: 0 Abstain: 5
- EC proposed: Jeffree Second:

P802.1ak-Cor 1 supporting material

- Working Group recirculation ballot closed 5th March

- Results:

Category	Total	Percentage
Yes	46	100.00%
No	0	0.00%
Abstain	42	47.73%
No. of Voters	93	100.00%
Voters responding	88	94.62%

- No comments made in recirc and no changes to the draft.

Moved: 802.1 requests approval of the EC to submit P802.1ak-Cor-1 for Sponsor ballot
Moved: Jeffree/Grow

Passes: 16/0/0

5

The break was taken at this time.

6.00		Executive Committee Study Groups, Working Groups, TAGs	-		
6.01	MI*	802.15 RFID SG Extension (1st extension)	-	Heile	
6.02	MI	802.11 Very high Throughput SG (2nd Extension)	-	Kerry	2 04:54 PM

Agenda#: 6.02

Date:

Time:

IEEE 802 LMSC RESOLUTION

Motion By: KERRY

Seconded By: Stephenson

**Move to request the ExCOM approve
the extension of the 802.11 Very
High Throughput (VHT) Study
Group.**

Moved by Eldad Perahia on behalf of the Study group.

SG Results: moved by: Marc de Courville 2nd: Joe Levy. Approved: 109/0/2

WG Results: moved by: Eldad Perhia 2nd Approved: (52/0/1)

Approve:

Do Not Approve:

Abstain:

Rationale for VHT-SG extension

- VHT SG is making good progress towards completion of the two PARs and 5C's, an additional extension is necessary for completion
 - First extension was given in November
 - In January there were five submissions
 - VHT usage models by WFA
 - Mobile cooperation and IMT-Advanced aligned scope for < 6 GHz
 - Concept of 60 GHz PAR
 - Coexistence
 - Two strawpolls setting the direction of the study group:
 - Should the study group develop two PAR & 5C's one for <6GHz band and one for 57-62GHz band? Y/N/A: 29/4/19
 - Should the study group specify limited usage models in a <6 GHz PAR and a 60 GHz PAR? Y/N/A: 39/1/19
 - VHT held two conferences in January and February with presentations on a proposal for a <6 GHz PAR and 5C's and 60 GHz PAR and 5C's
 - Progress in March
 - Final report on VHT usage models from WFA with prioritization
 - Discussion on <6 GHz PAR & 5C's
 - Discussion on 60 GHz PAR & 5C's
 - Continued strong interest in the study group demonstrated by over 100 participants

Moved: to request the ExCom approve the extension of the 802.11 Very High Throughput (VHT) Study Group
Moved: Kerry/Stevenson

5 Passes: 15/0/0

6.03 MI 802.11 Video Transport Streams SG (2nd Extension) - Kerry 2 04:59 PM

Agenda#: 6.03

Date:

Time:

IEEE 802 LMSC RESOLUTION

Motion By: KERRY

Seconded By: Stephenson

Move to request the ExCOM approve the extension of the 802.11 Video Transport Stream (VTS) Study Group.

Moved by Ganesh Venkatesan on behalf of the Study group.

SG Results: moved by: John A. Stine 2nd Dave Bagby. Approved by UC

WG Results: moved by: Ganesh Venkatesan 2nd Approved: (45/4/7)

Approve:

Do Not Approve:

Abstain:

VTS -- Justification

- VTS PAR is submitted to NESCom for approval under the condition that the WG and ExCom will approve the PAR in the March meeting.
- The extension request is to accommodate the case where VTS PAR requires additional work and fails to obtain the required project approvals

**Moved: to request the ExCom approve the extension of the 802.11 Video Transport Stream (VTS)
Study Group
Moved: Kerry/Stevenson**

5 Passes: 15/0/1

6.04 MI 802.21 Security SG (2nd extension)

- Gupta

2 03:58 PM



802.21 Security SG Renewal



- Motion: Move that the EC extend (second extension) the 802.21 Security Study Group through the July 2008 Plenary Meeting
- Moved: Vivek Gupta
- Second: Tony Jeffree
- LMSC Vote: 16-0-0

Moved: that the EC extend (second extension) the 802.21 Security Study Group through the July 2008 Plenary Meeting
Moved: Gupta/Greenspan

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

6.05 MI 802.21 Multi Radio Power Management SG (2nd extension) - Gupta 2 05:04 PM



802.21 MRPM SG Renewal



- Motion: Move that the EC extend (second extension) the 802.21 Multi-Radio Power Conservation Management Study Group through the July 2008 Plenary Meeting
- Moved: Vivek Gupta
- Second: Shellhammer
- LMSC Vote: 16-0-0

Moved: that the EC extend (second extension) the 802.21 Multi-Radio Power Conservation Management Study Group through the July 2008 Plenary Meeting
Moved: Gupta/Shellhammer

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

6.06 MI Formation of 802.15 Visible Light Communication SG - Heile 3 05:03 PM

802.15 Agenda Item for Visible Light Communications Study Group

Executive Committee Actions- Visible Light Communications Study Group

- Tutorial on Monday evening
- More than 20 companies active including an Industry Consortium in Japan (VLCC)

Motion in the WG:

- Move to seek EC approval to form an 802.15 study group to draft a PAR and 5C documents addressing Visible Light Communications

Moved by: Art Astrin

Second by: Ben Rolfe

Vote: 65/0/2

Executive Committee Actions- Visible Light Communications Study Group

Move to approve the formation a Study Group
in 802.15 to draft a PAR and 5C for wireless
communications using visible light.

Moved: Bob Heile

Second:

Moved: to approve the formation a Study Group in 802.15 to draft a PAR and 5C for wireless communications using visible light

Moved: Heile/Greenspan

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

6.07 MI Formation of 802.21 Emergency Services SG - Gupta 3

This item moved to the EC reflector.

6.08 MI formation of 802.21 Handover with Broadcast Services SG - Gupta 3

10

This item moved to the EC reflector.

6.09 -
 6.10 -
 7.00 Break -
 8.00

IEEE-SA Items

 -
 8.01 II 802 Task Force update - Nikolich 10

This item moved to the EC reflector.

15

8.02 II -
 8.03 -
 9.00

LMSC Liaisons & External Interface

 -
 9.01 II -
 9.02 ME -
 9.03 ME Liaison to ITU-R WP1A on Status of 275-3000GHz Band - Lynch 2 05:06 PM

Moved: to approve the documents in agenda items 9.03 through 9.10.

Moved: Lynch/Rigsbee

20 **Passes: 16/0/0**

9.04 ME Proposed Amendments to Section 4 of ITU-R/IMT-Advanced/IMT-Tech document - Lynch 5
 9.05 ME Proposed Amendments to Sections 5&6 of ITU-R/IMT-Advanced/IMT-Tech document - Lynch 5
 9.06 ME Update of Subclause 5.6 of Rec. ITU-R M.1457 - Lynch 2
 9.07 ME Revision of M.1457 Introduction - Lynch 2
 9.08 ME Revision of M.1457 Administrative Procedures - Lynch 2
 9.09 ME Request for Clarification on Steps 2 & 3 of the Submission and Evaluation Procedure for IMT-Advanced - Lynch 2
 9.10 ME Request For Clarification of the Formula in the WP5D Liaison Statement on OFDMA TDD WMAN BS and MS ACS Values - Lynch 2

25

ITU-T SG15 liaison letter

Response to their LS 203-E and LS 204-E
Move that 802.3 approve and forward the liaison letter (3av_0803_effenberg_8.pdf) with appropriate edits by the chair (or his appointed agent) and appropriate approvals by the EC to the ITU-T SG15.

M: G. Kramer, S: F. Effenberger

Proc 50%, Passed by voice vote without opposition

ITU-T liaison motion

Moved the EC approve the IEEE 802.3 liaison response to ITU-T with editorial corrections and clarifications.

M: R. Grow



IEEE 802.3 Ethernet Working Group
Liaison Communication

March 20, 2008

From: IEEE 802.3 Ethernet Working Group

To: Yoichi Maeda, Chair of ITU-T SG15 (yoichi.maeda@ntt-at.co.jp)

Members ITU-T Question 2/15

Cc: Paul Nikolich; Chair, IEEE 802 (p.nikolich@ieee.org)

Robert Grow, Chair, IEEE 802.3 (bob.grow@ieee.org)

Wael Diab; Secretary, IEEE 802.3 (wdiab@broadcom.com)

Subject: ITU-T SG15 Liaison letters LS 203-E and LS 204-E to IEEE 802.3

Action: Response / Information

Dear Mr. Maeda and members of ITU-T SG15:

The 802.3 working group thanks Q2/15 for their kind liaisons regarding the proposed work on point-to-point single-fiber optical access systems. While currently there are no active task forces considering such systems, the working group as a whole looks on with great interest as the technology in our standard receives wider application and attention in peer standardization development organizations.

To the particular matters at hand:

At the current time, 100 Mb/s point-to-point single-fiber physical layers are described in IEEE Std 802.3 Clause 58 (100BASE-BX10), and in ITU-T G.985. We believe that this pair of documents has many similarities. The IEEE document specifies the basic architecture of the PHY in question, and a basic level of performance. The ITU document specifies an extended level of performance, mainly having to do with loss budget and certain operations support features. The new work, which proposes to include the new feature of “silent start,” can be included in the category of “extended performance.” Importantly, such a feature is possible with the BX-like PHYs, because such PHYs have directionality (it should be noted that non-BX-like non-PX-like PHYs would not permit “silent start”). [IEEE Std 802.3 Clause 66 may also be used to implement this function, although modifications would be required.](#)

The 1000Mb/s point-to-point single-fiber physical layer is described in IEEE Std 802.3 Clause 59 (1000BASE-BX10). Similar to clause 58, clause 59 defines the basics of such a PHY. The ITU document suggested in the liaison could take 1000BASE-BX-10 as a base, and include such extensions as loss budget, operations support capabilities, and the “silent start” feature.

It should be noted that the systems described by such extended specifications likely will not be compliant with the corresponding IEEE 802.3 clauses. However, we expect that the ITU-T recommendations will have similarities with certain sub-sections of the IEEE clauses. At a minimum, this partial similarity probably could be clarified for the benefit of all.

We would like to describe briefly the process for modifying IEEE clauses, which would be needed if the work described in your liaison letter were to proceed in this body: This process begins by having a call-for-interest on the topic. A successful call-for-interest leads to a creation of a study group charged with generating a project authorization request and 5 criteria documentation. If the project is approved by IEEE Standards Association Standards Board, the task force is formed. The task force conducts meetings to select a baseline proposal, and then a draft standard document is drafted and reviewed through the comment resolution process.

While opening a project in IEEE 802.3 may be one option, another option would be to adopt alternative existing specifications from IEEE. For example, adopting 1000BASE-PX10 PMD specified in IEEE Std 802.3 Clause 60 may be a viable option, as this PMD provides a sufficient power budget and can operate on a point-to-point link (which is a special case of PON). For another example, the OAM functions specified in IEEE Std 802.3 Clause 57 provide an extension mechanism that may facilitate implementation of UNI management functions or additional loop-back tests.

If Q2/15 decides to proceed with the work described in the liaison, we would like to request that the following items be given consideration:

1. The relevant clauses of the 802.3 standard should be referenced, so that the reader can see the direct and specific connections between the work of the IEEE and ITU.
2. The ITU document should make it clear which specifications (i.e., sub-sections) in the IEEE standard are directly similar, and which are being extended or modified.
3. We also request that the ITU continue to keep the 802.3 working group advised as to the progress of the work.

Moved: the EC approve the IEEE 802.3 liaison response to ITU-T with editorial corrections and clarifications.

Moved: Grow/Rigsbee

5 Passes: 16/0/0

9.12 ME 802.16 Liaison to WiMAX Forum

- Marks

2

05:57PM

Roger B. Marks
Chair, IEEE 802.16 Working Group
r.b.marks@ieee.org
20 March 2008

To: Ron Resnick
President, WiMAX Forum

Subject: Developing a formal liaison relationship between IEEE 802.16 Working Group and the WiMAX Forum

Dear Mr. Resnick,

We are encouraged by your response (L802.16-08/006) to our previous note (L802.16-07/065). Based on your request, the IEEE 802.16 Working Group (WG) would like to develop a formal liaison relationship with the WiMAX Forum in accordance with the LMSC policies and procedures (7.2.4.2a). We believe this would enable a more structured process of engagement on topics of mutual interest, as you suggest. We do feel that further discussion is needed to finalize the liaison topics and the nature of engagement, including possible future collaboration.

Regards,

Roger

Roger B. Marks
Chair, IEEE 802.16 Working Group on Broadband Wireless Access

cc: Paul Nikolich, Chair, IEEE 802

Moved: To approve the 802.16 liaison to the WiMAX Forum (L802.16-08/021d2)

Moved: Marks/Rigsbee

Passes: 16/0/0

5

9.13	II	802.16 Liaison to 802.11/802.15	-	Marks	2
------	----	---------------------------------	---	-------	---

This item moved to the EC reflector.

9.14	ME	802.16 Liaison to Bluetooth	-	Marks	2	05:11 PM
------	----	-----------------------------	---	-------	---	----------

10

Roger B. Marks
Chair, IEEE 802.16 Working Group
r.b.marks@ieee.org
20 March 2008

To: Mike Foley
Executive Director, Bluetooth SIG, Inc.
500 108th Avenue NE, Suite 120
Bellevue, WA 98004

Subject: Co-located coexistence among 802.11, 802.15, and 802.16 devices

Dear Mr. Foley,

In its development of standards for Broadband Wireless Access networks, the 802.16 Working Group has become concerned with problems of interference and coexistence with co-located radios on bands near those of its operation. Many 802.16 radios are expected to be operating in the 2.3 and 2.5 GHz bands, which is close to Bluetooth frequencies. This topic was addressed in a November 2007 IEEE 802 tutorial on “WPAN/WLAN/WWAN Multi-Radio Coexistence”:

<http://ieee802.org/802_tutorials/nov07/IEEE-multi-radio-coex-tutorial.ppt>,

The 802.16 Working Group would like to initiate a dialog with the Bluetooth SIG on these issues to ensure that solutions emerging in 802.16 drafts are compatible with Bluetooth protocols. To initiate discussions and enhance interactions, we would be open to a formal liaison relation between the organizations.

I would appreciate it if you would let us know if you are interested in such a relationship.

Regards,

Roger

Roger B. Marks
Chair, IEEE 802.16 Working Group on Broadband Wireless Access

cc: Paul Nikolich, Chair, IEEE 802
Steve Shellhammer, Chair, IEEE 802.19 Coexistence TAG
Stuart Kerry, Chair, IEEE 802.11 Working Group
Bob Heile, Chair, IEEE 802.15 Working Group
John Barr, Vice Chairman of the Board, Bluetooth SIG

Moved: To approve the 802.16 liaison to Bluetooth (L802.16-08/022d1)

Moved: Marks/Stevenson

Passes: 15/0/0

5

10.00

LMSC Internal Business

10.01 II

Treasurer's Report

-

-

-

Hawkins

5

05:13 PM

DRAFT

**IEEE Project 802
Statement of Operations
Nov 2007 Plenary Session
Atlanta, GA
As of Mar 21, 2008**

Session Income	dB	Est/Act	Budget	Deviation
Net Registrations		1,424	1,200	224
75.8% 1080 Early Registrations @ \$400	\$ 432,000			
14 Early cancellations @ \$400	(5,600)			
35 Cancellations @ \$350	(12,250)			
24.0% 342 Registrations @ \$500	171,000			
4 Cancellation @ \$500	(2,000)			
2 Cancellation @ \$450	(900)			
0.1% 2 Student @ \$150	300			
1 Other credits @ \$100	(100)			
Registraion Subtotal	\$ 582,450	\$ 581,950	\$ 512,664	\$ 69,286
0 Deadbeat Payment @ \$500		0	0	0
Interest		223	200	23
Other (Hotel comps and commission)		75,252	50,000	25,252
TOTAL Session Income		\$ 657,425	\$ 562,864	\$ 94,561

Session Expenses	Est/Act	Budget	Deviation
Audio Visual Rentals	20,063	18,000	(2,063)
Audit	0	6,000	6,000
Bank Charges	354	500	146
Copying	3,917	3,500	(417)
Credit Card Discounts & Fees	18,891	14,355	(4,536)
Equipment Expenses	15,174	11,000	(4,174)
Get IEEE 802 Contribution	124,800	90,000	(34,800)
Insurance	0	0	0
Meeting Administration	85,006	75,064	(9,942)
Misc Expenses	5,503 *	2,500	(3,003)
Networking	65,707	60,000	(5,707)
Other Expenses	0 **	0	0
Phone & Electrical	278	2,500	2,222
Refreshments	154,887	120,500	(34,387)
Shipping	12,293	15,000	2,707
Social	54,981	45,000	(9,981)
Supplies	263	1,500	1,237
TOTAL Session Expense	\$ 562,116	465,419	(96,697)
NET Session Surplus/(Deficit)	95,309	97,445	(2,136)
Analysis			
Refreshments per registration	109	100	(8)
Social per registration	39	38	(1)
Meeting Admin per registration	60	63	3
Surplus(Loss) per registration	67	81	(14)

* Misc items: Hotel gratuity, CD production, registration desk rental, 802.20 travel reimb

** Other expenses: N/A

Cash recognized on hand as of Mar 15, 2008	\$ 916,545	
Reserve for unpaid expenses for prior sessions		
Reserve for other outstanding commitments	(5,600)	Avilar renewal?
Income received for current session	(49,942)	
Expenses prepaid for current session	43,083	
Expenses prepaid for future session:	0	
Operating Reserve following this session	\$ 904,086	

IEEE Project 802
Estimated Statement of Operations
March 2008 Plenary Session
Orlando, FL
As of Mar 21, 2008

DRAFT

Meeting Income	<i>Estimate</i>	Budget	Variance
Registrations	1,417	1,300	117
Registration income	599,200	559,000	40,200
Cancellation refunds	(22,650)	(11,180)	
Deadbeat collections		0	0
Bank interest	500	150	350
Other income	84,150	75,000	9,150
TOTAL Meeting Income	\$ 661,200	\$ 622,970	38,230

Meeting Expenses	<i>Estimate</i>	Budget	Variance
Audio Visual Rentals	20,621	\$ 25,500	4,879
Audit	6,000	6,000	0
Bank Charges	450	450	0
Copying	2,726	3,000	274
Credit Card Discount	16,778	15,652	(1,126)
Equipment Expenses	15,000	15,000	0
Get IEEE 802 Contribution	106,275	97,500	(8,775)
Insurance	3,000	3,000	0
Meeting Administration	86,473	80,861	(5,612)
Misc Expenses	5,000	5,000	0
Network	62,500	68,000	5,500
Other Expenses	5,600	5,600	
Phone & Electrical	500	2,300	1,800
Refreshments	135,000	135,000	0
Shipping	10,100	19,000	8,900
Social	54,740	49,000	(5,740)
Supplies	200	800	600
Other Discounts	0	0	0
TOTAL Meeting Expense	\$ 530,963	\$ 531,663	700

NET Meeting Income/Expense	<u>\$ 130,237</u>	<u>\$ 91,307</u>	38,930
-----------------------------------	--------------------------	-------------------------	---------------

Analysis

Refreshments per registration	95	104	9
Social per registration	39	38	(1)
Meeting Administration per regi	61	62	1
Networking per registration	44	52	8
Get IEEE 802 Contribution per r	75	75	0
Surplus/Deficit per registration	92	70	22
Pre-registration rate	77%	70%	

Meeting Planner RFP (MP-RFP) Update

John Hawkins
Treasurer, IEEE 802
jhawkins@nortel.com
(770) 708-4375

MP-RFP Progress

- Much progress made this week updating the RFP package:
 - Master Services Agreement (Contract, Scope of Work, Schedule of Sessions, Fee and Expense Structure docs)
 - RFP Invitation and Instructions
 - RFP Process Timeline and response evaluation sheet
- A few adds from the last time:
 - Updated with duties we've come to expect from the meeting planner (e.g. Web content/structure, surveys, etc)
 - Outsourcing the Treasurer (bookkeeping functions)
- A few adds still needed:
 - NDA
 - Bonding clause
- EC review and comment is welcome thru mid-week

MP-RFP Process Timeline

31 March 2008:	Issue complete RFP to Vendor List by email; request confirmation of receipt
1 April - 9 May 2008	Q&A Period with scheduled vendor telecons as necessary
12 May 2008	RFP Submission Deadline, no later than midnight UTC. Responses sent to neutral party and sealed until then.
13 May - 9 June 2008	Proposal evaluation period with scheduled telecons as needed
10 June - 23 June 2008	Proposal ranking, justification write-up, and web site prep for
24 June 2008	Announce final candidates to EC with pointers to full proposals & evaluations.
25 June - 11 July 2008	Question & Comment period for EC members
14 July 2008	Announce current RFP status to EC at Monday morning meeting.
16 July 2008	MP-RFP discussion subgroup to resolve any issues and concerns at 3-5pm MDT
18 July 2008	Make and approve final selections at closing EC. Direct ES to execute MP-MSA with winner.

It's a tight schedule to be ready for November!

MP-RFP Motion #1

- IEEE 802 Executive Committee approves implementation of the Meeting Planner RFP process and schedule as described/amended

Moved: John Hawkins

Seconded: Buzz Rigsbee

Y: 14 N: 0 A: 0

Moved: IEEE 802 Executive Committee approves implementation of the Meeting Planner RFP process and schedule as described/amended

Moved: Hawkins/Rigsbee

5 Passes: 14/0/0

MP-RFP Motion #2

- IEEE 802 Executive Committee approves the following individuals to serve as Meeting Planner RFP response evaluation committee:
 - Bob Grow, John Hawkins, Bob Heile, Karen Kenney, Steve Mills, Buzz Rigsbee, Roger Marks

Moved: John Hawkins

Seconded: Buzz Rigsbee

Y: 15 N: 0 A: 0

Moved: IEEE 802 Executive Committee approves the following individuals to serve as Meeting Planner RFP response evaluation committee:

- **Bob Grow, John Hawkins, Bob Heile, Karen Kenney, Steve Mills, Buzz Rigsbee, Roger Marks**

5 **Moved: Hawkins/Rigsbee**

Passes: 15/0/0

10.03 MI Network Management Strategy - Hawkins 10 05:26 PM

10 This item moved to the EC reflector.

10.04	MI*		-			
10.05	MI*	Approval of 802.20 report on Taiwan meeting (UCEC)	-	Greenspan		
10.06	MI*	Approval of 802.20 report on OC Activities in 2007 (UCEC)	-	Greenspan		
10.07	MI	nNA RFP Process Report and Motion	-	Rigsbee	5	05:33 PM

nNA-Venue RFP Process Report

Buzz Rigsbee
Dawn Slykhouse

Current Status

- 5 Host Candidate venues identified
 - March 2011: Macao, Singapore, Geneva
 - March 2012: Tel Aviv, Geneva
 - July 2013: Univ. of Twente, Enschede, NL
- Q&A Session positive, good feedback
- Guidelines were well received - thorough
- Some updates for Guidelines identified
- EC comments accepted until 3/26/08

Next Steps

- Motion to Send out final RFP documents
- Approve funding for site inspections
- Formation of RFP Evaluation Team (~5)
 - Buzz Rigsbee, John Hawkins, Dawn Slykhouse
 - Pat Thaler, Bob Heile
- Final edits and assembly of all materials
- Send out RFP via email by March 31st

Timeline for Process Completion

- 4/1– 5/9/08 Host Q&A Period (telecons)
- May 12, 2008 RFP Responses due
- 5/1-31/08 Host Venue Site Inspections
- 6/1/08 Selection of Finalist Proposals
- 6/30/08 Publish ranked list of Finalists
- 7/14/08 Report final status at Mon EC
- 7/15/08 Venue Hosts Presentations Tutorial
- 7/18/08 EC votes on Final Selections

Motion

- To authorize initiation of RFP process to solicit nNA Host Venues from candidates
 - AND -
- To authorize expenditure of 802 funds for Host venue site inspection travel expenses (not to exceed ~\$25K).

Moved: Rigsbee 2nd: Hawkins

Y 15 N 0 A 1

Moved: To authorize initiation of RFP process to solicit nNA Host Venues from candidates

- AND -

To authorize expenditure of 802 funds for Host venue site inspection travel expenses (not to exceed ~\$25K)

5 **Moved: Rigsbee/Hawkins**

Moved: To divide the question

Moved: Lemon/Shellhammer

10 **Motion to divide Fails: 5/8/2**

On the main motion: Passes: 15/0/1

10.08 MI Approval to Ballot P&P Revision Titled "Creation of Operations Manual" - Sherman 10 05:48 PM

15

EC Motion

To approve the balloting of the P&P revision titled “Creation of LMSC OM” as described in the document titled:

- 802.0-Creation_of_LMSC_OM_-_Proposed_LMSC_P&P_Revision_Ballot_080321_r1.doc

Found at:

- <http://grouper.ieee.org/groups/802/secmail/msg10510.html>

Moved: Matthew Sherman
2nd: Pat Thaler

For:
Against:
Abstain:

Moved: To approve the balloting of the P&P revision titled “Creation of LMSC OM” as described in the document titled:

802.0-Creation_of_LMSC_OM_-_Proposed_LMSC_P&P_Revision_Ballot_080321_r1.doc

Found at:

5 <http://grouper.ieee.org/groups/802/secmail/msg10510.html>

Moved: Sherman/Thaler

10 Bob Grow requested that the ballot be conducted as a question and discussion period followed by the voting, to avoid any confusion on the subject of the ballot. Mat indicated that all the ballot documents are already available. He urges everyone to read them and comment/discuss early. He plans to start the actual ballot in about a month.

Passes: 16/0/0

10.09			-				
10.10			-				
11.00		<table border="1"><tr><td>Information Items</td></tr></table>	Information Items	-			
Information Items							
11.01	II		-				
11.02	II	Network Services Report	-	Rigsbee	5	05:56 PM	

15 Buzz reports that everything ran perfectly.

11.03	II	Future meeting sites	-	Rigsbee	10	
-------	----	----------------------	---	---------	----	--

This item moved to the EC reflector.

20	11.04	II	802.17 Status	-	Lemon	5
----	-------	----	---------------	---	-------	---

802.17 is discussing moving to hibernating status. This item moved to the EC reflector.

	11.05	II	Attendance Software	-	Gilb	10
--	-------	----	---------------------	---	------	----

25 This item moved to the EC reflector.

	11.06	II	Update on IMT-Advanced	-	Lynch	3
--	-------	----	------------------------	---	-------	---

This item moved to the EC reflector.

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

30 The meeting was adjourned at 6:00pm.

Respectfully submitted,

35 Bob O'Hara
Recording Secretary, 802 LMSC