

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

Friday, July 12, 2002 – 1:00 p.m.

Hyatt Regency, Koloa, Kaua'i, Hawai'i

1. MEETING CALLED TO ORDER

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

- | | |
|-----------------|--|
| Paul Nikolich | - Chair, IEEE 802 LAN / MAN Standards Committee |
| Geoff Thompson | - Vice Chair, IEEE 802 LAN / MAN Standards Committee |
| Mat Sherman | - Vice Chair, IEEE 802 LAN / MAN Standards Committee |
| 10 Buzz Rigsbee | - Executive Secretary, IEEE 802 LAN / MAN Standards Committee |
| Bob O'Hara | - Recording Secretary, IEEE 802 LAN / MAN Standards Committee |
| Robert Grow | - 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 |
| 15 Stuart Kerry | - Chair, IEEE 802.11 - Wireless LANs Working Group |
| Bob Heile | - Chair, IEEE 802.15 – Wireless PAN Working Group |
| Roger Marks | - Chair, IEEE 802.16 – Broadband Wireless Access Working Group |
| Mike Takefman | - Chair, IEEE 802.17 – Resilient Packet Ring Working Group |
| Carl Stevenson | - Chair, IEEE 802.18 – Radio Regulatory TAG |
| 20 Jim Lansford | - Chair, IEEE 802.19 – Coexistence TAG |
| Mark Klerer | - Chair, Mobile Broadband Wireless Access Study Group |

The meeting was attended by approximately 75 IEEE 802 Working Group members and several guests.

2.00 APPROVE OR MODIFY AGENDA

Motion to approve agenda.

25 Items in the proposed agenda that are on the consent agenda are shown as highlighted in yellow.

Move/Second: Marks/Heile

13/0/0 Approved at 1:17 pm

AGENDA - IEEE 802 LMSC EXECUTIVE COMMITTEE MEETING

Friday, November 15, 2002 - 1:00PM -6:00PM

Hyatt Regency, Kauai, Hawaii

1.00		MEETING CALLED TO ORDER	-	Nikolich	1	01:00 PM
2.00	MI	APPROVE OR MODIFY AGENDA	-	Nikolich	16	01:01 PM
3.00	*		-		0	01:17 PM
4.00	II	TREASURER'S REPORT	-	Quackenbush	10	01:17 PM
4.01	II	802 Project Plan	-	Sherman	5	01:27 PM
Category (* = consent agenda)						
5.00	DT	Broadband Wireless Mobility PARS joint discussion	-	Nikolich	10	01:32 PM
5.01	DT	802.16e PAR final review	-	Marks	5	01:42 PM
5.02	DT	MBWA PAR final review	-	Klerer	5	01:47 PM
5.03	ME	802.16e PAR to NESCOM	-	Marks	5	01:52 PM

5.04	ME	MBWA PAR to NESCOM	- Klerer	5	01:57 PM
5.05	ME*	802.1Q approval for reaffirmation ballot	- Jeffree		02:02 PM
5.06	ME*	Approve administrative withdrawal of 802.1b,e,f,g	- Jeffree		02:02 PM
5.07	ME	802a to sponsor ballot	- Jeffree	5	02:02 PM
5.08	ME*	Approve reaffirmation ballot for 802.11-1999	- Nikolich		02:07 PM
5.09	ME*	Approve reaffirmation ballot for 802.2-1989 (R1997)	- Nikolich		02:07 PM
5.10	ME*	Approve reaffirmation ballot for 802.5-1997	- Nikolich		02:07 PM
5.11	ME*	Approve administrative withdrawal of 802.6-1990 (r1997)	- Nikolich		02:07 PM
5.12	ME*	Approve administrative withdrawal of 802.7-1989 (r1997)	- Nikolich		02:07 PM
5.13	ME*	802b OID Registration PAR to NESCOM	- Jeffree		02:07 PM
5.14	ME*	802.1D Revision PAR to NESCOM (and withdrawal of 802.1y)	- Jeffree		02:07 PM
5.15	ME*	802.1AD LAN Support for Service Provision PAR to NESCOM	- Jeffree		02:07 PM
5.16	ME	802.11j 4.9 GHz - 5 GHz Operation in Japan PAR to NESCOM	- Kerry	1	02:07 PM
5.17	ME*	802.11k Radio Resource Measurement PAR to NESCOM	- Kerry		02:08 PM
5.18	ME	802.15.3a Higher Rate PHY for 802.15.3 PAR to NESCOM	- Heile	5	02:08 PM
5.19	ME*	802.15.4 Revision PAR to NESCOM	- Heile		02:13 PM
5.20	ME*	1802.16.2 Test Suite Structure and Test Purposes PAR to NESCOM	- Marks		02:13 PM
5.21	ME*	802.16d System Profiles Amendment PAR to NESCOM	- Marks		02:13 PM
5.22	ME*	802.17a Amendment to 802.1D PAR to NESCOM	- Takefman		02:13 PM
5.23	ME*	802.3af to sponsor ballot	- Grow		02:13 PM
5.24	ME	802.15.2 to sponsor ballot (conditional approval)	- Heile		02:13 PM
5.25	ME	802.16c to REVCOM	- Marks	5	02:13 PM
5.26	ME	802.15.3 to sponsor ballot	- Heile	1	02:18 PM
5.27	ME*	802.1s to sponsor ballot	- Jeffree		02:19 PM
5.28	ME	802.11h to sponsor ballot	- Kerry	5	02:19 PM
5.29	ME	802.16.2a to sponsor ballot	- Marks	5	02:24 PM
5.30	ME	802.16a to REVCOM (conditional approval)	- Marks	5	02:29 PM
5.31	ME	SB Op. Man. procedure change	- Grow	5	02:34 PM
5.32	ME	Kibis and bits	- Grow	5	02:39 PM
5.33	ME	Filing of reply comments on FCC 02-312	- Stevenson	5	02:44 PM
5.34	ME	Authority to engage in ex parte meetings with FCC	- Stevenson	10	02:49 PM
5.35	ME	802.11g conditional approval for sponsor ballot (Procedure 10)	- Kerry	5	02:59 PM
5.36	ME	Endorsement of 2003 Get IEEE 802 budget	- Walker	10	03:04 PM
5.37	ME	802.3 Liaison letters	- Grow	10	03:14 PM
5.38		Break	-	10	03:24 PM
5.39	MI	Chairs guideline	- Jeffree	5	03:34 PM
5.40	MI	Affirm chair of 802.19	- Nikolich	5	03:39 PM
5.41	MI	Extension of Mobile Wireless MAN SG	- Marks	5	03:44 PM
5.42	MI	Extension of MBWA ECSG	- Klerer	5	03:49 PM
5.43	MI	10GBASE-CX4 Study Group formation	- Grow	5	03:54 PM
5.44	MI	10GBASE-T Study Group formation	- Grow	5	03:59 PM
5.45	MI	Establishment of ECSG on Link Security	- Grow	10	04:04 PM
5.46	MI*	802.11 HT SG extension	- Kerry		04:14 PM
5.47	MI	Extension of contract with meeting organizer	- Quackenbush	5	04:14 PM
5.48	MI	Contract for 802.1/802.3 interim meeting	- Quackenbush	5	04:19 PM
5.49	MI	Meeting fee increase (SEC Procedure 1)	- Quackenbush	5	04:24 PM
5.50	MI	Database contract	- Quackenbush	5	04:29 PM

5.51	MI	Reporting of WG/TAG votes requesting SEC action	-	Quackenbush	5	04:34 PM
5.52	MI	SG Extension motions .11j, .11k	-	Kerry	5	04:39 PM
5.53	MI	SEC TAG rule change	-	Thompson	5	04:44 PM
5.54	MI	Email balloting rule change to email ballot	-	Sherman	5	04:49 PM
5.55	MI	SEC Operating Rules title change to email ballot	-	Sherman	5	04:54 PM
5.56	DT	Tutorial slots	-	Sherman	5	04:59 PM
5.57	DT	802 handoff tutorial result and CFI	-	Marks	10	05:04 PM
5.58	DT	Single venue for future meetings	-	Nikolich	10	05:14 PM
5.59	II	Liaison from 802.17 to ITU-T SG 7/17	-	Takefman	5	05:24 PM
5.60	II	802.19 summary	-	Lansford	5	05:29 PM
5.61	II	802 survey initial results	-	Marks	10	05:34 PM
5.62	II	802.3aj to WG Ballot	-	Grow	1	05:44 PM
5.63	II	802.3 Interpretations status	-	Grow	1	05:45 PM
5.64	II	802.3 interim meetings	-	Grow	2	05:46 PM
5.65	II	802 News Bulletin	-	Marks	10	05:48 PM
		ADJOURN SEC MEETING	-	Nikolich		06:00 PM
		ME - Motion, External				
		MI - Motion, Internal				
		DT- Discussion Topic				
		II - Information Item				
4.00	II	TREASURER'S REPORT	-	Quackenbush	10	01:17 PM

Bill Quackenbush presented an updated financial report.

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**IEEE Project 802
Statement of Operations
July, 2002 Plenary Meeting
Vancouver, BC Canada
As of October 31, 2002**

Meeting Income	Actual	Budget
Net Registrations	967	850
619 Registrations @ \$250	154,750	
348 Registrations @ \$300	104,400	
1 Cancellation @ \$25	25	
31 Cancellations @ \$50	1,550	
0 Other @	0	
Registraion Subtotal	260,725	216,750
0 Deadbeat Payment @ \$300	0	0
Interest	148	150
Other	765	375
TOTAL Meeting Income	261,638	217,275
Meeting Expenses	Actual	Budget
Audio Visual Rentals	10,991	9,000
Audit	0	0
Bank Charges	245	35
Copying	845	6,000
Credit Card Discounts & Fees	6,925	6,069
Equipment Expenses	5,174	8,000
Get IEEE 802 Contribution	71,400	63,750
Insurance	770	0
Meeting Administration	53,636	53,250
Networking	4,114	10,000
Phone & Electrical	603	2,000
Refreshments	35,928	35,700
Shipping	2,485	3,000
Social	23,220	31,450
Supplies	643	0
Other	3,717	500
TOTAL Meeting Expense	220,696	228,754
NET Meeting Income/Expense	40,942	(11,479)
Expenses from prior meetings	5,265	
Reserve for outstanding commitments	7,000	
Expenses prepaid for current meeting	9,200	
Nov, 2002 Operating Reserve	174,046	
Worst Case Hotel Cancellation Penalties	128,633	

IEEE Project 802
Estimated Statement of Operations
November, 2002 Plenary Meeting
Koloa, Kauai, HI
As of November 15, 2002

Meeting Income	<i>Estimate</i>	<i>Budget</i>
Registrations	868	800
Registration income	232,750	208,000
Deadbeat collections		0
Bank Interest		150
Other		375
	<hr/>	
TOTAL Meeting Income	232,750	208,525
Meeting Expenses	<i>Estimate</i>	<i>Budget</i>
Audio Visual Rentals	10,500	10,000
Audit	0	0
Bank Charges	230	230
Copying	3,000	6,000
Credit Card Discount	6,517	5,824
Equipment Purchase	0	5,000
Get IEEE 802 Contribution	65,100	60,000
Insurance	60	0
Meeting Administration	52,571	49,680
Misc	0	2,000
Network	9,400	10,000
Phone & Electrical	1,500	2,000
Refreshments	65,000	60,000
Shipping	3,000	3,000
Social	52,000	41,000
Supplies	1,500	400
	<hr/>	<hr/>
TOTAL Meeting Expense	270,378	255,134
NET Meeting Income/Expense	(37,628)	(46,609)
Estimated Other Liabilities	0	
November, 2002 Operating Reserve	174,046	
Projected March, 2003 Operating Reserve	136,418	

4.01 II 802 Project Plan - Sherman 5 01:27 PM

Mat Sherman asked for updates to the 802 project plan from the WG chairs.

5.00 DT Broadband Wireless Mobility PARS joint discussion - Nikolich 10 01:32 PM

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Presentations were made showing the result of the comment resolutions on the 802.16e and MBWA PARs. Opinions were expressed that standardizing this is 802.16 is imperative, that 802 is the right place to standardize this technology (even though it might appear to compete with 3G work). One member expressed the opinion that there is not yet consensus on whether or how to go forward with the two PARs before us.

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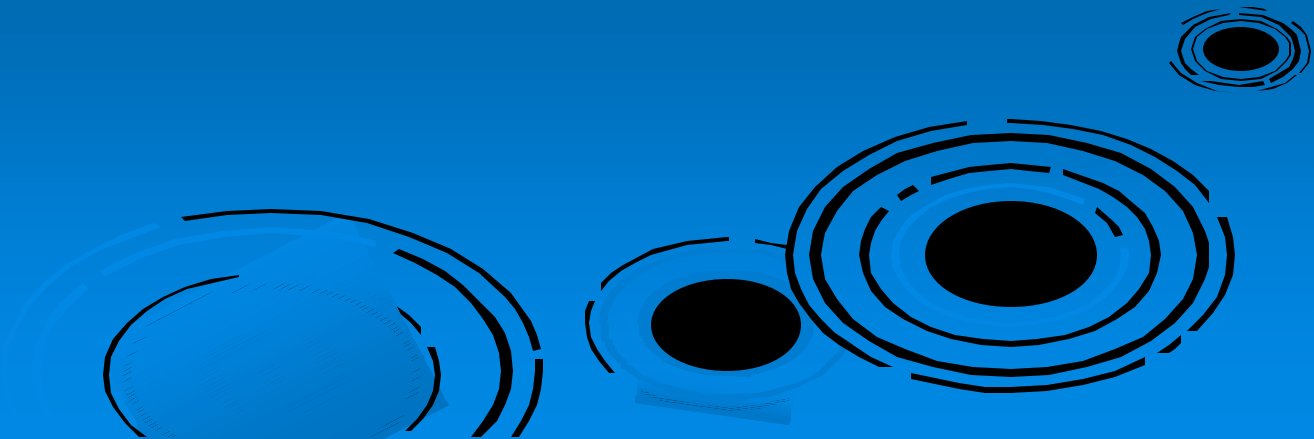
There is continuing concern about distinct identity between the two PARs. Roger Marks described some distinctions on the type of mobility and that the 802.16e mobility would likely be more limited than that of the MBWA mobility.

802.16sgm-02/16

802m_ecsg-02/15

MBWA and 802.16e

Two Markets – Two Projects



Unique Identities (1)

Dimension	802.16e	MBWA	3G
End-user	<p>High data rate fixed wireless user with adjunct mobility service</p> <p>Symmetric data services</p> <p>End-user devices for fixed subscribers (CPE) and PC Cards for mobile devices</p> <p>Support of low-latency data and real time voice services</p>	<p>Fully mobile, high throughput data user</p> <p>Symmetric data services</p> <p>End-user devices initially PC Card enabled data devices</p> <p>Support of low-latency data services</p>	<p>Voice user requiring data services</p> <p>Highly asymmetric data services</p> <p>End user devices initially data enabled handsets</p> <p>Lack of support for low latency services</p>
Service Provider	<p>Evolving off Fixed Wireless service providers and WISPs adding mobility as enhancement to service offering</p> <p>Local/Regional mobility and roaming support</p>	<p>Wireless Data Service provider – Greenfield start or evolving Cellular carrier</p> <p>Global mobility and roaming support</p>	<p>Cellular voice service provider evolving to data support</p> <p>Global mobility and roaming support</p>

Unique Identities (2)

Dimension	802.16e	MBWA	3G
Technology	<p>Extensions to 802.16a MAC & PHY</p> <p>Optimized for and backwards compatible with fixed stations</p> <p>Licensed bands 2-6 GHz</p> <p>Typical Channel BW >5 MHz</p> <p>Packet oriented architecture</p> <p>Channelization and control for multimedia services with QoS</p> <p>High efficiency data uplinks and downlinks</p> <p>Low Latency architecture</p>	<p>New PHY & MAC optimized for packet data and adaptive Antennas</p> <p>Optimized for full mobility</p> <p>Licensed bands below 3.5 GHz</p> <p>Typical Channel BW < 5 MHz</p> <p>Packet oriented architecture</p> <p>Channelization and control for mobile multimedia services. Mobile-IP Based</p> <p>High efficiency data uplinks and downlinks</p> <p>Low latency data architecture</p>	<p>W-CDMA, cdma2000</p> <p>Evolving of GSM or IS -41</p> <p>Licensed bands below 2.7 GHz</p> <p>Typical Channel BW < 5 MHz</p> <p>Circuit oriented architecture – evolving to packet on the downlink</p> <p>Channelization and control optimized for mobile voice services. MAP/SS7 based</p> <p>Medium efficiency data downlinks, low efficiency uplinks</p> <p>High latency data arch.</p>

5 Roger described the changes to the title, scope, and purpose of the 802.16e PAR as a result of the comments received during the week and discussions held. He emphasized the items in the five criteria that differentiate this proposed project from other projects. Roger indicated that there is close cooperation between 802.16a and ETSI BRAN HIPERMAN. Roger showed from the WirelessMAN web site that the motion to forward this PAR carried with a tally of 27-0-2.

5 Mark presented bullets summarizing the PAR, itself. He emphasized the differences in the type of mobility proposed for this project as compared to other projects, proposed and existing. Participants in the ECSG (by company affiliation and industry segment) were listed. The motion to forward the PAR was unanimous and no abstentions with approximately 20 persons voting. Attendance varied from 20-60.

The MBWA PAR

Presentation at the Closing Meeting of
the IEEE 802 Executive Committee

Mark Klerer

Chair- MBWA ECSG

15 November 2002



The MBWA PAR Scope

Develop a specification for the PHY and MAC layers of an air interface for interoperable packet-data mobile broadband wireless access systems that:

- operates in licensed frequency bands below 3.5 GHz,
- supports peak data rates per user in excess of 1 Mbps,
- supports vehicular mobility classes up to 250 Km/h,
- covers cell sizes commensurate with ubiquitous metropolitan-area networks, and
- targets spectral efficiencies, sustained user data rates and numbers of active users significantly higher than achieved by existing mobile systems.

MBWA Purpose

- **Enable worldwide deployment of cost effective , spectrum efficient, always on and interoperable mobile broadband wireless access systems in order to address user needs for:**
 - **Mobile and ubiquitous Internet access**
 - **Transparent support of Internet applications**
 - **Access to enterprise intranet services**
 - **Transparent access to Infotainment and Location services**

Broad Interest by the Mobile Wireless Industry

- Participation by Key Members of All Segments of the **Macro-Cellular Mobile** Wireless Industry

Service Provider Segment

- DoCoMo
- France Telecom
- ETRI
- Nextel
- **Bell Mobility**
- **ITRI**

Mobile Infrastructure Segment

- ArrayComm
- Flarion Technologies
- Motorola
- Nokia
- Nortel Networks
- Qualcomm
- Samsung
- **Ericsson**
- **Huawei**
- **Siemens**

Core Network Equipment Providers

- Cisco
- Nokia
- Nortel Networks
- Samsung

Broad Interest by the Mobile Wireless Industry

- Participation by Key Members of All Segments of the **Macro-Cellular Mobile** Wireless Industry

User Equipment Segment

- Fujitsu
- Motorola
- Nokia
- Panasonic
- Qualcomm
- Samsung Electronics

Component Suppliers

- Analog Devices
- Cirrus Logic
- Intersil
- Intel
- Philips
- Texas Instruments
- Vocal Technologies
- **Wavecom**

End-User/Applications Community

- Boeing
- Lockheed Martin
- Microsoft
- Northrop Grumman
- Panasonic
- Sony
- **US Army**
- **Wachovia**

MBWA Solution Characteristics

Characteristic	Value for 1.25 Mhz	Value for 5 Mhz
Mobility	up to 250 km/hr	
Sustained spectral efficiency	> 1 b/s/Hz/cell	
Peak user data rate (Downlink (DL))	> 1 Mbps	> 4Mbps
Peak user data rate (Uplink (UL))	> 300 Kbps	> 1.2 Mbps
Peak aggregate data rate per cell (DL)	> 4 Mbps	> 16 Mbps
Peak aggregate data rate per cell (UL)	> 800 Kbps	> 3.2 Mbps
Airlink MAC frame RTT	<10 ms	
Spectrum (Maximum operating frequency)	< 3.5 GHz	

3GPP Partnership Agreement

Preamble

Standards organizations and other related bodies have agreed to cooperate for the production of a complete set of globally applicable Technical Specifications for a 3rd Generation Mobile System based on the evolved GSM core networks and the radio access technologies supported by 3GPP partners (i.e., UTRA both FDD and TDD modes).

The Project is entitled the “Third Generation Partnership Project” and may be known by the acronym “3GPP”.

3GPP has been established for the preparation and maintenance of the above mentioned Technical Specifications, and is not a legal entity.

3GPP2 Partnership Agreement

Preamble

Standards organizations and other related bodies have agreed to cooperate for the production of a complete set of globally applicable Technical Specifications for a 3rd Generation Mobile System based on the evolving ANSI-41 core network and the radio access technologies supported by 3GPP2 partners.

The Project is entitled the "Third Generation Partnership Project 2" may be known by the acronym "3GPP2."

3GPP2 has been established for the preparation and maintenance of the specifications, and is not a legal entity and is non-profit making.

Motion: To forward PAR 802.16e (IEEE 802.16-02/48r3) to NESCOM.
Moved: Roger Marks/Mat Sherman

5 Geoff points out that this PAR changes the title of the base standard, with a corresponding expansion of the scope of the working group. He recommends holding off approval until more clarity and consensus can be achieved.

Roger indicates that 802.16 has discussed the topic for quite some time, the work is refined, it is important work, much of the rest of the work in the WG is complete, and the WG is ready to develop this standard.

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Bob Grow related that he has been directed (57-0-17) to oppose the approval of this PAR, because the 802.3 WG has great difficulty distinguishing the distinct identity of this project.

15

Mat Sherman asks “where does the PAR work?” If this PAR is approved, where will the work be done? Roger indicates that 802.16 is the right place for the work, in his opinion, since the work would be amending 802.16.

There was a question about relative cost. Roger points out that item 5 in the 5 criteria document addresses this.

20

An audience member pointed out that any delay of this project would have an adverse impact on the industry.

Passes: 8/2/3

LMSC Motion: 802.16e to NesCom

Motion: To forward PAR 802.16e (IEEE 802.16-02/48r3) to NesCom

- Topic: *Draft Amendment to IEEE Standard for Local and Metropolitan Area Networks - Part 16: Air Interface for Fixed and Mobile Broadband Wireless Access Systems - Amendment for Physical and Medium Access Control Layers for Combined Fixed and Mobile Operation in Licensed Bands*
 - Submitted following proper procedure
 - Comments received and considered; responses issued ([802.16sgm-02/12r1](#) and [802.16sgm-02/14r1](#))
 - [revised 802.16e PAR \(802.16sgm-02/48r3\)](#)
 - [revised Five Criteria \(802.16sgm-02/49r2\)](#)
 - IEEE 802.16 Working Group Motion #11 of 14 November 2002:
 - "To Approve the revised 802.16e PAR (802.16sgm-02/48r3) and the "Five Criteria" (802.16sgm-02/49r2) forward them to the Executive Committee"
 - *Carried 27-2-0.*
-

Return to [802.16 Issues for LMSC Closing meeting of 15 November](#)

IEEE-SA Standards Board Project Authorization Request (PAR) Form (2002)

For a review of the Standards Development Process (designed to assist the Working Group, Working Group Chair, Sponsor Chair, and Society Liaison), please click here.

1. Assigned Project Number (Please contact the NesCom Administrator if this is a new PAR):
P802.16e

2. Sponsor Date of Request: 15-NOV-02

3. Type of Document (Please check one)

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

4. Title of Document: Draft Amendment to IEEE Standard for Local and Metropolitan Area Networks - Part 16: Air Interface for Fixed and Mobile Broadband Wireless Access Systems - Amendment for Physical and Medium Access Control Layers for Combined Fixed and Mobile Operation in Licensed Bands"

5. Life Cycle

- Full Use (5-year life cycle)
 Trial Use (2-year life cycle)

6. Type of Project:

- New standard
 Revision of existing standard (indicate Number and year existing standard was published in box to the right) (####-YYYY)
 Amendment to an existing standard (indicate Number and year existing standard was published in box to the right) IEEE Std 802.16-2001as modified by IEEE 802.16a (####-YYYY)
 Corrigendum to an existing standard (indicate Number and year existing standard was published in box to the right) (####-YYYY)
 Revised PAR (indicate PAR Number and Approval Date here: P - (YYYY-MM-DD)

Is this project in ballot now? No

State reason for revising the PAR in Item #18.

7. Contact information of Working Group Chair who must be an SA member as well as an IEEE and/or Affiliate Member

Name of Working Group(WG) : IEEE 802.16 Working Group on Broadband Wireless Access

Name of Working Group Chair:
First Name: Roger Last Name: Marks
Telephone: +1 (303) 497 3037
FAX: +1 509 756 2642
EMAIL: r.b.marks@ieee.org

8. Contact Information of Official Reporter, Project Editor or Document Custodian if different from the Working Group Chair. The Official Report must be an SA member as well as an IEEE and/or Affiliate Member

Name of Official Reporter (if different than Working Group Chair):
First Name: Last Name:
Telephone:
FAX:
EMAIL:

9. Contact information of Sponsoring Society or Standards Coordinating Committee

Sponsoring Society and Committee: C/LM and MTT
Sponsor Committee Chair:
First Name: Paul Last Name: Nikolich
Telephone: 978 749 9999 x246
FAX: 978 749 8888
EMAIL: p.nikolich@ieee.org

10. Sponsor Balloting Information (Please choose one of the following)

Choose one from the following:

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

Expected Date of Submission for Initial Sponsor Ballot: 14-NOV-03

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

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

11. Projected Completion Date for Submittal to RevCom: 14-MAY-04

If this is a REVISED PAR and the completion date is being extended past the original four-year life of the PAR, please answer the following questions.

If this is not a revised PAR, please go to question #12

Statement of why the extension is required:

When did you begin writing the first draft?:

How many people are actively working on the project?:

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

How frequently is a draft version circulated to the working group via electronic means?:

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

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

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

12. Scope of Proposed Project

[Projected output including technical boundaries. REVISED STANDARDS - Projected output including the scope of the original standard, amendments and additions. Please be brief (less than 5 lines).]:

This document provides enhancements to IEEE Std 802.16/802.16a to support subscriber stations moving at vehicular speeds and thereby specifies a system for combined fixed and mobile broadband wireless access. Functions to support higher layer handoff between base stations or sectors are specified. Operation is limited to licensed bands suitable for mobility between 2 and 6 GHz. Fixed 802.16a subscriber capabilities shall not be compromised. (See 18)

13. Purpose of Proposed Project:

[Intended users and user benefits. REVISION STANDARDS - Purpose of the original standard and reason for the standard's revision. Please be brief (less than 5 lines).]:

To increase the market for Broadband Wireless Access solutions by taking advantage of the inherent mobility of wireless media. This standard will fill the gap between very high data rate WLANs and very high mobility cellular systems and will support fixed and mobile services for both enterprise and consumer markets.

14. Intellectual Property { Answer each of the questions below }

Sponsor has reviewed the IEEE patent policy with the working group?

Yes

Sponsor is aware of copyrights relevant to this project?

No

Sponsor is aware of trademarks relevant to this project?

Yes

Sponsor is aware of possible registration of objects or numbers due to this project?
No

15. Are there other standards or projects with a similar scope?

Yes, with explanation below

Explanation:

The ETSI BRAN HIPERMAN Project is currently focusing on licensed frequencies between 2 and 11 GHz and license-exempt frequencies in the 5.725-5.875 GHz band. No mobility is supported.

TP1.4 is currently developing air interface standards for medium data rate, low speed mobility. The individual user data rates specified by this group range from 8 Kb/s to 2 Mb/s.

IEEE 802.11, ETSI HIPERLAN/2 and 802.15 address primarily short range WLAN and WPAN applications, respectively. This amendment is specifically directed towards longer-range wireless point to multipoint MAN systems that provide access to core public networks.

ITU-R Working Party 8F in conjunction with 3GPP and 3GPP2 are developing air interfaces for IMT-2000 both mobile and fixed applications. The work targets CDMA and W-CDMA, with relatively low spectral efficiency and data rate per user, as compared with 802.16 solutions.

If Yes, please answer the following:

Sponsor Organization:

Project Number:

Project Date:

Project Title:

16. International Sponsor Organization

Is there potential for this standard (in part or in whole) to be submitted to an international organization for review/adoption?

Yes { Yes/No/?? if you don't know at this time }

If Yes, please answer the following questions:

International Committee Name and Number: ITU-R JRG 8A-9B

International Organization Contact Information:

Contact First Name: Jose

Contact Last Name: Costa

Contact Telephone Number: +1 613 763-7574

Contact FAX Number: +1 613 763-1225

Contact E-mail address: j.costa@ieee.org

17. Will this project focus on health, safety or environmental issues?

No { Yes/No/?? if you don't know at this time }

If Yes: Explanation? []

18. Additional Explanatory Notes: { Item Number and Explanation }

"(12) Subscriber stations specified herein, when stationary, shall interoperate with base stations specified in IEEE Std 802.16a. Base stations specified herein shall interoperate with stationary subscriber stations specified in IEEE Std 802.16a.

Because the standard will utilize the 802.16/802.16a medium access control layer, it will support multimedia services requiring differentiated Quality of Service, and it will support adaptive physical link control so that subscriber stations can receive higher-rate service when they move more slowly, include more effective antennas, or are otherwise in better link conditions.

The PAR Copyright Release and Signature Page must be submitted either by FAX to 732-562-1571 or as an e-mail attachment in .pdf format to the NesCom Administrator before this PAR will be sent on for NesCom and Standards Board approval.

IEEE-SA Standards Board
Working Guide for the Project Authorization Request (PAR) Form

This guide has been prepared to assist in the submittal of the PAR for consideration by the New Standards Committee (NesCom) and approval by the IEEE-SA Standards Board as an IEEE Standards Project. Submitters should also refer to the latest edition of the IEEE-SA Standards Board Operations Manual.

A PAR must be received by the IEEE-SA Standards Department at least 40 calendar days before the next IEEE-SA Standards Board meeting. Submittal deadlines for the year 2002 are available. Please note that the PAR may be approved via our continuous processing program. For more information on this program, please go to our website at <http://standards.ieee.org/faqs/contproc.html>.

1. Assigned Project Number

New Standards Projects: Leave blank.

Standards Revision/Update: Enter PAR number from existing standard.

Note: New project numbers are assigned by the IEEE Standards Department. Please confer with IEEE staff if a specific project number is desired.

2. Sponsor Date of Request

Enter the date when the PAR is submitted to the IEEE-SA.

3. Type of Document

For the submitter's reference, standards are documents with mandatory requirements and are generally characterized by the use of the verb "shall."

Recommended practices are documents in which procedures and positions preferred by IEEE are presented and are generally characterized by the use of the verb "should."

Guides are documents in which alternative approaches to good practice are suggested, but no clear-cut recommendations are made. They are generally categorized by the use of the verb "may."

4. Title of Document

Enter the title of the document.

The project title should include the type of document. For example:

1. Standard Test Method for...
2. Recommended Practice for...
3. Guide for...

The title should not contain the acronym "IEEE". This is added to the title when published.

All acronyms should be spelled out.

5. Life Cycle

A standard can be designated trial-use or full-use.

A standard can be designated for trial use when a draft satisfies the standards-developing group (i.e., subcommittee or working group), but needs input from a very broad constituency. This is a preferred alternative to the widespread distribution of unapproved drafts. Such a draft requires a letter ballot of the sponsor and approval by the IEEE-SA Standards Board as a trial-use standard. Trial-use standards are effective for not more than two years from the date of publication. In the absence of comments received in the trial period, the document is subject to adoption as a full-use standard upon receipt of written recommendation from the sponsor and approval by the IEEE-SA Standards Board.

6. Type of Project

Indicate whether this work will result in a new standard, a revision of an existing standard (indicate standard number and year), an amendment (formerly supplement) to an existing standard (indicate standard number and year), or a corrigendum (indicate standard number and year). Amendments are additions to existing standards and may contain substantive corrections and/or errata to the standard. Corrigenda are substantive corrections and/or errata to a standard.

If this is an update to an existing PAR, indicate the original PAR number, approval date and ballot status.

If this is a PAR revision, provide a short explanation of the changes to the original PAR. Rationale **MUST** be submitted with the PAR revision request under Item #18.

7. Contact Information of Working Group Chair

Indicate the Name, Telephone Number, FAX Number and E-mail address of the Working Group (WG) Chair. The Working Group Chair must be an SA member as well as an IEEE and/or Affiliate Member. IEEE/IEEE-SA membership number is required.

8. Contact Information for Official Reporter, Project Editor or Document Custodian

Indicate the Name, Telephone Number, FAX Number and E-mail address of the Official Reporter, Project Editor or Document Custodian if different from the Working Group Chair. The Official Reporter must be an SA member as well as an IEEE and/or Affiliate Member. IEEE/IEEE-SA membership number is required.

9. Contact Information of Sponsoring Society or Standards Coordinating Committee

Enter the name of the sponsoring society and the name of the sponsoring committee (i.e., Power Engineering/Switchgear, not PE/SWG) responsible for the development and coordination of the project and for the maintenance of the document after approval by the Standards Board. The name entered here should not be confused with the name of the group writing the standard. If the project is sponsored by two or more committees, enter all committee names and indicate that the work is a jointly sponsored project. When a Standards Coordinating Committee (SCC) is developing the document, enter the SCC number and name as the sponsor (i.e., Standards Coordinating Committee 4 - Thermal Rating).

10. Sponsor Balloting Information:

Is the balloting group for this project expected to be composed of individuals, of entities (persons representing corporations/government bodies/academic institutions, or SDO's), or a combination of both? See Section 5.4.1 in the IEEE-SA Standards Board Operations Manual for further explanation.

For the expected date of submission for initial balloting entry, enter the date the draft standard is planned to be submitted to the IEEE for balloting. Make the entry in numerical month-year format.

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

11. Projected Completion Date for Submittal to RevCom

Enter the date the draft standard is planned to be submitted to RevCom for processing. Make the entry in numerical month-year format (not to exceed four years from the date of PAR submission). Cutoff dates for submitting draft standards to RevCom are generally in February, May, August and October. Check the appropriate calendars for the specific date as the draft matures. Use a best estimate for the PAR.

12. Scope of Proposed Project

The submittal should clearly and concisely define the scope of the document. The scope generally describes "what" will be done, i.e. the technical boundaries of the project. For example:

"Scope: This project will develop a standard protocol for the control of printers. This protocol will be independent of the underlying datastream or page description language used to create the printed page. This protocol will be usable by all classes of printers. This project is limited to management and control of printers and will not include management or control of printing systems or subsystems."

The Scope of a revision to a standard or a revision to the Scope of an existing PAR shall represent the new Scope. If the Scope is different from the original Scope, provide an indication of the differences in Item #18.

13. Purpose of Proposed Project

The submittal should clearly and concisely define the purpose of the document. The purpose generally describes "why" a project will be done. For example:

"Purpose: There is currently no defined, independent standard for controlling printers. Each vendor builds some control into the underlying page description language or datastream. Without an independent, openly defined protocol, applications and operating systems cannot automatically determine the type of printer being addressed. This protocol will provide a minimum implementation subset which will allow automatic identification and configuration of printers and vendor extensibility to provide for growth and product differentiation."

The purpose of the document should be consistent with the description of the document in Item 3, the title in Item 4, and the scope in Item 12. If the title of the document is "Guide for...", it is inconsistent if the purpose states "This document will describe standard criteria..."

The scope, purpose and/or title indicated on the PAR should agree in principle with the scope, purpose and/or title stated in the document at the time of submittal to the IEEE-SA Standards Board.

If this is a PAR to revise the standard, explain here why changes are being made to the standard. This may be due to a change in industry, the introduction of new technology, etc.

The Purpose of a revision to a standard or a revision to the Purpose of an existing PAR shall represent the new Purpose. If the Purpose is different from the original Purpose, provide an indication of the differences in Item #18.

14. Intellectual Property

If an IEEE standards-developing committee chooses to include patented technology in its standard, early disclosure of these patents is valuable. Early disclosure notifies the standards developers and the IEEE of the patent in the most timely manner and gives participants the greatest opportunity to evaluate the benefits the patented technology may offer a draft standard. However, the standards

developers should not take any action that could be interpreted as requiring any participant in the development process to undertake a patent search of its own portfolio or of any other. The objective is to obtain early disclosure concerning the existence of patents, where known.

If the proposed standard uses copyrighted material, copyright releases must be obtained by the working group and included in the final package submitted to the IEEE-SA Standards Board. Additionally, remember that during development of your approved project, the proper IEEE copyright notices must be maintained on all drafts.

If the proposed standard uses any trademarked terms, permission for use must be obtained from the owner. Refer to Section 6 of the IEEE-SA Standards Board Operations Manual for IEEE patent, copyright, and trademark policies.

If the proposed standard will require the unique identification of objects or numbers by the IEEE for use in industry, this should be indicated. An example of this type of registration is the unique manufacturer ID, known as Organizationally Unique Identifier (OUI).

15. Are there other Standards or Projects with a Similar Scope?

Identify any standard(s) or project(s) of similar scope(s), both within or outside of the IEEE, and explain the need for an additional standard in this area.

16. International Sponsor Organization

If the project is intended to be submitted to the appropriate international technical committee as the basis of or for inclusion in an international standard, or if this standard is intended to be adopted as the international standard, this should be noted here. It is important for all working group members to be aware of international activity within their area of technical expertise.

17. Will this Project focus on Health, Safety or Environmental Issues?

No intensive research required; only obvious or general health, safety, or environmental issues that would be affected by this work need to be cited.

18. Additional Explanatory Notes:

If you know of any further information that may assist NesCom in recommending approval for your project, please include this information here.

If this is a revised PAR or a PAR for the revision of a standard, a short explanation of the changes to the original PAR and rationale **MUST** be submitted under this item.

Copyright Form (separate page)

The copyright form, the last page in the electronic PAR form (and a separate page), must be submitted by FAX to the IEEE-SA office before the PAR will be approved. In order to comply with

US copyright law, the IEEE and its legal counsel request that a copyright agreement be signed by the Official Reporter, who is usually the chair of the working group. This signed copyright agreement is an official part of the IEEE Standards Project Authorization Request (PAR). The PAR will not be submitted to the IEEE-SA Standards Board until the copyright agreement is signed by the proper person.

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

Rationale for a Mobile Wireless MAN Standard: Meeting the Five Criteria

1. Broad Market Potential

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

a) Broad sets of applicability

The mobility enhancement will target the consumer and enterprise markets, allowing fast access to mobile IP applications, multi-media messaging, mobile videoconferencing, etc. Possible tariffed services include: games, video clips, virtual sightseeing, emergency services, location based services, financial services, telematics, telemedicine, etc. The user will have access to these services at data rates similar to those provided by the 802.16/802.16a standard, while stationary, walking, or mobile. For example, in a 6 MHz channel, the maximum data rate per user can be beyond 20Mbit/s.

The resulting standard will have a very broad applicability set because it will converge fixed and mobile services, allowing connectivity for high-speed data in both stationary and mobile situations using the same set of base stations. Large demand exists for such systems. For example, see "WCA Letter of Support for 802.16e" (C802.16sgm-02/26), from the trade association of the wireless broadband industry, the Wireless Communications Association International (WCA). The letter says:

-"WCA member companies (many of whom are service providers) have a great interest in this very topic. In particular, the U.S. spectrum known as the 'MDS' bands has historically been allocated for fixed use. Recent regulatory changes by the FCC in response to WCA efforts provide the opportunity to use the spectrum for combination of fixed and mobile purposes. Our members see great opportunities here."

-"We understand that IEEE 802 is, very appropriately, concerned that standardization projects be based in market requirements. So, we assure you that many of WCA's members are looking forward with keen interest to deploying fixed/mobile broadband wireless metropolitan area networks, and would be very interested in the future output of the IEEE 802.16e project."

b) Multiple vendors and numerous users

The possibility of multiple vendors introducing this equipment is indicated by the fact that the standard is to be developed by the IEEE 802.16 Working Group on Broadband Wireless Access, which has operated for nearly four years with the participation of hundreds of people from many companies from many countries. The standard will be based on standards that have been completed, or nearly completed, by the Working Group.

The possibility of multiple users is indicated by the letter of interest from the WCA (see (1a)). Many companies throughout the world have been granted rights to licensed spectrum for deployment of fixed broadband wireless access. As noted in (1a), recent regulatory changes by the FCC provide the opportunity to use MMDS spectrum for fixed and mobile purposes. The many holders of MMDS spectrum will certainly be interested in fixed/mobile deployments, if standardized equipment is available. The initiation of standardization efforts on this topic is also expected to influence regulatory regimes to liberalize their fixed wireless access rules to encompass mobility.

c) Balanced costs (LAN versus attached stations)

Portable 802.16a radio interfaces are expected to be similar in production cost to cellular air interfaces. The cost of adding such an interface to a mobile computer is expected to be much less than the cost of the computer.

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 which are compatible with systems management standards.

The proposed standard will conform to IEEE Standard 802 and the other cited documents, with the possible exception of the Hamming distance.

3. Distinct Identity

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

a) Substantially different from other IEEE 802 standards.

IEEE 802.16 is the only IEEE 802 standard designed for metropolitan area networks (MANs). Other 802 wireless standards and projects that support mobile use do not offer the full set of key defining features of 802.16, including

**design for long-range MAN-sized macrocells*

**high data rate*

**scheduled MAC for full Quality of Service support*

**specification for licensed bands*

For these (and other) reasons, the 802.16 standard will be unlike any other standard or current project in 802.

It should also be noted that this project is tailored towards the addition of mobile service to fixed wireless MANs and does not conflict with mobility efforts ongoing in other Standards Development Organizations.

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

By modifying the existing 802.16 air interface, a unique solution will be developed. The mobile extension to the 802.16 standard will inherently provide a single BWA solution for both fixed and mobile applications.

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

It is anticipated that the document will be easily selectable by the user.

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

The feasibility of such systems has been demonstrated by proprietary systems that provide some, if not all, of the capabilities envisioned for this standard and are being deployed in many cities worldwide. Additionally, the current Digital Audio Broadcast (DAB) standard (ETSI EN300401) and Digital Video Broadcast – Terrestrial (DVB-T, ETSI EN300744), which support vehicular mobility in the downstream, utilize PHYs similar to the OFDMA PHY in the current 802.16a standard. The current 802.16a standard also does not preclude the incorporation of battery power saving mechanisms. The current 802.16a standard already includes various security features that can be readily extended to mobile operation.

b) Proven technology, reasonable testing

The radio technology proposed has been in existence for decades in both commercial and military environments. Similar proprietary systems currently exist.

In addition, the Worldwide Interoperability Microwave Access (WiMAX) Forum is a corporate consortium that supports the deployment of IEEE 802.16 systems by developing compliance and interoperability testing, both for 10-66 GHz (802.16) and 2-11 GHz (802.16a) systems. WiMAX plans to develop an interoperability certification program and is actively engaged in discussions with IEEE-SA regarding such a program. WiMAX has supported the development of drafts that have become the basis of 802.16 standards projects regarding compliance testing. The existence of WiMAX and its earlier output makes the feasibility of developing interoperability tests, and doing so quickly, quite high.

c) Confidence in reliability

Commercial deployment of both point-to-point and point-to-multipoint systems at these frequencies by carriers is evidence of proven reliability. For example, high reliability, carrier class, microwave systems have been deployed for decades. Also, several proprietary systems, which utilize substantially similar PHYs, have been deployed for several years with high link availability.

5) Economic feasibility

a) Known cost factors, reliable data

The economic feasibility of the equipment has already been demonstrated at the level of proprietary systems now going into operation. The willingness of investors to spend large sums to acquire spectrum rights, plus the large additional investment required for hardware in public networks, attests to the economic viability of the wireless access industry as a whole.

b) Reasonable cost for performance.

Utilizing modern radio-modem technologies, defined by 802.16a or ETSI BRAN HIPERMAN, will minimize the subscriber radio cost. As demonstrated in many IEEE 802 standards over the years, the radio shared-media systems effectively serve users whose requirements vary dynamically, within the constraints of the total available rate. The cost of a single base station is amortized over a large number of users; that number may be quite high, since both fixed and mobile users are supported. In addition, due to the different traffic profiles of fixed and mobile users, some users may be able utilize significant bandwidth during periods (such as evening hours) when mobile use may be relatively light, thus providing more efficient use of the available bandwidth.

c) Consideration of installation costs.

The radio interfaces to mobile hand-held devices, such as PDAs and Laptops, can be customer installed or physically incorporated into the device at manufacture.

Base station installation can be costly. However, the cost to install an upgrade to a deployed 802.16a base station should be moderate. Furthermore, the use of 802.16 MANs, particularly of the 10-66 GHz variety, for base station backhaul can minimize the cost of interconnecting the base station to core network and provide flexibility of placement. Furthermore, since one base station may support many (fixed and mobile) users, the costs involved are low on a per-user basis. Where regulations permit, existing physical infrastructure could be utilized for base station installations.

Motion: MBWA requests approval to forward the Mobile Broadband Wireless Access PAR to NESCOM.

Moved: Buzz Rigsbee/Bill Quackenbush

- 5 Bob Grow has been directed (51-0-17) to oppose the approval of this PAR for the same reasons he was directed to oppose the 802.16e PAR, that the 802.3 WG has difficulty distinguishing the distinct identity of this project.

- 10 Mike Takefman points out that the 802.17 WG is involved in a turf battle with another standards body. He asks how this work will be distinct from work in other standards bodies. Mark points out that the 3GPP and 3GPP2 groups have limitations in their charters that preclude this work. Mark acknowledged that this work was invited to be in T1P1.

Carl Stevenson indicates that he is not convinced that the material presented resolves the question as to whether the MBWA work is distinct from that in the telephony groups.

- 15 An audience member questioned whether the distinct identity of the MBWA PAR is not established from outside standards work. Another audience member, involved in IUT-2000, said ITU WP8F has stated in recommendations that there is a need for new radio access systems, such as those proposed in the MBWA PAR. This member claims that there is no body currently working in this area and that this project is a very important project.

- 20 The chair of 3GPP2 indicates that that group is constrained to not do the work specifically described in this PAR.

Passes: 4/2/7

IEEE-SA Standards Board Project Authorization Request (PAR) Form (2002)

For a review of the Standards Development Process (designed to assist the Working Group, Working Group Chair, Sponsor Chair, and Society Liaison), please click here.

1. Assigned Project Number (Please contact the NesCom Administrator if this is a new PAR): P802.20

2. Sponsor Date of Request: 2002-11-15

3. Type of Document (Please check one)

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

4. Title of Document: Draft Local and Metropolitan Area Networks – Standard Air Interface for Mobile Broadband Wireless Access Systems Supporting Vehicular Mobility – Physical and Media Access Control Layer Specification

5. Life Cycle

- Full Use (5-year life cycle)
 Trial Use (2-year life cycle)

6. Type of Project:

- New standard
 Revision of existing standard (indicate Number and year existing standard was published in box to the right) (####-YYYY)
 Amendment to an existing standard (indicate Number and year existing standard was published in box to the right) (####-YYYY)
 Corrigendum to an existing standard (indicate Number and year existing standard was published in box to the right) (####-YYYY)
 Revised PAR (indicate PAR Number and Approval Date here: P - (YYYY-MM-DD)

Is this project in ballot now? No

State reason for revising the PAR in Item #18.

7. Contact information of Working Group Chair who must be an SA member as well as an IEEE and/or Affiliate Member

Name of Working Group(WG) : IEEE 802.20 Working Group on Mobile Broadband Wireless Access

Name of Working Group Chair:

First Name: Mark Last Name: Klerer

Telephone: +1 908-997-2069
FAX: +1 908-997-2050
EMAIL: m.klerer@flarion.com

8. Contact Information of Official Reporter, Project Editor or Document Custodian if different from the Working Group Chair. The Official Report must be an SA member as well as an IEEE and/or Affiliate Member

Name of Official Reporter (if different than Working Group Chair):

First Name: Last Name:

Telephone:

FAX:

EMAIL:

9. Contact information of Sponsoring Society or Standards Coordinating Committee

Sponsoring Society and Committee: Computer Society, LAN/MAN Standards Committee

Sponsor Committee Chair:

First Name: Paul Last Name: Nikolich

Telephone: 978-749-9999 x246

FAX: 978-749-8888

EMAIL: p.nikolich@ieee.org

10. Sponsor Balloting Information (Please choose one of the following)

Choose one from the following:

Individual Balloting

Entity Balloting

Mixed Balloting (combination of Individual and Entity Balloting)

Expected Date of Submission for Initial Sponsor Ballot: 2004-05-26

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

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

11. Projected Completion Date for Submittal to RevCom: 2004-10-01

If this is a REVISED PAR and the completion date is being extended past the original four-year life of the PAR, please answer the following questions.

If this is not a revised PAR, please go to question #12

Statement of why the extension is required:

When did you begin writing the first draft?:

How many people are actively working on the project?:

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

How frequently is a draft version circulated to the working group via electronic means?:

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

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

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

12. Scope of Proposed Project

[Projected output including technical boundaries. REVISED STANDARDS - Projected output including the scope of the original standard, amendments and additions. Please be brief (less than 5 lines).]: See also ITEM 18 for additional Information.

Specification of physical and medium access control layers of an air interface for interoperable mobile broadband wireless access systems, operating in licensed bands below 3.5 GHz, optimized for IP-data transport, with peak data rates per user in excess of 1 Mbps. It supports various vehicular mobility classes up to 250 Km/h in a MAN environment and targets spectral efficiencies, sustained user data rates and numbers of active users that are all significantly higher than achieved by existing mobile systems.

13. Purpose of Proposed Project:

[Intended users and user benefits. REVISION STANDARDS - Purpose of the original standard and reason for the standard's revision. Please be brief (less than 5 lines).]:

To enable worldwide deployment of cost effective, spectrum efficient, ubiquitous, always-on and interoperable multi-vendor mobile broadband wireless access networks. To provide an efficient packet based air interface optimized for IP. The standard will address end user markets that include access to Internet, intranet, and enterprise applications by mobile users as well as access to infotainment services.

14. Intellectual Property { Answer each of the questions below }

Sponsor has reviewed the IEEE patent policy with the working group?

Yes

Sponsor is aware of copyrights relevant to this project?

Yes

Sponsor is aware of trademarks relevant to this project?

Yes

Sponsor is aware of possible registration of objects or numbers due to this project?

Yes

15. Are there other standards or projects with a similar scope?

Yes, with explanation below

Explanation:

ITU-R Working Party 8F is developing air interfaces for IMT-2000 for both mobile and fixed applications, and receives input from various external standards development organizations. 3GPP and 3GPP2 are partnership projects that develop the specifications among these organizations for evolving mobile data air-interface specifications.

Their work targets an evolution of existing voice and circuit-switched architectures (in the case of 3GPP based on GSM and in the case of 3GPP2 based on IS-41), as compared to the MBWA project, which focuses on an air-interface optimized for IP data for a cost-effective, packet-switched mobile broadband wireless data solution.

Sponsor Organization: ITU-R

Project Number: Working Party 8F

Project Date:

Project Title:

T1P1.4 has a project on WWINA which addresses standards related to the radio and network aspects of systems optimized for internet data applications in low mobility environments (with handoff). The individual user data rates specified by this group range from 8 Kb/s to 2 Mb/s.

Sponsor Organization: T1P1 (A subcommittee of Committee T1, which is a US National SDO)

Project Number: T1P1.4

Project Date:

Project Title: WWINA

16. International Sponsor Organization

Is there potential for this standard (in part or in whole) to be submitted to an international organization for review/adoption?

Yes{ Yes/No/?? if you don't know at this time }

If Yes, please answer the following questions:

International Committee Name and Number: ITU-R WP8F

International Organization Contact Information:

Contact First Name: Stephen

Contact Last Name: Blust

Contact Telephone Number: +1 404 236 5924

Contact FAX Number:

Contact E-mail address: Stephen.blust@cingular.com

17. Will this project focus on health, safety or environmental issues?

No{ Yes/No/?? if you don't know at this time }

If Yes: Explanation? []

18. Additional Explanatory Notes: { Item Number and Explanation }

Additional Information for Item 12.

As stated in item 12, the standard to be developed "targets spectral efficiencies, sustained user data rates and numbers of active users, which are all significantly higher than those achieved by existing mobile communications systems". The table below provides additional information on air interface characteristics and performance targets that are expected to be achieved.

Characteristic	Target
Mobility	Vehicular mobility classes up to 250 km/hr (as defined in ITU-R M.1034-1)
Sustained spectral efficiency	> 1 b/s/Hz/cell
Peak user data rate (Downlink (DL))	> 1 Mbps*
Peak user data rate (Uplink (UL))	> 300 Kbps*
Peak aggregate data rate per cell (DL)	> 4 Mbps*
Peak aggregate data rate per cell (UL)	> 800 Kbps*
Airlink MAC frame RTT	< 10 ms
Bandwidth	e.g. 1.25 MHz, 5 MHz
Cell Sizes	Appropriate for ubiquitous metropolitan area networks and capable of reusing existing infrastructure.
Spectrum (Maximum operating frequency)	< 3.5 GHz
Spectrum (Frequency Arrangements)	Supports FDD (Frequency Division Duplexing) and TDD (Time Division Duplexing) frequency arrangements
Spectrum Allocations	Licensed spectrum allocated to the Mobile Service
Security Support	AES (Advanced Encryption Standard)

* Targets for 1.25 MHz channel bandwidth. This represents 2 x 1.25 Mhz paired) channels for FDD and a 2.5 MHz (unpaired) channel for TDD. For other bandwidths, the data rates may change.

The PAR Copyright Release and Signature Page must be submitted either by FAX to 732-562-1571 or as an e-mail attachment in .pdf format to the NesCom Administrator before this PAR will be sent on for NesCom and Standards Board approval.

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Guides are documents in which alternative approaches to good practice are suggested, but no clear-cut recommendations are made. They are generally categorized by the use of the verb "may."

4. Title of Document

Enter the title of the document.

The project title should include the type of document. For example:

1. Standard Test Method for...
2. Recommended Practice for...
3. Guide for...

The title should not contain the acronym "IEEE". This is added to the title when published.

All acronyms should be spelled out.

5. Life Cycle

A standard can be designated trial-use or full-use.

A standard can be designated for trial use when a draft satisfies the standards-developing group (i.e., subcommittee or working group), but needs input from a very broad constituency. This is a preferred alternative to the widespread distribution of unapproved drafts. Such a draft requires a letter ballot of the sponsor and approval by the IEEE-SA Standards Board as a trial-use standard. Trial-use standards are effective for not more than two years from the date of publication. In the absence of comments received in the trial period, the document is subject to adoption as a full-use standard upon receipt of written recommendation from the sponsor and approval by the IEEE-SA Standards Board.

6. Type of Project

Indicate whether this work will result in a new standard, a revision of an existing standard (indicate standard number and year), an amendment (formerly supplement) to an existing standard (indicate standard number and year), or a corrigendum (indicate standard number and year). Amendments are additions to existing standards and may contain substantive corrections and/or errata to the standard. Corrigenda are substantive corrections and/or errata to a standard.

If this is an update to an existing PAR, indicate the original PAR number, approval date and ballot status.

If this is a PAR revision, provide a short explanation of the changes to the original PAR. Rationale MUST be submitted with the PAR revision request under Item #18.

7. Contact Information of Working Group Chair

Indicate the Name, Telephone Number, FAX Number and E-mail address of the Working Group (WG) Chair. The Working Group Chair must be an SA member as well as an IEEE and/or Affiliate Member. IEEE/IEEE-SA membership number is required.

8. Contact Information for Official Reporter, Project Editor or Document Custodian

Indicate the Name, Telephone Number, FAX Number and E-mail address of the Official Reporter, Project Editor or Document Custodian if different from the Working Group Chair. The Official Reporter must be an SA member as well as an IEEE and/or Affiliate Member. IEEE/IEEE-SA membership number is required.

9. Contact Information of Sponsoring Society or Standards Coordinating Committee

Enter the name of the sponsoring society and the name of the sponsoring committee (i.e., Power Engineering/Switchgear, not PE/SWG) responsible for the development and coordination of the project and for the maintenance of the document after approval by the Standards Board. The name entered here should not be confused with the name of the group writing the standard. If the project is sponsored by two or more committees, enter all committee names and indicate that the work is a jointly sponsored project. When a Standards Coordinating Committee (SCC) is developing the document, enter the SCC number and name as the sponsor (i.e., Standards Coordinating Committee 4 - Thermal Rating).

10. Sponsor Balloting Information:

Is the balloting group for this project expected to be composed of individuals, of entities (persons representing corporations/government bodies/academic institutions, or SDO's), or a combination of both? See Section 5.4.1 in the IEEE-SA Standards Board Operations Manual for further explanation.

For the expected date of submission for initial balloting entry, enter the date the draft standard is planned to be submitted to the IEEE for balloting. Make the entry in numerical month-year format.

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

11. Projected Completion Date for Submittal to RevCom

Enter the date the draft standard is planned to be submitted to RevCom for processing. Make the entry in numerical month-year format (not to exceed four years from the date of PAR submission). Cutoff dates for submitting draft standards to RevCom are generally in February, May, August and October. Check the appropriate calendars for the specific date as the draft matures. Use a best estimate for the PAR.

12. Scope of Proposed Project

The submittal should clearly and concisely define the scope of the document. The scope generally describes "what" will be done, i.e. the technical boundaries of the project. For example:

"Scope: This project will develop a standard protocol for the control of printers. This protocol will be independent of the underlying datastream or page description language used to create the printed page. This protocol will be usable by all classes of printers. This project is limited to management and control of printers and will not include management or control of printing systems or subsystems."

The Scope of a revision to a standard or a revision to the Scope of an existing PAR shall represent the new Scope. If the Scope is different from the original Scope, provide an indication of the differences in Item #18.

13. Purpose of Proposed Project

The submittal should clearly and concisely define the purpose of the document. The purpose generally describes "why" a project will be done. For example:

"Purpose: There is currently no defined, independent standard for controlling printers. Each vendor builds some control into the underlying page description language or datastream. Without an independent, openly defined protocol, applications and operating systems cannot automatically determine the type of printer being addressed. This protocol will provide a minimum implementation subset which will allow automatic identification and configuration of printers and vendor extensibility to provide for growth and product differentiation."

The purpose of the document should be consistent with the description of the document in Item 3, the title in Item 4, and the scope in Item 12. If the title of the document is "Guide for...," it is inconsistent if the purpose states "This document will describe standard criteria..."

The scope, purpose and/or title indicated on the PAR should agree in principle with the scope, purpose and/or title stated in the document at the time of submittal to the IEEE-SA Standards Board.

If this is a PAR to revise the standard, explain here why changes are being made to the standard. This may be due to a change in industry, the introduction of new technology, etc.

The Purpose of a revision to a standard or a revision to the Purpose of an existing PAR shall represent the new Purpose. If the Purpose is different from the original Purpose, provide an indication of the differences in Item #18.

14. Intellectual Property

If an IEEE standards-developing committee chooses to include patented technology in its standard, early disclosure of these patents is valuable. Early disclosure notifies the standards developers and the IEEE of the patent in the most timely manner and gives participants the greatest opportunity to evaluate the benefits the patented technology may offer a draft standard. However, the standards developers should not take any action that could be interpreted as requiring any participant in the development process to undertake a patent search of its own portfolio or of any other. The objective is to obtain early disclosure concerning the existence of patents, where known.

If the proposed standard uses copyrighted material, copyright releases must be obtained by the working group and included in the final package submitted to the IEEE-SA Standards Board. Additionally, remember that during development of your approved project, the proper IEEE copyright notices must be maintained on all drafts.

If the proposed standard uses any trademarked terms, permission for use must be obtained from the owner. Refer to Section 6 of the IEEE-SA Standards Board Operations Manual for IEEE patent, copyright, and trademark policies.

If the proposed standard will require the unique identification of objects or numbers by the IEEE for use in industry, this should be indicated. An example of this type of registration is the unique manufacturer ID, known as Organizationally Unique Identifier (OUI).

15. Are there other Standards or Projects with a Similar Scope?

Identify any standard(s) or project(s) of similar scope(s), both within or outside of the IEEE, and explain the need for an additional standard in this area.

16. International Sponsor Organization

If the project is intended to be submitted to the appropriate international technical committee as the basis of or for inclusion in an international standard, or if this standard is intended to be adopted as the international standard, this should be noted here. It is important for all working group members to be aware of international activity within their area of technical expertise.

17. Will this Project focus on Health, Safety or Environmental Issues?

No intensive research required; only obvious or general health, safety, or environmental issues that would be affected by this work need to be cited.

18. Additional Explanatory Notes:

If you know of any further information that may assist NesCom in recommending approval for your project, please include this information here.

If this is a revised PAR or a PAR for the revision of a standard, a short explanation of the changes to the original PAR and rationale MUST be submitted under this item.

Copyright Form (separate page)

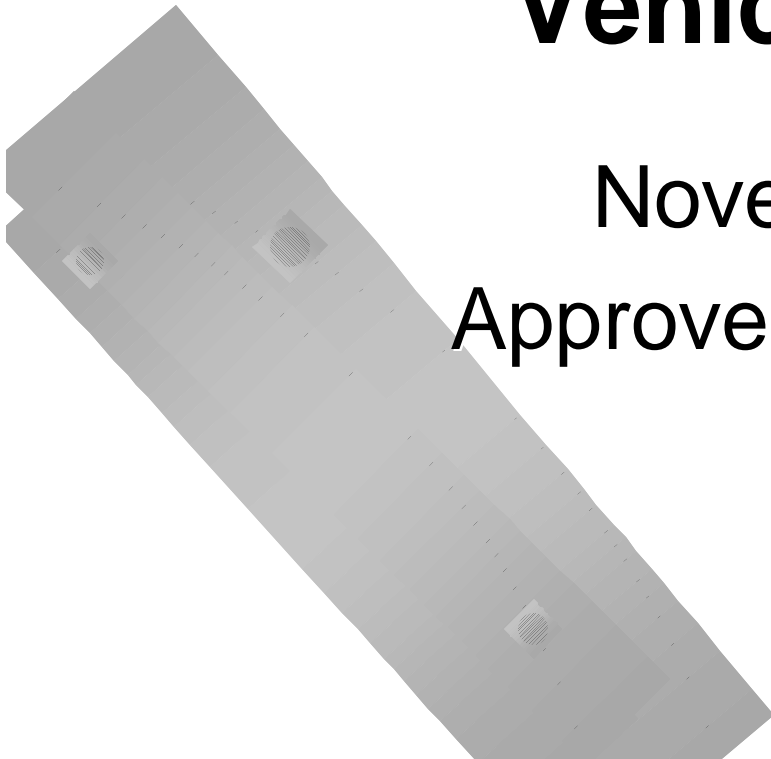
The copyright form, the last page in the electronic PAR form (and a separate page), must be submitted by FAX to the IEEE-SA office before the PAR will be approved. In order to comply with US copyright law, the IEEE and its legal counsel request that a copyright agreement be signed by the Official Reporter, who is usually the chair of the working group. This signed copyright agreement is an official part of the IEEE Standards Project Authorization Request (PAR). The PAR will not be submitted to the IEEE-SA Standards Board until the copyright agreement is signed by the proper person.

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

Mobile Broadband Wireless Access Systems “Five Criteria” Vehicular Mobility

November 13, 2002

Approved by MBWA ECSG



Broad Market Potential

- a) **Broad sets of applicability.**
 - b) **Multiple vendors and numerous users.**
 - c) **Balanced costs**
-

- **The capability of the wireless medium to support mobility is a feature unmatched by the capabilities of wireline broadband access networks. The mobile capability has proven vastly successful as can be seen from the abundance of narrow-band mobile devices. Mobile broadband wireless access, based on IP mobility, unlocks all Internet content to the general public, potential addressable market is all users of IP - based services and applications. These include:**
 - **Secure Enterprise Intranets and VLAN Services**
 - **Entertainment & Gaming**
 - **Internet and Location Services**
- **Mobile station and terminal equipment are provided by multiple international telecommunications equipment vendors, deployed by international carriers and made available to the end-user community. Tutorial and Call for Interest (CFI) sessions were held at the IEEE 802 plenary in March 2002. The CFI was attended by 55 individuals from 45 organizations expressing interest in the project. The ECSG meeting in September 2002 was attended by 49 individuals representing 34 organizations. The market potential is further increased by cooperatively developing specifications with 3GPP and 3GPP2 for interfacing MBWA networks with 3G networks.**
- **This project will achieve cost balance between terminal devices and network infrastructure equipment that is comparable to existing cellular wireless networks and encourage mass deployment of wireless data services. Given that base stations can serve many mobile terminals, the cost of the network equipment can easily be spread over many users. Terminal devices and associated chip-sets are expected to benefit from volume deployment, large-scale integration and an optimized IP-centric design to achieve low cost.**

Compatibility

- a) **Conformance with 802 Overview and Architecture**
 - b) **Conformance with 802.1D (MAC Bridges) and 802.1F (VLAN Bridges)**
 - c) **Conformance with 802.1F and compatible managed object definitions**
 - d) **Identification of any variance in conformance**
-

- **The proposed standard will conform with the appropriate IEEE 802 functional requirements.**
- **Compatibility will be addressed during development of the standard and any variance that may be required will be clearly identified and justified.**
- **The standard will include the definition of a compliant MIB in support of the PHY and MAC layer capabilities.**

Coexistence

- **The proposed standard is applicable to licensed spectrum and all issues of coexistence will be subject to the respective constraints imposed by the spectrum license. Deployment related coexistence issues will be addressed during the development of the proposed standard.**

Distinct Identity

- a) Substantially different from other IEEE 802 standards.
 - b) One unique solution per problem.
 - c) Easy for the document reader to select the relevant specification.
-

- IEEE 802 presently has no project that supports full vehicular mobility. The mobile BWA standard is intended to provide for public access networks operated by a third party, where the user typically makes use of a wide-area network through an access network when mobile. It differs from a wireless LAN, which typically is operated over smaller distances.
- The project has been socialized with the existing 802 wireless working groups.
- The proposed project will specify a unique solution to the PHY and MAC layer of the air interface operating in spectrum allocated to the Mobile Service. It is envisioned that the standard will flexibly and efficiently support a variety of services, some of which may have stringently bounded delay requirements. This solution will incorporate support for both traffic engineering and QoS for real-time and non-real-time data traffic.
- The specification will be a stand-alone document with clearly defined scope.

Technical Feasibility

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

- **The technical feasibility of such a system has been demonstrated by proprietary systems currently in deployment and trial. These systems use technological components in wide deployment today, such as modems, radios, antennas and PHY/MAC protocols.**
- **The solution may use well understood spread spectrum technologies (such as frequency hopping), radio technologies (such as OFDM), advanced signal processing techniques (such as adaptive antennas) and cellular architectures. These technologies have been successfully tested and deployed over the past decades and are finding increased usage in the LAN/MAN and mobile environments.**
- **Commercial deployment of cellular wireless networks in the bands licensed for mobile services demonstrates that air interface support for high reliability suitable for commercial deployment can be achieved.**

Economic Feasibility

- a) Known cost factors, reliable data.
 - b) Reasonable cost for performance.
 - c) Consideration of installation costs.
-

- Cost factors for mobile services and components are well known and understood. Worldwide deployment of mobile wireless networks and burgeoning demand for mobile services demonstrate the economic viability of mobile networks. The willingness of investors to spend large sums to acquire spectrum rights, plus the large additional investment required for hardware in public networks, attests to the economic viability of the mobile wireless access industry as a whole.
- The solution will offer better cost/performance characteristics than existing mobile networking solutions since it is based on a packet-based access network and designed for optimal spectral efficiency. Data services, characterized by high peak demands but bursty requirements overall, are best handled by packet technologies. As demonstrated in many IEEE 802 standards, shared-media packet systems effectively serve users whose requirements vary over time within the constraints of the total available resources.
- Installation costs will be reduced by decreasing the number of base stations required and eliminating the need for frequency planning. The reduction in the required number of base stations is achieved by supporting higher numbers of users per base station, which is accomplished by designing the air interface for frequency reuse of 1 or less and/or other techniques. Frequency reuse of 1 or less also eliminates the need for frequency planning.

5.05	ME*	802.1Q approval for reaffirmation ballot	-	Jeffree		02:02 PM
5.06	ME*	Approve administrative withdrawal of 802.1b,e,f,g	-	Jeffree		02:02 PM
5.07	ME	802a to sponsor ballot	-	Jeffree	5	02:24 PM

Moved: to forward 802a/D2 for sponsor ballot.

5 Moved: Tony Jeffree/Geoff Thompson

There is one outstanding “no” vote.

Passes: 12/0/0

10

MOTION (ME)

- 802.1 requests approval from the SEC to forward P802a/D2 (“Playpen Ethernets”) for Sponsor Ballot.
- 802.1 Proposed: seaman Second: wright
 - For: 9 Against: 0 Abstain: 0
- SEC Proposed: Jeffree, Second:
 - For: Against: Abstain:

Additional information – P802a

- WG Recirc closed with one outstanding negative & one TR comment (Geoff Thompson)
- Results: 13 Approve, 1 Disapprove, no abstains
- Response was 82% of voting membership
- Geoff's original comment, 802.1's original response, Geoff's comment on the recirc, and 802.1's rebuttal follow in the next few slides.

Geoff T's original comment

Comment 53

NAME: <Geoff Thompson>

COMMENT TYPE: <ER>

CLAUSE: <12.4>

PAGE: <9>

LINE: <31>

COMMENT START:

<Table 1 enumerates 2 experimental values of EtherType in addition to the SNAP EtherType. This is not consistent and disagrees with the text in 12.1a which calls for “a single EtherType value”.

COMMENT END:

SUGGESTED CHANGES START:

<Eliminate row entry for “Local Experimental Ethertype 2”, relabel row entry for “Local Experimental Ethertype 1” to be “Local Experimental Ethertype”>

also change “Ethertypes” in 12.2 to “EtherType” (singular) and “EtherTypes are” to “EtherType is”.>

SUGGESTED CHANGES END:

802.1's original response

A related comment that proposed the reverse solution (making it clear that two Local Experimental Ethertypes were intended) was accepted; therefore, Geoff's comment was (by implication) rejected.

Geoff T's recirc comment

Re: Comment #53

I REJECT the proposed resolution. It is not consistent with the RAC's desire to minimize the use of new EtherTypes. That is, the text from D2 below:

Page 7, line 35

Two Local Experimental Ethertype values are provided, in order to allow protocols that will need more than one distinct Ethertype value, or two distinct protocols, to be developed, within a single administrative domain.

The practice allowed by the text above is deprecated by the RAC. If an organization is developing more than one protocol (and even if they are not) then the sub-typing mechanism should be used. All newly developed protocols, protocol families and corporate sets of protocol families should use the sub-typing mechanism. The above text in D2 leads users away from that direction.

My request for my original suggested remedy still stands.

802.1 MOTION

- 802.1 approves the text of the rebuttal of Geoff Thompson's disapproval comment on P802a, as discussed during this meeting (see next slide).
- 802.1 Proposed: seaman Second: bell
 - For: 9 Against: 0 Abstain: 0

Rebuttal

802.1 shares the concern that the rate of allocation of Ethertypes should be reduced to a sustainable level by encouraging the use of subtypes. The committee differs from the commenter in the way this objective would be best achieved, and includes two members of the RAC.

A number of protocols that have been recently designed can be characterized as client-server protocols in which some number of clients use some number of servers attached to a bridged local area network. It is expected that many of the protocols that will be designed in the near future will also follow this paradigm. The filtering controls in bridges are often used to select which servers and which clients locate each other in regions of the network, and this selection typically involves filtering frames transmitted by the servers differently from those sent by clients. The design of these protocols is therefore partitioned into a server to client protocol and a client to server protocol, that are developed together but use distinct Ethertypes, so that they may be filtered selectively by existing bridges. Considering the extensive installed base of bridges it is not reasonable to expect that the designers of these protocols would rely on a future subtype filtering capability in bridges.

Therefore not allowing two experimental Ethertypes would simply encourage the waste of one non-experimental Ethertype for early versions of each client server protocol development. Allowing two experimental types would also facilitate other needs for simultaneous protocol development to realize a single system design.

Next steps

- **802.1 has agreed to forward Geoff's comment, and 802.1's rebuttal, along with the Sponsor ballot package, in order for Geoff's view, and the 802.1 position, to be visible to the Sponsor ballot group.**

5.08	ME*	Approve reaffirmation ballot for 802.11-1999	-	Nikolich		02:07 PM
5.09	ME*	Approve reaffirmation ballot for 802.2-1989 (R1997)	-	Nikolich		02:07 PM
5.10	ME*	Approve reaffirmation ballot for 802.5-1997	-	Nikolich		02:07 PM
5.11	ME*	Approve administrative withdrawal of 802.6-1990 (r1997)	-	Nikolich		02:07 PM
5.12	ME*	Approve administrative withdrawal of 802.7-1989 (r1997)	-	Nikolich		02:07 PM
5.13	ME*	802b OID Registration PAR to NESCOM	-	Jeffree		02:07 PM
5.14	ME*	802.1D Revision PAR to NESCOM (and withdrawal of 802.1y)	-	Jeffree		02:07 PM
5.15	ME*	802.1AD LAN Support for Service Provision PAR to NESCOM	-	Jeffree		02:07 PM

5.17	ME*	802.11k Radio Resource Measurement PAR to NESCOM	-	Kerry		02:08 PM
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5.18	ME	802.15.3a Higher Rate PHY for 802.15.3 PAR to NESCOM	-	Heile	5	02:28 PM
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Moved: to forward 802.15.3a PAR (document 802.15-02370r2) to NESCOM
 Moved: Bob Heile/Stuart Kerry

802.16 has directed Roger oppose the PAR and to present their position.

5

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The following motion carried in the 802.16 Closing Plenary by a vote of 17-1-12:

Motion: To direct the 802.16 chair to vote against the 802.15.3a PAR and convey the following opinion to the SEC:

The 802.15.3a study group has produced a PAR (doc00134.doc of the SEC server, as the (local) 802.15 website does not seem to provide a version anywhere), which manages to convey almost no tangible information apart from a targeted data-rate of 110 Mbps. The response to our questions reveals that it's going to be a license-exempt system, but even this is not mentioned anywhere in the PAR. In principle, a single PAR should not be so overly broad that it might cover such a wide range of frequency allocations that in principle it could end up with a distinct PHY for each of the allocations, as there is no single technology that covers all of bands indicated in the response to our questions. There is no feasible way to compare proposals which address for example the 5 GHz, UWB and 60 GHz bands, because they have nothing in common apart from the targeted data-rate. It is hence to be expected that this PAR will lead to at least one PHY for each of the bands mentioned in the response to our questions, resulting in an undesirable mushrooming of PHYs within the 802.15 WG.

When searching through the documents of the 802.15.3a study group, it is not credible to maintain that the study group cannot establish a decision on narrowing down the PAR to one single band (or provide multiple PARs for the individual bands it is really considering). We do therefor believe that the 802.15.3a study group is attempting to obfuscate which band it intends to pursue, in order to circumvent any reasonable concerns other WGs might have. We hence find that insufficient information has been provided in this PAR to allow reasonable consideration by other WGs.

Further, the 802.15 WG cannot possibly claim multiple vendors in its 5 criteria for this PAR, as each of the vendors present may well have had an entirely different system/band in mind.

In addition, approving PARs which are this fuzzy on intent sets an extremely bad precedent for any future PARs, since it would allow WGs to develop systems without the merest oversight by 802 members and co-ordination by the SEC.

We therefor recommend that the 802.15 be instructed to amend its PAR to be narrower in scope and resubmit it for consideration at the following 802 plenary to allow reasonable review by other WGs.

Passes: 7/3/2

5.16 ME 802.11j 4.9 GHz - 5 GHz Operation in Japan PAR to NESCOM - Kerry 1 02:07 PM

5 **Moved: to forward 802.11j PAR to NESCOM**
Moved: Stuart Kerry/Bob Heile

Geoff states that we are supposed to be an international, not a multi-national standards group. We should not be in the business of developing individual profiles for each country.

10

Stuart states that this is very desirable for the industry and that a precedent has already been set for individual national profiles.

Bob O'Hara points out that there is already precedent for a general mechanism in 802.1, that is 802.11d. What is needed is a general mechanism for describing the operation of an 802.11a-type PHY in any band and country.

15

Proposal to Amend 802.11a
to address
Japanese bands and rules

PAR and 5 criteria

Background

- In September, Japan allocated new spectrum for WLAN below 5GHz
 - 4.9 to 5.0 & 5.03 to 5.091
- Great opportunity for 802.11a but requires amendment
- Development of PAR & 5C undertaken by WNG SC rather than creating a new SG

Status

- Letter ballot sent to 802.11 WG voting members requesting approval to submit PAR and 5 Criteria to SEC for approval in November.
- 387 voting members
 - 251 yes, 3 no, 10 abstain
 - 68.2% response, 98.8% approval
- Documents distributed to SEC and WGs

Comments & Resolution

13 Comments received by 5PM Tuesday, Nov 12, '02

802.11 WG Comments (11 Total)

Overall – 5

PAR – 3

5 Criteria – 3

SEC (1 comment)

802.15 (1 Total)

Detailed responses contained in 11-02-668r3

Motion

- Move that the WG approve the revised PAR (11-02-564r3) and 5 Criteria (11-02-565r1) and forward them, with comment resolution responses (11-02-668r3), to the SEC for approval on Friday Nov 15 '02.
- 111/1/10

Passes: 8/2/3

5.19	ME*	802.15.4 Revision PAR to NESCOM	-	Heile	02:13 PM
5.20	ME*	1802.16.2 Test Suite Structure and Test Purposes PAR to NESCOM	-	Marks	02:13 PM
5.21	ME*	802.16d System Profiles Amendment PAR to NESCOM	-	Marks	02:13 PM
5.22	ME*	802.17a Amendment to 802.1D PAR to NESCOM	-	Takefman	02:13 PM
5.23	ME*	802.3af to sponsor ballot	-	Grow	02:13 PM
5.24	ME	802.15.2 to sponsor ballot (conditional approval)	-	Heile	02:46 PM

Moved: to forward 802.15.2/D8 to sponsor ballot according to Procedure 10

5 Moved: Bob Heile/Stuart Kerry

Passes: 12/1/0

5.25 ME 802.16c to REVCOM - Marks 5 02:41 PM

Moved: to forward 802.16c/D4 to REVCOM

10 Moved: Roger Marks/ Geoff Thompson

LMSC Motion: 802.16c to RevCom

Motion: To forward 802.16c/D4 to RevCom

- Title: *Draft Amendment to IEEE Standard for Local and Metropolitan Area Networks - Part 16: Air Interface for Fixed Broadband Wireless Access Systems - Detailed System Profiles for 10-66 GHz*
 - See [RevCom Submittal Package](#)
 - IEEE 802.16 Working Group Motion #4 of 14 November 2002:
 - "To approve the RevCom submission of P802.16c/D4."
 - *Carried 20-0-0.*
-

Return to [802.16 Issues for LMSC Closing meeting of 15 November](#)

Passes: 12/0/0

5.26 ME 802.15.3 to sponsor ballot - Heile 1 02:48 PM
5 Moved: to forward 802.15.3/D15 to sponsor ballot
Moved: Bob Heile/Stuart Kerry

Passes: 13/0/0

10 5.27 ME* 802.1s to sponsor ballot - Jeffrey 02:19 PM

5.28 ME 802.11h to sponsor ballot - Kerry 5 02:51 PM
Moved: to forward 802.11h/D3 to sponsor ballot
Moved: Stuart Kerry/Bob Heile

Passes: 12/0/0

15

5.29 ME 802.16.2a to sponsor ballot - Marks 5 02:55 PM
Moved: to forward 802.16.2a/D3 to sponsor ballot according to Procedure 10
Moved: Roger Marks/Buzz Rigsbee

20 Roger reviewed the remaining disapproval comments.

Passes: 10/0/2

5.30 ME 802.16a to REVCOM (conditional approval) - Marks 5 02:58 PM
25 Moved: to grant conditional approval, under Procedure 10, to forward 802.16a/D7 to RevCom.
Moved: Roger Marks/Bill Quackenbush

Passes: 12/0/0

5.31 ME SB Op. Man. procedure change - Grow 5 03:04 PM

SB Op. Man. proposed Interpretations amendments

- Charging
 - Discourage Interpretations
- Interpretations point out defects, which is very valuable
 - May raise expectation of consultancy
 - Where does the revenue go?
 - Implicit that there will be a charge
- Short timescale action required to avoid charge
- Undesirable timescales
 - Do not believe it is compatible with 802 Interpretations process
 - Counter to thorough review

Motion: Interpretations Process

- IEEE P802. 3 requests that IEEE P802 EC convey the issues listed on the slide to proCom.

802.3 vote: 69,0,1

- Move that the LMSC Chair convey the issues listed on the slide to ProCom.

Grow/Quackenbush

Y: N: A:

Moved: That the 802 LMSC Chairman present the issues listed in the presentation to ProCom
Moved: Bob Grow/Bill Quackenbush

5 **Passes: 12/0/0**

5.32 ME Kibis and bits

- **Grow**

5 03:09 PM

Moved: That the 802 LMSC Chair transmit the following letter:

Kibis, Mibis ...

- Request that the chairman of the IEEE 802 LMSC transmit the following letter concerning P1541 to the secretary of the IEEE-SA Standards Board

Should 802 not approve this letter it will be appropriately edited and sent as a 802.3 position.

Howard Frazier / Steve Carlson

Y: 74

N:0

A:8

15-November-2002

Judith Gorman
Secretary, IEEE-SA Standards Board
445 Hoes Lane
P.O. Box 1331
Piscataway, NJ 08855-1331

Dear Ms. Gorman,

The members of the IEEE 802 LAN/MAN Standards Committee are aware of the decision pending at the IEEE-SA Standards Board regarding the approval of IEEE P1541 Draft Standard for Prefixes for Binary Multiples. We have several concerns with this draft standard that we wish to bring to your attention.

Our primary concern is with the limited breadth of review that has been given to this draft. We understand that the sponsor ballot group for P1541 consisted of 16 individuals, representing the interest categories of User, Academic, General Interest, and Government, with no representation in the Producer interest category. We believe that producers of information technology components and systems are materially interested in the subject matter of P1541, and should have been represented in the sponsor ballot group.

We believe that adoption of P1541 will have wide ranging implications for the information technology industry, and will have a broad effect on information technology standards. There may be unintended and unanticipated effects that are detrimental to a particular standard or a particular segment of the industry.

Furthermore, it appears that there are alternative means that can be employed to improve the precision of communications involving binary multiples. We believe that these alternatives should be given consideration.

Therefore, we respectfully suggest that the IEEE-SA Standards Board consider approving P1541 as a 2 year, Trial Use standard. We believe that this will encourage materially interested parties to comment on P1541, and participate in the process of developing a standard that will have broader support in the information technology industry.

Sincerely,

Paul Nikolich
Chair, IEEE 802 LMSC

Moved: Bob Grow/Tony Jeffree

Steve Carlson asked why if the ballot pool was so small that we are asking for Trial Use, rather than reballoting the draft with a larger pool. Howard points out that there might be real difficulties with trying to have the standards board re-form a ballot pool.

Tony asked what the implication of trial use is. Howard indicates that this would encourage comments on the standard and require that they be addressed before full use could be granted.

Passes: 12/0/0

5.33 ME Filing of reply comments on FCC 02-312 - Stevenson 5 03:16 PM
Moved: to approve the filing with the FCC of Reply Comments in ET Docket 02-312 (Biennial Review of Part 15), contained in document 18-02-038r0, authorizing the Chair of 802.18 to do the necessary editorial and formatting changes.
Moved: Carl Stevenson/

Passes: 12/0/0

5.34 ME Authority to engage in ex parte meetings with FCC - Stevenson 10 03:20 PM
Moved: to authorize the Chair of 802.18, within his/her current term, to engage in ex parte discussions or presentations with FCC Staff as necessary and appropriate, provided that such ex parte discussions or presentations are consistent with and relevant to previously approved and filed documents.
Moved: Carl Stevenson/Bob Heile

Roger Marks points out that this is a very broad motion, without time limit. He expresses trust in the 802.18 chair. He suggests that the motion be modified to include limitation to the current term of the 802.18 Chair. The motion was modified as suggested.

Passes: 10/0/2

5.35 ME 802.11g conditional approval for sponsor ballot (Procedure 10) - Kerry 0 00:00 PM
This item was removed from the agenda at the request of Stuart Kerry, Chair of 802.11.

5.36 ME Endorsement of 2003 Get IEEE 802 budget - Walker 10 03:27 PM
Moved: That 802 LMSC accept the Get IEEE 802 2003 budget, as shown.
Moved: Geoff Thompson/Bill Quackenbush

Passes: 11/0/1

5.37 ME 802.3 Liaison letters - Grow 10 03:30 PM

IEEE 802 Response to ITU-T SG15

Re: Question 2/15

To: David Faulkner, Rapporteur, ITU-T Q2 /15
From: Paul Nikolich, Chair IEEE 802 LMSC
Copy: Robert Grow, Chair IEEE 802.3 CSMA/CD WG
Howard Frazier, Chair IEEE 802.3ah EFM TF
Frank J. Effenberger, Liaison, SG15
Date: 15-November-2002

Response to Liaison Statement, 24 Oct 2002: Question 2/15

Dear Dr. Faulkner,

Thank you for your liaison letter and recommendations regarding optical specifications for Ethernet in the First Mile.

At the November, 11-14, 2002 meeting of the Ethernet in the First Mile Task Force (IEEE 802.3ah), we reviewed comments against draft 1.1 of P802.3ah Ethernet in the First Mile. As part of this review, specific comments were received from the participants of the Task Force to modify power levels for Point to Multipoint optics and to modify the "burst mode" timing parameters.

During resolution to these comments, the recommendations in document BM-14R1 were discussed. The committee adopted changes for power level recommendations and we left the decision regarding timing parameters for a future date.

We are currently editing Draft 1.2 of P802.3ah, and we will make a copy available to you as soon as it is ready.

In the future, please direct correspondence concerning IEEE P802.3ah to Howard Frazier, chair, IEEE 802.3ah EFM Task Force, millardo@dominetsystems.com.

Sincerely,

Paul Nikolich
Chair, IEEE 802 LMSC

Kauai, HI, 11-14 November 2002

SOURCE: IEEE EFM Task Force
TITLE: Communication to ITU-T Q4/15 from IEEE P802.3ah Ethernet in the First Mile Task Force
REFERENCE: Communication Statement sent from ITU-T Q4/15 21-25 October 2002
Rapporteur meeting to IEEE P802.3ah

COMMUNICATION STATEMENT

TO: Richard Stuart, Q4/15 Rapporteur, rlstuart@ieee.org

COPY: Bob Grow, IEEE 802.3 Chair, bob.grow@intel.com
Paul Nikolich, IEEE 802 Chair, p.nikolich@ieee.org
Howard Frazier, IEEE 802.3ah Task Force Chair; millardo@dominetsystems.com
Hugh Barrass, IEEE 802.3ah Copper Track Chair, hbarrass@cisco.com
Frank Effenberger, ITU-T SG15 Representative to IEEE 802.3ah, feffenberger@quantumbridge.com

APPROVAL: Agreed to at IEEE 802.3ah EFM plenary meeting, Kauai, 14 November 2002
FOR: Information
DEADLINE: N/A
CONTACT: Barry O'Mahony, 802.3ah representative to ITU-T Q4/15, barry.omahony@intel.com

The IEEE 802.3ah EFM Task Force has received the Communication Statement from your October 2002 meeting.

We welcome your suggestion that we develop a proposal for a TPS-TC, to be incorporated into revised DSL Recommendations, that fulfill the requirements we enumerated in our previous communication. Tentatively, we intend to forward a proposal to you prior to your July Rapporteur Group meeting.

We look forward to continued communication and cooperation between our two groups.

Source: IEEE P802.3ah EFM Task Force
Title: Notification Of G.etsna Activity

LIAISON STATEMENT

To: ITU-T SG15
Approval: Kauai meeting, November 11-15, 2002
For: Q.12/15 – Action
Deadline: January 2003

Contact: Howard Frazier, EFM TF chair Email: millardo@dominetsystems.com
Contact: Matt Squire, EFM OAM STF chair Email: msquire@hatterasnetworks.com

Introduction

Thank you for providing the information regarding the G.etsna effort. At the time of our meeting, we were able to review the liaison letter but were unable to look at the G.etsna draft itself. We look forward to providing feedback in the future.

The Ethernet in the First Mile (EFM) Task Force would like to keep you informed of the work in EFM. To assist you in the review of this work, we have a public website available at <http://www.ieee802.org/3/efm/public>, and are willing make our most recent draft available [1].

Proposal

We invite Q.12/15 to review the EFM draft specification and provide us comments. Also, please contact us in the future if specific issues arise during your work on which you would like our input.

Attachments

[1] EFM Draft D1.2

Moved: That the LMSC chair send the liaison letter to ITU-T Q2/15 with the appropriate edits.

Moved: Bob Grow/Geoff Thompson

5 Edits to the letter will be made to indicate that future correspondence be made directly through the task group chair.

Passes: 10/0/0

Bob showed the letters to ITU-T Q4/15 and ITU-T Q12/15 from the EFM TG for information purposes.

10

5.38 Break - 10 03:38 PM

5.39 MI Chairs guideline - Jeffree 5 03:54 PM

Moved: SEC approves the text of the Chair's Guideline regarding cross working group document and email reflector access.

Moved: Tony Jeffree/Roger Marks

15

Passes: 12/0/0

5.40 MI Affirm chair of 802.19 - Nikolich 5 03:59 PM

This vote was not taken, as the TAG did not take such a vote.

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Moved: to affirm Jim Lansford as the interim chair of 802.19 TAG through the end of the March 2003 Plenary.

Moved: Carl Stevenson/Stuart Kerry

Passes: 12/0/0

25

5.41 MI Extension of Mobile Wireless MAN SG - Marks 0 00:00 PM

Withdrawn.

5.42 MI Extension of MBWA ECSG - Klerer 5 04:02 PM

Moved: To extend the Mobile Broadband Wireless Access ECSG until the end of the March 2003 plenary

30

Moved: Buzz Rigsbee/Tony Jeffree

Passes: 12/0/0

Paul appointed Mark Klerer to continue as chair of the ECSG and to continue as the interim chair of the WG, should it be approved by the IEEE Standards Board.

35

Moved: To affirm Mark Klerer as the chair of the MBWA ECSG and interim chair of the WG, should it be approved.

Moved: Bob Heile/Tony Jeffree

Passes: 13/0/0

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5.43 MI 10GBASE-CX4 Study Group formation - Grow 5 04:07 PM

Moved: to approve formation of an 802.3 study group on 10GBASE-CX4.

Moved: Bob Grow/Geoff Thompson

Passes: 13/0/0

45

5.44 MI 10GBASE-T Study Group formation - Grow 5 04:11 PM

Moved: to approve formation of an 802.3 study group on 10GBASE-T.

Moved: Bob Grow/Geoff Thompson

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Passes: 13/0/0

5.45 MI Establishment of ECSG on Link Security - Grow 10 04:04 PM
Moved: to approve formation of an SEC study group on link security.
Moved: Bob Grow/Carl Stevenson

5 802.1 discussion brought out a significant feeling that this work should wind up in 802.1, though there might be MAC specific portions that would be handled in individual working groups. The result is that 802.1 offers to host the study group and the resultant working group, should one be approved.

10 Dolors Sala (chair of the group proposing the work) reports that, in order to build consensus, the group felt that it belonged at the ECSG. This is supported by Geoff Thompson, who also said that the ultimate location of the WG can be decided in the future as the SG proceeds. This is addressed in the charter of the SG, as presented.

Passes: 13/0/0

15 Paul appoints Dolors Sala as chair of the ECSG on link security.

Moved: to affirm Dolors Sala as chair of the ECSG on link security.
Moved: Roger Marks/Carl Stevenson

20 Passes: 13/0/0

5.46 MI* 802.11 HT SG extension - Kerry 04:14 PM

5.47 MI Extension of contract with meeting organizer - Quackenbush 5 04:27 PM
25 Moved: that 802 extend the contract with Face to Face Events dated March 12, 1999 to provide meeting management services for the March 2003 802 Plenary meeting under the terms and conditions of the referenced contract.
Moved: Bill Quackenbush/Buzz Rigsbee

Passes: 11/0/2

5.48 MI Contract for 802.1/802.3 interim meeting - Quackenbush 5 04:30 PM
30 Moved: That 802 contract Face to Face Events to provide meeting management services for the January 2003 802.1/.3 interim meeting with the terms and conditions of the contract with F2F dated March 12, 1999 with the exceptions that the fixed fee will be \$6k and Face to Face will provide the web registration software.
Moved: Bill Quackenbush/Buzz Rigsbee

35 Passes: 13/0/0

5.49 MI Meeting fee increase (SEC Procedure 1) - Quackenbush 5 04:35 PM
40 Moved: That the pre-registration/registration fees for the IEEE 802 Plenary meetings be increased to \$300/\$350 beginning with the March 2003 meeting.
Moved: Bill Quackenbush/Buzz Rigsbee

Discussion surrounded whether the fee increase includes professional network support services. This increase does not include an increase for that purpose.

45 Further discussion from an audience meeting requested that there be a fee differential (additional) for attendees not staying on the property where the meeting is held.

Passes: 13/0/0

50 Moved: To increase the budget allocation for networking services to \$25k per meeting, on order to provide professional onsite support at the meetings.
Moved: Tony Jeffree/Stuart Kerry

Passes: 10/1/1

5.50 MI Database contract - Quackenbush 5 04:48 PM

Moved: To authorize the Treasurer, after consultation with the Chair and Executive Secretary, to invoke the 30-day cancellation option of the contract with Plexus Consulting for the 802 database any time after November 30, 2002 if work on the 802 database has not been completed by that date.

Moved: Bill Quackenbush/Buzz Rigsbee

Passes: 10/0/2

5.51 MI Reporting of WG/TAG votes requesting SEC action - Quackenbush 5 04:50 PM

Moved: That a motion requesting the SEC to take an action or actions at the request of a WG/TAG shall be supported with both the numerical vote in the WG/TAG on the motion requesting SEC action and the number of WG/TAG voting members at the time of the vote.

Moved: Bill Quackenbush/Tony Jeffree

It was pointed out that this should really be in the operating rules, rather than languishing in the minutes. Another point was to trim the motion to require reporting a numerical vote. The motion was modified to reflect this.

A point was made that sometimes a group uses unanimous consent to move the process along. Another point was made that a rule change

Fails: 6/6/1, the chair votes against the motion.

5.52 MI SG Extension motions .11j, .11k - Kerry 5 04:57 PM

Moved: to authorize renewal of the 802.11 Radio Resource Measurement for an additional plenary cycle.

Moved: Stuart Kerry/Mat Sherman

Passes: 11/0/1

5.53 MI SEC TAG rule change - Thompson 5 05:01 PM

Moved: that 802 adopt the TAG rules as distributed for inclusion in the 802 Operating Rules per clause 3.6.5.

Moved: Geoff Thompson/Bob Grow

Passes: 11/0/0

5.54 MI Email balloting rule change to email ballot - Sherman 5 05:02 PM

Moved: to send the proposed rules changed titled "SEC Electronic Ballot (R1)" to operating rules change letter ballot.

Moved: Mat Sherman/Carl Stevenson

Passes: 10/0/1

5.55 MI SEC Operating Rules title change to email ballot - Sherman 5 05:05 PM

Moved: to send the proposed rules change titled "Rules Title Change" to SEC operating rules change letter ballot

Moved: Mat Sherman/Carl Stevenson

Passes: 10/0/1

5.56 DT Tutorial slots - Sherman 5 05:08 PM

Motion: Move to make Tuesday evening tutorial slots from 8-9:30 exclusive of all other 802 meetings. (Paul / Mat)

4 yes, 0 no, no abstains

Clarifications: Exclusive means no other meetings or tutorials will run during slot. The SEC may schedule additional exclusive tutorials should they be needed.

Issue: Formation of a new working group based on CFI requires attention across 802. Need to guarantee availability of 802 participants.

Motion: A CFI relating to the formation of a (potentially) ECSG has rights to an exclusive Tutorial slot. (Geoff / Mat)

4 yes, 0 no, no abstains

Clarification: A potential ECSG is any study group formation activity that any SEC member believes may be pushed into and ECSG.

Clarification: Call for Interest (CFI) is a meeting who's sole purpose is to determine the interest and support in forming a study group and to formulate presentation to the next higher body for doing so.

Clarification: The chair's cutoff date for holding Tutorial Slots open for 802 use is 21 days before the opening plenary.

It is recommended that the Chair's Guidelines be adjusted as indicated in these minutes.

9 AM: Meeting adjourned.

Mat reported on the meeting held to discuss the Chair's guidelines regarding tutorial slots. Some discussion of the assignment of exclusive tutorial slots for CFIs that may result in an ECSG expressed skepticism that such is necessary. Opposition to a rigid rule was expressed by several members. Paul pointed out that this is a Chair's Guideline, not an operating rule.

5.57 DT 802 handoff tutorial result and CFI - Marks 10 05:16 PM

5 The tutorial was well attended, SRO in a room for 50. The tutorial materials are available on the 802 web site. Roger will put together a formal CFI at the March plenary. Roger speculates that the result of the CFI will be an ECSG.

5.58 DT Single venue for future meetings - Nikolich 10 05:21 PM

10 Paul points out that having the LMSC split between two meeting locations is causing difficulties for the SEC members that must travel between the venues, and that the members of the WGs are not able to mix and exchange ideas. Bob Grow points out that Vancouver's meeting, where the hotels were only a couple minutes walk from each other. The Kauai meeting was very different. This is going to be a major problem in Albuquerque 2003.

15 Geoff would like us to be in one hotel, as long as it offers more variety than oscillating between Orlando and Las Vegas. Tony supports

Moved: That future meeting venues (after today) be chosen on the basis of being able to support the entire body of 802 in meeting spaces within a 400 meter walk.

Moved: Tony Jeffree/Mike Takefman

20 Buzz points out that there are not a lot of hotels in the world that can support a meeting of the size of 802. If we restrict ourselves to only hotels that will host our entire meeting, we are reducing the candidate list of hotels to about 25. Of those 25, about 2/3 of those will charge significantly more than we currently pay, resulting in a registration fee increase. Buzz supports a guideline that all meeting space be within easy walking distance.

25 Bob Heile say is a laudable goal, but may not be practical. Three issues: the network requires control of the property 7x24, evening meeting times are highly utilized and may not be available, cost is a significant concern.

Passes: 10/2/1

5.59 II Liaison from 802.17 to ITU-T SG 7/17 - Takefman 5 05:37 PM

30 Mike presented information on the X.msr in ITU-T SG 7/17, which overlaps heavily with 802.17 and T1X1.5 liaison.



X.msr



- ITU-T SG 7/17 X.msr draft defines both a MAC and the Services above the MAC
 - Overlap between the X.msr MAC and the 802.17 MAC is extensive
 - Q 17 MAC is slightly simpler as there is no fairness algorithm
 - Q 17 MAC as documented has technical errors
- Q 7/17 is attempting to gain consent at their Plenary meeting November 25-29, 2002
- ITU-T SG 13 and 15 have adopted positions that state there is an overlap between X.msr and work in their SGs and with IEEE 802.17
 - US and Canadian government positions is to delay consent until overlap with IEEE 802.17 and other ITU groups is resolved



Liaison to ITU-T



- IEEE 802.17 liaison to Q 7/17 provides technical comments on the X.msr draft and a proposal to progress both standards
 - Q 7/17 would define X.msr as Services layer over the 802.17 MAC
 - Q 7/17 would request an Ethertype from the RAC for X.msr
 - .17 has agreed that it would be willing to initiate joint work with Q 7/17 to review the requirements of X.msr so that the proposed IEEE 802.17 standard can accommodate X.msr
 - Q 7/17 has been invited to our January Interim meeting.

5.60 II 802.19 summary

- Lansford 5 05:39 PM

The chair's of 802.11, .15, .16, and .17 will work with Jim to help develop their scope and operating rules. The chair is tasked with the delivery to the SEC of a draft scope, purpose and coexistence process 30 days before the March meeting. The chair must be elected by the TAG at the next meeting.

5

IEEE 802.19 Coexistence TAG

November Meeting Summary

Jim Lansford, Chair

Summary of Activities

- **Web site up (www.ieee802.org/19)**
 - Thanks to Ian Gifford
 - Email reflector should be up soon
- **802.15 SG3a joint meeting**
 - Presentations on 11a-UWB interference
 - Proposal for 802.19 conference calls to refine SG3a selection criteria for presentations in January
- **Wednesday meeting**
 - **Generic Java PHY model reviewed**
 - Will be made freely available on web
 - Initially includes 802.15.3, 802.15.4, 802.11b, Bluetooth, but would like members to add others
 - **Presentation on coexistence “Classes”**
 - Framework for evaluating coexistence performance
 - Needs more work
 - **Policies and procedures: 802.19 is evolving into 3 roles**
 - PAR/5 criteria review
 - Facilitator during proposal phase
 - Draft review

Conclusion

- Docs are on 802-18-19/coexistence server
 - All documents from this session are on 802-18-19/submissions/802-19
- Instructions for subscribing to 802.19 email reflector will be sent to 11/15/16 shortly
- Bi-weekly conference call announcements will go out in next week or so...also, check web site for updates
- January interim plans:
 - Joint meeting: SG3a on selection criteria
 - Joint meeting: 802.11 High Throughput
 - Continued Operating Rules work
 - Continued evaluation tools work
 - Officer election (!)

5.61 II 802 survey initial results - Marks 10 05:52 PM
Roger showed the materials received as a result of the survey and a spreadsheet with the collection of responses to date.

5 **5.62 II 802.3aj to WG Ballot - Grow 1 05:55 PM**
802.3aj maintenance 7 is going out to WG ballot.

5.63 II 802.3 Interpretations status - Grow 1 05:55 PM
7 interpretation requests

10

5.64 II 802.3 interim meetings - Grow 2 05:56 PM
Vancouver
Seoul
Italy

15 See the 802.3 web site for details.

5.65 II 802 News Bulletin - Marks 10 05:57 PM
Roger reminded everyone of the need to submit input for the press release by Monday 11/18. The bulletin will go out on Friday 11/22

20

ADJOURN SEC MEETING - Nikolich 05:58 PM
ME - Motion, External MI - Motion, Internal
DT- Discussion Topic II - Information Item

25 **Motion to adjourn.**
Moved: Stevenson/Jeffree

Passes: 8/0/1
The LMSC meeting was adjourned at 5:59pm.

30 Respectfully Submitted,
Bob O'Hara
Recording Secretary