

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

Friday, March 14, 2003 – 1:00 p.m.

Hyatt DFW Airport, Dallas, Texas

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
- Bill Quackenbush - Treasurer, IEEE 802 LAN/MAN Standards Committee
- Tony Jeffree - Chair, IEEE 802.1 - HILI Working Group
- Bob Grow - Chair, IEEE 802.3 - CSMA/CD Working Group
- 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, IEEE 802.20 - Mobile Broadband Wireless Access Working Group

The meeting was attended by approximately 25 IEEE 802 Working Group members, IEEE staff, and several guests.

2.00 APPROVE OR MODIFY AGENDA

AGENDA - IEEE 802 LMSC EXECUTIVE COMMITTEE MEETING

Friday, March 14, 2003 - 1:00PM -6:00PM

Hyatt DFW Airport, Dallas Texas

1.00		MEETING CALLED TO ORDER	- Nikolich	1	01:00 PM
2.00	MI	APPROVE OR MODIFY AGENDA	- Nikolich	5	01:01 PM
3.00	*		-	0	01:06 PM
4.00	II	TREASURER'S REPORT	- Quackenbush	5	01:06 PM
4.01	II	802 Project Plan	- Sherman	5	01:11 PM
Category (* = consent agenda)					
5.00		IEEE Standards Board Items	-		01:16 PM
5.01	ME*	802.1D revision conditional approval to submit to sponsor ballot	- Jeffree	5	01:16 PM
5.02	ME*	802a conditional approval to submit to RevCom	- Jeffree	5	01:21 PM
5.03	ME*	802.3aj Maintenance #7 PAR to NESCOM	- Grow	5	01:26 PM
5.04	ME*	802.3ak 10GBase-CX PAR to NESCOM	- Grow	5	01:31 PM
5.05	ME*	802.11ma Maintenance PAR to NESCOM	- Kerry	5	01:36 PM
5.06	ME*	802.15.4 Draft 18 to RevCom	- Heile	5	01:41 PM
5.07	ME	802.15.3 conditional approval to submit Draft 17 to RevCom	- Heile	10	01:46 PM
5.08	ME*	1802.16.3 PAR to NESCOM	- Marks	5	01:56 PM
5.09	ME*	802.16.2a conditional approval to submit to RevCom	- Marks	5	02:01 PM

5.10	ME*	1802.16.1 conditional approval to submit to RevCom	-	Marks	5	02:06 PM
5.11	ME*	802.3af conditional approval to RevCom	-	Grow	5	02:11 PM
5.12			-			02:16 PM
5.13		Executive Committee Study Groups & Working Groups	-			02:16 PM
5.14	MI	Send Working Group Membership rules change to ballot	-	Sherman	15	02:16 PM
5.15	MI	Activate 802.10 from hibernation	-	Alonge	5	02:31 PM
5.16	MI	Placement of Link Security Study Group	-	Sala	5	02:36 PM
5.17	MI	802 Handoff Study Group	-	Marks	15	02:41 PM
5.18	MI	Confirm election of 802.19 officers	-	Lansford	2	02:56 PM
5.19	MI	Confirm election of 802.20 officers	-	Klerer	15	02:58 PM
5.20	MI	Establish 802.15.1 revision study group	-	Heile	2	03:13 PM
5.21		Break	-		15	03:15 PM
5.22		IEEE-SA Items	-			03:30 PM
5.23	II	Get IEEE 802 Program update	-	Walker	10	03:30 PM
5.24	MI	Approval of 2004 Get IEEE 802 budget	-	Thompson	5	03:40 PM
5.25	ME	Clarification of SA recirculation ballot rule	-	Sherman	5	03:45 PM
5.26		LMSC Liaisons & External Interface	-			03:50 PM
5.27	ME	ITU-T-SG15 Liaison reply	-	Takefman	2	03:50 PM
5.28	ME	Unlicensed Spectrum Bills	-	Stevenson	2	03:52 PM
5.29	ME	Canadian Radiometer	-	Stevenson	2	03:54 PM
5.30	ME	Reply to FCC petition for rule making 10666	-	Stevenson	2	03:56 PM
5.31	ME	Italy Clarification	-	Stevenson	2	03:58 PM
5.32	ME	Comments IB-01-185, IB-02-365	-	Stevenson	2	04:00 PM
5.33	ME	Press release	-	Stevenson	2	04:02 PM
5.34	MI	IEEE International Award Endorsement	-	Nikolich	2	04:04 PM
5.35	ME	Letter to ISTO on Broadband Wireless Internet Forum	-	Marks	5	04:06 PM
5.36			-			04:11 PM
5.37		LMSC Internal Business	-			04:11 PM
5.38	MI	Meeting services contract extension	-	Quackenbush	2	04:11 PM
5.39	MI	Contract for additional meeting services and web registration	-	Quackenbush	2	04:13 PM
5.40	MI	Resolution that phases 1-3 of the database contract are complete	-	Quackenbush	2	04:15 PM
5.41	MI	Authority to obtain professional financial analysis	-	Quackenbush	5	04:17 PM
5.42	MI	Send Unregistered Attendees rules change to ballot	-	Quackenbush	5	04:22 PM
5.43	MI	Approval of SEC Electronic Balloting rules change	-	Sherman	2	04:27 PM
5.44	MI	Approval of SEC Rules Titles rules change	-	Sherman	2	04:29 PM
5.45	MI	Send Executive Committee Title rules change to ballot	-	Sherman	2	04:31 PM
5.46	MI	Send Minimum Sponsor Ballot Durations rules change to ballot	-	Grow	2	04:33 PM
5.47			-			04:35 PM
5.48			-			04:35 PM
5.49			-			04:35 PM
5.50			-			04:35 PM
5.51			-			04:35 PM
5.52			-			04:35 PM
5.53			-			04:35 PM
5.54		Information Items	-			04:35 PM

5.55	II	Network Services	-	Heile	5	04:35 PM
5.56	II	802 Task Force update	-	Nikolich	5	04:40 PM
5.57	II	Survey Results	-	Quackenbush	2	04:45 PM
5.58	II	Interim meetings	-	Nikolich	2	04:47 PM
5.59	II	10GBASE-T Study Group Extension	-	Grow	2	04:49 PM
5.60	II	802.11n HT PAR update	-	Kerry	2	04:51 PM
5.61			-			04:53 PM
5.62			-			04:53 PM
5.63			-			04:53 PM
5.64			-			04:53 PM
5.65	II	802 News Bulletin	-	Klerer	10	04:53 PM
		ADJOURN SEC MEETING	-	Nikolich		06:00 PM
		ME - Motion, External		MI - Motion, Internal		
		DT- Discussion Topic		II - Information Item		

Motion to approve agenda.

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

Move/Second: Kerry/Stevenson

5 **12/0/1 Approved at 1:06 pm**

1.00		MEETING CALLED TO ORDER	-	Nikolich	1	01:00 PM
2.00	MI	APPROVE OR MODIFY AGENDA	-	Nikolich	5	01:01 PM
3.00	*		-		0	01:06 PM
4.00	II	TREASURER'S REPORT	-	Quackenbush	5	01:06 PM

5 The estimated number of attendees is based on the numbers provided by the working group chairs at the November meeting. This represents record attendance for 802. It was pointed out that it happened when we were all in the same hotel, too.

The deficit was compensated for by the surplus from Vancouver. This makes last year net zero, which is positive for the reserve.

IEEE Project 802
Estimated Statement of Operations
March 2003 Plenary Meeting
Dallas, TX (DFW)
As of March 14, 2003

Meeting Income	<i>Estimate</i>	<i>Budget</i>
Registrations	1,146	900
Registration income	366,450	281,250
Deadbeat collections	0	0
Bank interest	100	150
Other income	11,398	0
TOTAL Meeting Income	<u>377,948</u>	<u>281,400</u>
Meeting Expenses	<i>Estimate</i>	<i>Budget</i>
Audio Visual Rentals	8,000	10000
Audit	4,500	4508
Bank Charges	230	230
Copying	4,500	5500
Credit Card Discount	10,261	7875
Equipment Purchase	0	7000
Get IEEE 802 Contribution	85,950	67500
Insurance	3,000	3000
Meeting Administration	63,874	51775
Misc Expenses	6,000	500
Network	10,363	25000
Phone & Electrical	1,800	2100
Refreshments	90,000	67500
Shipping	4,000	3000
Social	33,777	27000
Supplies	400	168
TOTAL Meeting Expense	<u>326,654</u>	<u>282,656</u>
NET Meeting Income/Expense	<u>51,294</u>	<u>(1,256)</u>
Notes		
(1) Refreshments per registration	79	75
(2) Social per registration	29	30
Estimated Other Liabilities	0	
March 2003 Operating Reserve	174,046	
Projected July 2003 Operating Reserve	225,340	

4.01 II 802 Project Plan - Sherman 5 1:14 PM

No input has been received from the chairs. He will follow up with the chairs.

Category (* = consent agenda)		-			
5.00		IEEE Standards Board Items	-		
5.01	ME*	802.1D revision conditional approval to submit to sponsor ballot	-	Jeffree	5
5.02	ME*	802a conditional approval to submit to RevCom	-	Jeffree	5
5.03	ME*	802.3aj Maintenance #7 PAR to NESCOM	-	Grow	5
5.04	ME*	802.3ak 10GBase-CX PAR to NESCOM	-	Grow	5
5.05	ME*	802.11ma Maintenance PAR to NESCOM	-	Kerry	5
5.06	ME*	802.15.4 Draft 18 to RevCom	-	Heile	5
5.07	ME	802.15.3 conditional approval to submit Draft 17 to RevCom	-	Heile	10 1:17 PM

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Get file from BobH (.15-03/078r3)

Motion: To forward 802.15.3 draft 17 to RevCom under Procedure 10
Moved: Bob Heile/Stuart Kerry

5 **Passes: 13/0/0**

5.08	ME*	1802.16.3 PAR to NESCOM	-	Marks	5	
5.09	ME*	802.16.2a conditional approval to submit to RevCom	-	Marks	5	
5.10	ME*	1802.16.1 conditional approval to submit to RevCom	-	Marks	5	
5.11	ME*	802.3af conditional approval to RevCom	-	Grow	5	
5.12			-			
5.13		Executive Committee Study Groups & Working Groups	-			
5.14	MI	Send Working Group Membership rules change to ballot	-	Sherman	15	1:27PM

Proposed IEEE 802 LMSC Policy and Procedure Revision Ballot
on
WG Membership

From: Matthew Sherman
To: LMSC Executive Committee

Date: 3/14/2003

Duration: March 14, 2003

Purpose: Adjust membership rules so that membership in a new working group is established through study group attendance.

Rationale for proposed text:

The current IEEE 802 rules state that “All persons participating in the initial meeting of the Working Group become members of the Working Group.” This allows that anyone (even someone who has never attended 802 before) can walk in and become a member of a Working Group (WG) in the first meeting of this working group’s existence. In fact, such a person could even be elected to a position of responsibility such as Chair, even though they have had no prior experience in IEEE 802, and no familiarity with the rules or practices of IEEE 802, or the IEEE SA. The normal process requires that someone participate for at least 2 full sessions of 802 meetings before obtaining voting rights (on the 3rd session) let alone become chair of a working group and a voting Executive Committee member. The original wording of the Policies and Procedures (P&P) of IEEE 802 did not presume that the majority of WG membership would have no prior familiarity with IEEE 802. Rather it presumed that such individuals had for the most part been involved with 802, but were new to that WG as it had never existed before.

Given that it now is apparent that a large group of people with no prior experience in IEEE 802 could in fact walk in the first day of a WG’s existence and elect a set of officer who are unfamiliar with IEEE 802 and IEEE SA Policies and Procedures, it seems appropriate to develop a set rule that prohibits such behavior, as it is not anticipated by the current rules.

Proposed Text:

1.1.1.1 Establishment

Membership in a Working Group is established by participating in the meetings of the Working Group at two out of the last four Plenary sessions, and by (optionally) providing a letter of intent to the Chair of the Working Group. Participation in a meeting is defined as at least 75% presence at a meeting. Participation at a session (the meanings of “meeting” and “session” are as per Robert’s Rules) is defined as attending at least 75% of the meetings in a session. Membership starts at the third Plenary session attended by the participant. One duly constituted interim Working Group or task group meeting may be substituted for the Working Group meetings at one of the two Plenary sessions (See 5.1.3.5 Meetings and Participation).

For the establishment of a new working group, membership is established based on attendance of Study Group meetings and sessions in the Study Group leading to the creation of the new Working Group. In cases where the Study Group (SG) has not be in existence for at least 2 sessions, attendance at other IEEE 802 WG prior to the existence of the SG will count towards establishment of membership. In no case should a person who is not a member in good standing of IEEE 802 by the end of the first session

Deleted: All persons participating in the initial meeting of the Working Group become members of the Working Group. Thereafter, m

of establishment of a WG be considered to Chair a WG, as they are unlikely to have sufficient familiarity with the Policies and Procedures of IEEE 802, as well as the IEEE 802 Standards Association (IEEE-SA), and IEEE Computer Society.

Deleted: ¶

Attendees of the Working Group who have not achieved member status are known as observers. Liaisons are those designated individuals who provide liaison with other working groups or standards bodies. Although not a requirement for membership in the Working Group, participants are encouraged to join the IEEE, IEEE-SA, and the IEEE Computer Society. Membership in the IEEE SA will also allow participants to join the sponsor level ballot group. Working Group members shall participate in the consensus process in a manner consistent with their professional expert opinion as individuals, and not as organizational (industry or company) representatives.

Formatted: Body Text, Space After: 0 pt, Adjust space between Latin and Asian text, Adjust space between Asian text and numbers

Deleted: ¶

Deleted: IEEE Standards Association (

Deleted:)

No participation credit will be granted to any individual who has outstanding financial obligations to LMSC; retroactive credit for participation in meetings shall not be granted if payment is not made prior to the start of the next meeting. (Note: Assumes LMSC Treasurer personally contacts individual, verbally or in writing, but with some assurance that communication was, in fact, received, and in sufficient time to respond.)

Motion: to direct the vice chair to submit the working group membership rule change (with the 1.1.1.1 corrected to 5.1.3.1) to SEC email ballot.

Moved: Mat Sherman/Tony Jeffree

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There was discussion of the merits of the content of the rules change, including whether participation in a preceding study group provides preferred membership status in the resulting working group. The actual section that the rule change would modify is 5.1.3.1.

10 **The question is called:
14/0/0**

Passes: 13/1/0

15 **Moved: In view of the apparent deficiencies in the current rules for voting membership, the SEC resolves to adopt the rules for voting membership proposed by Mat Sherman, pending formal balloting and approval of the rules change.
Moved: Tony Jeffree/Stevenson**

Discussion:

20 This will not override the current rules.

This is a good idea to describe the intent of the SEC.

There is discomfort with this motion. Desire to continue with the current rules and declare a moratorium on

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Moved: to amend the motion by replacing “to adopt the rules for voting membership proposed by Mat Sherman, pending formal balloting and approval of the rules change” by “continue past practices with respect to established members of working groups and TAGs and declare a moratorium on votes taken by exercise of initial membership rules.”

Moved: Thompson/Marks

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The amendment is not necessary.

The deficiencies in the current rules are such that the proposed text in the rules change might rock the boat too much. As such, a measure such as this is needed

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The amendment perpetuates an absurd interpretation of the membership rules that permits an infinite number meetings with the possibility of no persons being able to gain membership and exercise their right to vote on motions in the working group.

Motion to amend fails: 1/7/6

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Further discussion on the main motion:

Motion: to suspend the rules in 5.1.3.1 that might interfere with the actions proposed in the main motion

Moved: Stevenson/Jeffree

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The chair interprets this motion to refer to only those rules that establish voting membership in 5.1.3.1.

Fails: 4/5/4

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Returning to the main motion:

Objection was stated that several working groups and TAGs have successfully started in the past couple years, without any difficulty determining initial membership, including 802.15, .16, .17, .18, and .19

Main motion fails: 5/6/2

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5.15 MI Activate 802.10 from hibernation

- Alonge

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2:12 PM

802.10 Security Issues & Un-hibernation of the WG

Ken Alonge
Chair 802.10

What Necessitates This Action?

- 5 Year review of 802.10 Standards:
 - IEEE Std 802.10-1998 Standard for Interoperable LAN/MAN Security (SILS)
 - IEEE Std 802.10a-1999 Overview and Architecture
 - IEEE Std 802.10c-1998 Key Management Protocol
- LinkSec Study Group identified additional security requirements not considered when 802.10 Standards were developed
- LinkSec SG and various MAC working groups leaning strongly toward SDE to provide required security services

Why 802.10?

- .10 was chartered to provide an interoperable security mechanism across all 802 MACs [STILL THE CASE]
- Have the capability to bring expertise together quickly to update our Standard (Both from previous .10 membership and LinkSec membership) [~10 AGREE TO SUPPORT]
- No learning curve [WE ARE THE DEVELOPERS]
- No other work items on our plate (SG has a lot to look at), so we can focus entirely on delivering the correct solution quickly to meet 802.3 EPON urgent needs [REVISION COMPLETE BY END OF 2003]
- Participate in LinkSec SG meetings [COOPERATIVE RELATIONSHIP]
 - Requirements updates from SG
 - Feedback to SG on .10 development activities and issues
- Revising SDE does not prevent SG from recommending other security tasks be performed under 802.1 (.1X Enhancements, Security Architecture Revision)

A PAR for the Revision of IEEE Std 802.10-1998

Purpose

The purpose of this PAR is to update the Secure Data Exchange (SDE) Protocol specified in IEEE Std 802.10-1998, to accommodate newly identified security requirements for all current 802 MACs.

Scope

The scope of this PAR is to make changes to the format and processing of SDE PDUs to:

- Accommodate replay protection.
- Authenticate Destination MAC address.
- Provide integrity protection of additional header fields, particularly the VLAN tag.

The current PDU format and processing will have to be modified to incorporate a sequence number; the DA will have to be included in the computation of the ICV, and; the VLAN tag (and any other required header fields) will be included in the computation of the ICV, if protection is required by VLAN tagging rules (which are to be specified).

In addition, an SDE profile shall be developed that specifies a single interoperable SDE configuration that must be supported by all vendors claiming conformance to the revised SDE specification.

NOTE: If un-hibernating 802.10 is approved, the PAR and 5 Criteria will be developed and circulated prior to the next 802 Plenary Meeting

Motion

To bring the 802.10 SILS Working Group out of hibernation in order to develop a new PAR for revising IEEE Std 802.10-1998 and to develop additional PARs, as necessary, to update its other Standards, in support of the security requirements of 802 MACs.

MOVED: Geoff Thompson

SECONDED: Bob Heile

APPROVE: _____

DISAPPROVE: _____

ABSTAIN: _____

Motion: To bring the 802.10 SILS working group out of hibernation in order to develop a new PAR for revising the IEEE Std 802.10-1998 and to develop additional PARs as necessary, to update its other Standards, in support of the security requirements of 802 MACs.

5 **Moved: Geoff Thompson/Bob Heile**

Sponsors for the .10 participants have committed to support the participants if the work resides in .10. There is not any determination of support if the work is done elsewhere.

10 This is a good example of when a working group is supposed to come out of hibernation, to revise their existing standards. The SEC is faced with the decision to support the revision of standards that have members willing to do the work, or to decide to kill the standard.

15 There is not any decision made by the LinkSec SG as to how their work will be done. There does not yet appear to be strong support for doing the LinkSec work in the 802.10 WG. Opinions differ on this point.

There are at least 10 individuals that have told Ken they would be willing to work in 802.10.

20 Sentiment was described that there is an asymmetry in the rule when a WG is activated, i.e., they only return to hibernation at their own request. It was also opined that there is no means for the individuals in the WG to obtain membership, including the chair. It was described

Motion: Moved to postpone indefinitely

Moved: Stevenson/Jeffree

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Passes: 5/4/5

5.16 MI Placement of Link Security Study Group - Sala 5 2:35 PM

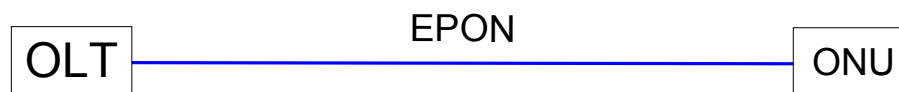
IEEE P802 Link Security Executive Committee Study Group

March Meeting Summary

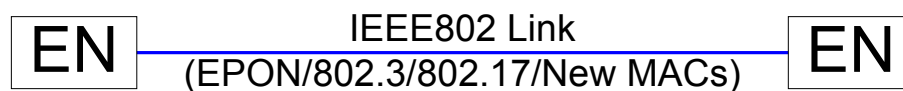
Dallas, March 10-12, 2003

Business Scenarios

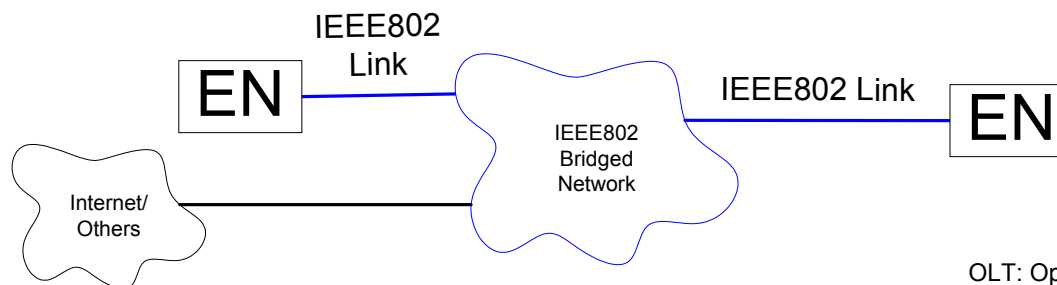
B1) EPON link scenario - Required (imminent need)



B2) Extension to other IEEE802 links/MACs - Required



B3) Layer 2 Network - Required



OLT: Optical Line Terminal (CO side)
ONU: Optical Network Unit (Client side)
EN: End Network Point
In blue: Scope of secure communication

Objectives

Select and/or specify:

- **A unified security architecture (high priority)**
- **A bridge-transparent secure data exchange mechanism (high priority)**
- **An authentication protocol (high priority)**
- **A key management protocol (high priority)**
- **A link security mechanism for 802.3 (including ptp, shared media, and PON) networks if additional MAC-specific functionality is needed (high priority)**
- **A discovery protocol (low priority)**

Business Level Requirements

- 1. Prevent theft of service**
- 2. Separate customers from each other**
- 3. Keep billing records**
- 4. Maintain consistency between media (unified security across media, ability to securely bridge across media, ability to handoff security associations)**
- 5. Specify a complete solution (by either selecting existing standards or defining new specifications)**

Study Group Charter

- **Evaluate link security architecture issues with the objective of identifying the broader scope that can be common to all MAC solutions**
- **Develop PAR(s) and 5 Criteria for a new standard for a security architecture and link security mechanisms that can be applied to IEEE 802 networks, with early emphasis on 802.3 networks**
- **Make a recommendation on the placement of the approved PAR(s) within a new or existing IEEE 802 working groups**

SG Vote: Favor 32 Against 0 Abstain 4

Next Interim Meeting

- **Ottawa, Canada, June 2-6, 2003**
- **Co-located with 802.1, 802.3 10GBASE-CX4 SG, 802.3 10GBASE-T SG**

The point in the agenda is reached to which the following original motion was postponed:

Motion: SEC resolves to place the Link Security SEC study group in 802.1

A friendly amendment with the following addition: "SEC resolves to continue the study group with the stated charter through the July Plenary."

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Passes: 13/0/1

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5.17	MI	802 Handoff Study Group	-	Marks	15	2:46 PM
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Proposal for Handoff Study Group

Output of

Call for Interest on 802 Handoff

11 March 2003

6-7:30 pm

Proposed Study Group

802 Executive Committee Study Group on Handoff
to:

- Consider the possibility of developing a standard specifying a common handoff framework applicable to 802 standards, wired and wireless
- Consider placement of work (in new working group or in 802.1)
- Authorized to draft a PAR

Study Group Objectives

- Define scope and requirements
 - May work with all MACs and PHYs
 - without unnecessary overhead
 - 802.x \Leftrightarrow 802.y (where x could equal y)
 - 802.x \Leftrightarrow non 802
 - consider how to address Authentication and Security
 - Within the PAR? Coordinated with Link Security group?
- Specify a framework that 802 MACs can adopt
 - MAC SAP messages
 - MIB entries
 - other?

Venues

- Meetings
 - May wireless interim in Singapore
 - July 802 Plenary
- Internet
 - Reflector
 - Web site

Notes from *Call for Interest on 802 Handoff* of 11 March 2003

Roger B. Marks

This document represents a set of notes regarding the Call for Interest on 802 Handoff of 11 March 2003.

Background

802 held a tutorial on “Handoff Mechanisms and their Role in IEEE 802 Wireless Standards” at the November 2002 plenary (11 November 2002, 6:30-9:30 pm). The tutorial was organized by Roger Marks and Brian Kiernan and co-sponsored by IEEE 802.16, 802.11, 802.15 . Approximately 250 attendees were reported. Seven people made presentations. The Tutorial Request Form is at http://iee802.org/16/tutorial/T80216-02_03.pdf. The slides are at http://iee802.org/16/tutorial/T80216-02_04.zip. An informal Call for Interest was held the next night for approximately 45 minutes, with about 50 people in attendance. Marks asked those interested to notify him by email so he could involve them in future email discussions.

Roger Marks reported at the SEC Closing Meeting that, based on the discussion, he would organize a formal Call for Interest for the March Plenary and that a likely result would be a request for an Executive Committee Study Group.

Marks initiated an 802 Handoff email reflector (stds-802-handoff) on 25 November 2002. He initially subscribed those who had requested to be on the list; others later joined voluntarily. The list archives are available <http://iee802.org/16/arc/802-handoff/thrd1.html>.

Marks used the handoff reflector to announce plans to formulate the March Call for Interest and to stimulate input to it. He filed a formal request for time at the March LMSC Plenary using the Tutorial Request Form.

Call for Interest of 11 March 2003

The Call for Interest on 802 Handoff was held 12 March, 6-7:30 pm at the Hyatt Regency DFW. Approximately 150 people attended.

Roger Marks, as Convener/Chair, opened the meeting, reviewing activities at the November 2002 802 session, and since.

David Johnston presented a document submitted in response to the Call for Interest announcement. He said that he preferred the term “Seamless Roaming” to “Handoff” in the title of a Study Group. He indicated a preference to locate the work in 802.1. He answered many questions.

Brian Kiernan took the podium and spoke in favor of an overall 802 interface that allows other networks, or other 802 networks, to know what to expect.

Mark Klerer took the podium and stated that it was too early to begin development of an “abstraction layer” because some Working Group projects were not well defined. He introduced Samir Kapoor, who presented some slides shown to 802.20 earlier in the day.

Richard Payne showed a diagram and spoke in favor of a simplicity in the handoff mechanism.

Marks showed a tentative proposal to open a Study Group, authored by Marks and Kiernan. He indicated several areas in which the proposal on the screen indicated alternative text as compared to

the version posted on the server before the meeting. The alternative text was that indicated by earlier presentations: namely, the optional replacement of "Handoff" with "Seamless Roaming" and the optional change from an Executive Committee Study Group to an 802.1 Study Group. Marks noted that he believed that 802.1 might be too busy with Link Security to handle a new Study Group at this time, pointing out that the tentative proposal suggested that the Study Group be chartered to consider whether eventual standardization work should be placed in 802.1.

Marks suggested that the questionable issues should be decided by straw poll, after which a vote be held on submitting the result as a whole.

Klerer dissented with this plan, requesting that a straw poll be held first on the general question of proceeding with a request for a Study Group.

Marks agreed to Klerer's request and conducted the straw poll on the group's general interest in proceeding with a Study Group request. The result was 47 yes, 19 no. On this basis, the straw polls continued.

It was suggested that "Seamless Roaming" be replaced by "Roaming" as a candidate title keyword. No objections were raised. It was suggested that "Interworking" be added as a candidate title keyword. A straw poll was held, in which participants were invited to vote more than once. The results were:

"Handoff":	36
"Roaming":	7
"Interworking":	27

On this basis, "Handoff" was selected.

A straw poll was held on the Study Group placement. The result was ExCom: 25, 802.1: 12. On this basis, the proposal was structured for an ExCom Study Group.

A straw poll was held on submitting the resulting Study Group proposal. The result was 44 yes, 17 no.

Paul Nicolich asked whether a proposal would be made to the SEC to form a Study Group. Mr. Marks answered in the affirmative and asked for participants willing to help organize it. Five people volunteered: Hani Elgebaly, David Johnston, Brian Kiernan, Roger Marks, and TK Tan. Marks asked that group to meet after the completion of the Call for Interest Session, which ended at 7:30 pm

Followup

Elgebaly, Johnston, Kiernan, Marks, and Tan met immediately after the Call for Interest to discuss plans. Johnston volunteered to chair the Study Group if this would be of assistance, and if his sponsor was agreeable. The others volunteered to participate as required. Johnson later determined that his sponsor would support him as a Chair, if so appointed.

**Motion: To create the 802 Executive Committee Study Group on Handoff and appoint David Johnston as Chair.
Moved: Roger Marks/Carl Stevenson**

5 A question was asked if there is an intention to include handoff to systems such as 3G cellular systems. The response is that this will be discussed.

Passes: 14/0/0

10

5.18 MI Confirm election of 802.19 officers - Lansford 2 2:56 PM

Project: IEEE P802.19 Coexistence TAG

Submission Title: March 2003 SEC Meeting Closing Summary

Date Submitted: 14 March, 2003

Source: Jim Lansford, Company Mobilian Corporation

Address 7431 NW Evergreen Pkwy, Hillsboro, OR 97124

Voice:+1 405 377 6170, FAX: +1 425 671 6099, E-Mail: jim.lansford@mobilian.com

Re:

Abstract: Meeting document for Dallas plenary

Purpose: For discussion

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

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

802.19 March SEC Closing Summary

Documents on \\802-18-19\submissions\802-19\Mar03

Jim Lansford

Chair, 802.19 Coexistence TAG

<http://ieee802.org/19>

jim.lansford@ieee.org

+1 405 377 6170

Results vs Plans for Dallas

- **Officer elections**
 - **Jim Lansford elected as chair (by acclamation, 3 voters)**
- **Vote on Charter and Operating Rules**
 - **Documents 03/001r2 and 03/002/r2; Given small number of voters present, tabled by acclamation to circulate/vote via reflector**
- **Presentation in 802.15.3a**
 - **802.19 chair and 802.15.3a proposal manager will work together to create summary document for review in May**
 - **Presentation by Pulse~Link on UWB discovery protocol**
- **Work on Coexistence Guideline document**
 - **Document 03/007; Ad-hoc meeting and conference calls will continue work**
- **Discussion of further upcoming work**
 - **Appendix for 802.15.2 for 802.11g: tabled**
 - **TIA cordless phone coexistence**
 - **Discussion with Steve Whitsell, TR-41 chair; interest in forming ad-hoc group to propose spectrum etiquette**
 - **Spectrum etiquette**
 - **General interest (see above) – will work jointly with 802.18**
 - **Other: Presentation to 802.11 HTSG on proposed coex process**

Objectives for Singapore

- Vote by email on Charter/Operating Rules
- Joint session with 802.15.3a
 - Review/approve coexistence summary of proposals
- Joint session with 802.18 on Spectrum Etiquette
- Joint session with 802.11n
 - Selection criteria
- Working session on Guideline
 - Goal for completion in July

Motion

- Moved to confirm Jim Lansford as Chair of 802.19
- Mover: Bob Heile
- Second: Stuart Kerry
- Approve 12 Do not approve 0 Abstain 0

Backup

Proposed Charter (1)

- IEEE 802 Coexistence Technical Advisory Group (TAG) is responsible to recommend and maintain the IEEE 802 policy regarding coexistence among implementations of IEEE 802 and other standards.
- To offer, when required, assessments to the SEC regarding the degree to which standards developers have conformed to coexistence criteria.
- To develop coexistence documentation of interest to the technical community outside 802.
- To assist, when requested by a Working Group running a ballot, with evaluation of proposals during the downselection process.

Proposed Charter (2)

- To assist, when requested by a Working Group running a ballot, with the resolution of comments related to coexistence.
- To issue reports and recommendations to the SEC representing a balanced viewpoint regarding impending SEC actions in which coexistence may be a concern.
 - Approved per COEX-TAG, relevant Working Group, and LMSC rules. (see LMSC Rules, Procedures 3 and 4.)
- To develop and maintain IEEE Standards (either Recommended Practices or Guides) to foster coexistence within the communications industry, provided that such work is done under an approved PAR.
- The Coexistence TAG may recommend additional activities consistent with its Purpose Statement, subject to approval by the SEC.

Operating Rules Discussion

- The original thoughts
- Where we go from here
- Formal documentation

Original Concepts

- TAG reviews PAR/5 Criteria
 - Includes coexistence language
 - Stresses need for coexistence as an evaluation criterion
 - Coexistence Guideline document will have more details
- TAG Reviews Draft at letter ballot
 - Group solicits comments across 802.19 voters
 - Can be from all working groups
 - 802.19 will vote to endorse or not endorse a draft, with comments
 - Coexistence vote and comments delivered to SEC at or before Sponsor Ballot

Modifications to procedure

- 802.19 appears to be also a facilitator
 - Joint sessions with WG/TG to air specific coexistence presentations
 - Conference calls to help converge to selection criteria
 - Ad hoc meetings to help identify and resolve issues

Formal Documentation

- See document 03/002
- Modeled after 802.3 rules
 - Uses “standard” LMSC template
 - Modified for TAG
 - TAG cannot write standards (per LMSC rules), only “Guidelines” and “Recommended Practices”
- Must also be ratified by SEC

Coexistence Guide Document

- Document 03/007
- Detailed listing of policies and procedures for 802.19
- Need to begin work completing this document
- Completion by July

Motion: to confirm Jim Lansford as chair of 802.19.
Moved: Jim Lansford/Stuart Kerry

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

5.19 MI Confirm election of 802.20 officers - Klerer 15 3:02 PM

IEEE 802.20

Report of Session #1

Mark Klerer

March 14, 2003

Successful Launch of Working Group

- Record Attendance
 - 237 individuals attended at least one meeting of the session (Compared to 61 in January 2003 and approximately 50-60 people at the ECSG meetings.)
 - 185 individuals received voting rights.
 - 83 Corporation and 35+ consultants

Broad Interest Across Wireless Industry

Interest measured by number of Members

- **Major 3G Companies**

- DoCoMo (6 US + 2 Japan)
- Ericsson (1)
- ETRI (6)
- Kyocera (3)
- LG Electronics (6)
- Lucent (4)
- Motorola (7)
- Nokia (3)
- Nortel (5)
- Qualcomm (8)
- Samsung (6)

- **Emerging Wireless Access Technologies (802.16, 802.20)**

- Airvana (1)
- Alvarion (3)
- ArrayComm (9)
- Broadcom (2)
- Flarion (7)
- Intel (6)
- Interdigital (1)
- Navini (3)
- Runcom (1)
- Wi-LAN (3)

Broad Interest Across Wireless Industry

Interest measured by number of members gaining voting rights

- **Service Providers**

- France Telecom
- Knology (1)
- KT (1)
- Nextel (3)
- NTT (1)
- Sprint (3)
- TeliaSonera (1)

- **User Community**

- Bombardier (1)
- Delphi (1)
- Fujitsu (2)
- NEC (1)
- Northrop Grumman (2)
- Panasonic (1)
- Sony (3)
- Texas Instruments (1)
- Toshiba (1)
- Toyota ITC

- **Knowledge Industry (Consultants)**

- Bussey Consulting (4)
- CTCI Group (2)
- Khademi Consulting (1)
- Ladcomm (2)
- TMG (3)
- + ~ 21 Independent Consultants

Election Results

Motion: To affirm the elections of the following officers:

- Working Group Chair – Jerry Upton
- Procedural Vice Chair – Gang Wu
- Liaison Vice Chair - Eshwar Pittampalli

Name Change

- Decision on name change deferred

**Moved: To confirm the election of Jerry Upton as chair, Gang Wu and Eshwar Pittampalli as vice chairs of 802.20.
Moved: Mark Klerer/Roger Marks**

5 Jerry Upton was invited to the podium to introduce himself and describe his qualifications.

David Trinkwon, of Medley Systems, Ltd, alleged that there were improprieties in the election process for 802.20.

10 Sentiment was expressed that there was impropriety in the voting on the working group officers and that the results not be endorsed.

It was pointed out that there was broad interest by companies in both networking and 3G/service provider markets.

15 It was pointed out that the working group did not bring any allegation of impropriety in the conduct of the vote.

It was pointed out that our rules for gaining membership at the formation of a working group are subject to several, widely different, interpretations. Many of which were expressed by various members of the SEC.

20 It is not surprising that there are a large number of people appearing for the first time at the first meeting of a working group, since our rules grant membership to those that do show up at the initial meeting.

Fails: 2/4/8

25 Paul appointed Geoff Thompson as the interim working group chair. Geoff accepted, with the condition that his company supports him in this position.

Motion: to affirm Geoff Thompson as the interim chair of 802.20, with the objective of taking new nominations for the officers of 802.20 and conducting new elections.

30 **Moved: Tony Jeffree/Mat Sherman**

It was expressed that there is nothing here that clarifies the election process that will not result in returning to this exact point at the next meeting. There was also a concern that the location of the election was not stated, since the interim meeting is scheduled for Singapore.

35 There was a great deal of discussion of the voting situation and what might be needed to rectify it to the degree that it would be acceptable to the SEC. No conclusive result was determined.

40 Paul asked that on the email reflector, the SEC provide clear guidance within 30 days on what the SEC requires with respect to the 802.20 officers, for the election to be considered valid.

Passes: 6/4/4

5.20 MI Establish 802.15.1 revision study group - Heile 2 4:04 PM

Motion: to affirm the establishment of the 802.15.1a study group to develop a PAR for 802.15.1a.
Moved: Bob Heile/Jim Lansford

5 **Passes: 12/0/1**

5.21		Break	-		15	4:11 PM
5.22		IEEE-SA Items	-			
5.23	II	Get IEEE 802 Program update	-	Walker	10	4:19 PM

Jerry presented the results of the budgeting exercise for the 2004 Get IEEE 802 project.

10 It was pointed out that making drafts available for sale easily, quickly, and visibly, would go a long way to increasing draft sales. Simply copying Jerry on ballot announcements (even WG ballot announcements) would be sufficient to help this process.

5.24	MI	Approval of 2004 Get IEEE 802 budget	-	Thompson	5	4:25 PM
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Motion: That the IEEE 802 SEC accept the 2004 Get IEEE 802 program budget as presented.

15 **Moved: Geoff Thompson/Bill Quackenbush**

Passes: 10/0/0

5.25	ME	Clarification of SA recirculation ballot rule	-	Sherman	5	4:32 PM
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Rules for Recirculation Ballots

Authors:

Matthew Sherman
2nd Vice Chair, IEEE 802
AT&T Labs - Research
mjsherman@att.com

Stuart J. Kerry
Chair, IEEE 802.11
Philips Semiconductors, Inc.
stuart.kerry@philips.com

Date: March 9th, 2003

- Next three slides extracted from IEEE 802.11-03/130
 - Provided by John Kowalski, Sharp Labs

802.11 Operating Rules

- NO explicit requirement for recirculation ballot
- However, (Section 1) “The 802.11 WG operates under the Operating rules of IEEE Project 802, LAN/MAN Standards Committee ([ref. \[rules3\]](#)) and the hierarchy of rules under which IEEE Project 802 operates.”

Relevant text from 802 Operating Rules

“The Working Group Chair determines if and how negative votes in an otherwise affirmative letter ballot are to be resolved. Normally, the Working Group meets to resolve the negatives or assigns the task to a ballot resolution group. There is a recirculation requirement. For guidance on the recirculation process see Section 5.4.3.2 Resolution of comments, objections, and negative votes in the IEEE-SA Standards Board Operations Manual.”

And, from Section 5.4.3.2 in the IEEE-SA Standards Board Operations Manual...

(<http://standards.ieee.org/guides/opman/sect5.html#5.4>)

“Further resolution efforts, including additional recirculation ballots, may be required if additional negative votes (with new technical comments) result. However, once 75% approval has been achieved, the IEEE has an obligation to the majority to review and publish the standard quickly. Therefore, once 75% approval has been achieved, the IEEE requirements for consensus have been met. Efforts to resolve negative votes may continue for a brief period; however, should such resolution not be possible in a timely manner, the Sponsor should forward the submittal to RevCom.”

Problems with existing Recirc. Rules

- Not clear how to treat recirculated drafts based on recirc. results
 - Open for interpretation
- 802 Rules for WG recirculations reference Sponsor recirculation rules as “Guidance” only
 - Okay, but perhaps should be more than guidance
 - Or perhaps separate rules for WG recirc

Possible Interpretations

- Recirculation passes with higher Approval level than last ballot
 - Replace prior approved draft with new draft
- New recirculation higher than 75% but less approval than last ballot
 - Replace prior approved draft with new draft
 - Fall back to prior approved draft
 - Fall back only in draft sections where consensus was lost
- Recirculation falls below 75% approval
 - Fall back to last draft
 - Start from scratch

Motion: That the 802 LMSC chair provide the material in this presentation to ProCom at the next possible Standards Board Meeting and request a clarification in the Standards Board Operation Manual accordingly.

Moved: Mat Sherman/Stuart Kerry

5

Passes: 11/0/1

5.26		<table border="1"><tr><td>LMSC Liaisons & External Interface</td></tr></table>	LMSC Liaisons & External Interface	-			03:50 PM
LMSC Liaisons & External Interface							
5.27	ME	ITU-T-SG15 Liaison reply	-	Takefman	2	4:29 PM	

Motion: to approve and forward the liaison letter (ITU-TSG15-reply04.doc) to ITU-T SG15.

10

Moved: Mike Takefman/Carl Stevenson

Passes: 9/0/3

5.28	ME	Unlicensed Spectrum Bills	-	Stevenson	2	4:37 PM
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IEEE 802

Local and Metropolitan Area Network Standards Committee
Homepage at <http://ieee802.org/>

March 31, 2003

To: <[name of Senator or Congressman](#)>
<[address](#)>

Reply to: Carl R. Stevenson
Chair, IEEE 802.18 Radio Regulatory
Technical Advisory Group
4991 Shimerville Road
Emmaus, PA 18049
phone: (610) 965-8799
mobile: (610) 570-6168
e-mail: carl.stevenson@ieee.org

From: Paul Nikolich,
Chair, IEEE Project 802
18 Bishops Lane
Lynnfield, MA 01940
(857) 205-0050
p.nikolich@ieee.org

Dear <[name of Senator or Congressman](#)>

IEEE Project 802, the Local and Metropolitan Network Standards Committee ("IEEE 802"), would like to thank you for your leadership in introducing <[insert name of bill, as appropriate to addressee](#)>. We strongly endorse this important legislation and wish you success in moving it forward in the <[Senate or House, as appropriate](#)>. We would be happy to answer any questions that you or your staff may have regarding the IEEE 802 wireless networking standards that define interoperability standards for wireless networking.

We believe that <[insert name of bill, as appropriate to addressee](#)> will help secure much-needed new spectrum for license-exempt uses such as systems and devices built to comply with the IEEE 802 wireless networking standards.

As you know, recently, an agreement on the interference protection requirements of incumbent government users was reached between industry and government, which should facilitate the ultimate passage of your bill.

IEEE 802 wireless networking standards have provided enabling platforms that are already promoting tremendous innovation and growth in equipment, applications, and services in both the consumer and business markets. New applications are appearing all the time, from home applications such as network-enabled video camcorders to business applications such as wireless Internet access, "hotspots" in airports and coffee shops, and many others. IEEE 802-based wireless networking is a thriving sector of the telecom and high-tech market. For its full potential to be fulfilled, the additional, globally harmonized spectrum identified in this legislation must be made available, consistent of course with interference protection for incumbent government users.

We look forward to working with you and all interested parties now and in the future to enable wireless broadband networking technologies to reach their full potential in providing important, productivity-enhancing services to business, education, the health care community, and the general public and spurring further growth in our economy.

Sincerely,

/s/
Paul Nikolich
Chair, IEEE 802
18 Bishops Lane
Lynnfield, MA 01940
(857) 205-0050
p.nikolich@ieee.org

/s/
Carl R. Stevenson
Chair, IEEE 802.18 Radio Regulatory Technical Advisory Group
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(610) 965-8799
carl.stevenson@ieee.org

Motion: To approve document 18-03-014r0_Letter_re_Unlicensed_Spectrum_Bills.doc as an 802 document, authorizing the Chair of 802.18 to do necessary editorial and formatting changes and, using the document as a “template,” create personalized versions and deliver those letters to the appropriate Senators and Representatives regarding S-159 and HR-363.

5

Informative: This document was approved unanimously by 802.18, 802.11, 802.15, and 802.16 with the same editorial and filing directions to the Chair.

10 **Moved: Carl Stevenson/Stuart Kerry**

Passes: 11/0/0

5.29 ME Canadian Radiometer - Stevenson 2 4:41 PM

NOTE: This document is intended to be input to the US WRC preparatory process in response to requests from the US Government for comments on the referenced submission to Working Party 4A from the administration of Canada.

COMMENTS ON "THE MEASUREMENT OF THE AGGREGATE INTERFERENCE INTO NON-GSO SATELLITE RECEIVERS FROM RLAN DEVICES IN THE 5150-5250 MHZ BAND" (ITU-R DOCUMENT 4A/CAN-1-E)

After consultation with space science experts, the IEEE 802 RR-TAG¹ has been lead to believe that satellite receiver determination of aggregate RLAN signal levels would be difficult if not impossible due to the other manmade and natural signal variations. There is concern that the proposed radiometric measurement method would have greater variations due to other signals than the aggregated RLAN energy, and that the proposal has not suggested any method of differentiating the RLANs from other signal sources. The measurement system to determine these interference levels would be prohibitively expensive and is not currently contained in any existing MSS satellites. The common approach of utilizing long integration times to enhance RMS sensitivity of measurements is not feasible in a rapidly orbiting platform. Further, determination of RLAN sites / locations by these measurements appear to be doubtful /unlikely making the utility questionable.

We have some concerns with the proposed measurement system statements including:

"If such a Dicke radio-astronomy radiometer receiver were included in the satellite, the error in measurement of the external noise could be measured with the accuracy indicated. . ."

- Radio astronomy measurements take advantage of large integration times to enhance the RMS sensitivity of the measurements, which are made by comparisons between a measurement made in a pointing direction with no source of interference, and another measurement made towards the radio source of interest. Inter alia, the separation in time between two measurements is small, to ensure the conditions of measurements are safeguarded to the greatest extent.
- The separation in time between two measurements in the method proposed by the Canadian document is quite long, perhaps 5 - 6 hours...
- A RA receiver is situated on Earth, generally fixed, and in a monitored environment (for example there may be exclusion zones around a RA site to avoid interference phenomenon). Here, the receiver is on board a LEO-D space-craft, orbiting quite rapidly around the Earth, and in an environment that may not be so satisfactorily monitored
- Since the integration time is linked to the required "accuracy", and the "Dicke receiver" is on board spacecrafts of a specific MSS constellation (LEO-D), the integration time together with the spacecraft location during the measurement, will determine the area on Earth in visibility of the satellite (which is also the "radio-source"('s) transmission level measured). So, if we discuss the assumptions (accuracy and requirement), we may need to increase the integration time to overcome a greater uncertainty in the forecasted accuracy, and also come at the end, to render any measurement impracticable (if the integration time is longer, then the measurements will correspond to a very large area in

¹ This document represents the views of the IEEE 802.18 RR-TAG. It does not necessarily represent the views of the IEEE as a whole or the IEEE Standards Association as a whole.

visibility of the satellite, and this would preclude even more the possibility to identify the source of interference).

"Systematic errors in that measurement of aggregate RLAN interference would be:

i. ***The background warm earth noise temperature may not be the same ... the differences in noise temperature in different parts of the Earth would be unavoidable as a second-order error in estimating aggregate RLAN interference."***

- Water surfaces with a much lower brightness temperature than land is present (say, between 120-160 K). This obviously complicates the issue dramatically. Also man-made noise from cities will be picked up; so with the described configuration, the desired unwanted signal can NEVER be singled out.
- The measurement involves the noise of the Earth, including Earth temperature and interference from sets of RLANs that are in the field of view of the space-craft antenna: the Earth temperature again is varying over day and seasons from years to years (following quite difficult to assess statistical/prediction laws).... thus making difficult an impairment between several sources of noise.

"This 5 GHz feeder-link path of the LEO-D system has an effective 549.5 • K uplink system noise temperature, with a thermal noise density of -201.2 dBW/Hz.

Thus the LEO-D system has a T_{sys} value (see Equation (1) above), of 549.5 • K, not including the relatively low level RLAN interference, and a B of $1.65 \cdot 10^7$ Hz if one of the 16.5 MHz wide transponders is used to estimate the value of the RLAN interference."

"The aggregate interference from RLAN transmissions in the beam of the 5 GHz satellite antenna is expected to be 1 % to 3 % of the uplink thermal and background noise of the uplink. The objective is to be able to measure the magnitude of that aggregate RLAN interference with high accuracy."

- For a single indoor RLAN the received power at the satellite will be around -190 dBW/channel.
- If we consider a number of 10000 RLANs active at the same time in a square of 100x100 Km, we get an aggregate RLAN interference of around -150 dBW/channel, which corresponds to a 'delta' in the received brightness temperature of the radiometer of around 5 Kelvin. But the use of this low gain satellite antenna would give a huge instantaneous field of view of the Earth (basically the entire hemisphere).["...for example at a central North America location such as over Colorado USA, where it would receive RLAN interference from Canada, CONUS, Mexico, and parts of Central America and the Caribbean."]
- A satellite flying at an altitude of 800 km, the antenna will cover an area describing a circle with a radius of around 3000km, which is identical to an area of 28 million square kilometer!!! One hotspot over land (290 K) in the satellite footprint, we are thus looking at an increase of the brightness temperature of 0.001 K!! It is acknowledged that several

hotspots may exist in the footprint (100s, maybe 1000s), but even then the increase due to interference will never be higher than, say, 0.1 K.

- To measure such small differences accurately, one would require a very stable, high accuracy, incredibly expensive radiometer.

"In this case a 1 % rms error in the measurement can be achieved with a Dicke receiver with an 0.67 or 2/3 second integration time. Thus a series of measurements can be taken as the satellite travels through its low-Earth orbit, one measurement being taken each 2/3 second."

- Radio astronomy measurements take advantage of large integration times to enhance the rms sensitivity of the measurements, which are made by comparisons between a measurement made in a pointing direction with no source of interference, and another measurement made towards the radio source of interest. Inter alia, the separation in time between two measurements is small, to ensure the conditions of measurements are safeguarded to the greatest extent.
- In RA measurements the separation in time between two measurements is small, to ensure the conditions of measurements are safeguarded to the greatest extent. In the Canadian proposal the separation in time between two measurements is quite long, several hours [perhaps 5 - 6 hours]
- The RA receiver is situated on Earth, generally fixed, and in a monitored environment (for example there may be exclusion zones around a RA site to avoid interference phenomenon's). Here, the receiver is on board a LEO-D space-craft, orbiting quite rapidly around the Earth, and in an environment that may not be so satisfactorily monitored

"A first-order estimate of the RLAN aggregate interference into the satellite can be determined by subtracting the external noise measurement at a remote location without RLAN interference, such as the measurement when the satellite is over the southern Indian Ocean, from the estimate at the location of interest, for example at a central North America location such as over Colorado USA, where it would receive RLAN interference from Canada, CONUS, Mexico, and parts of Central America and the Caribbean. The difference in the two measurements would be an estimate of the aggregate RLAN interference from that area."

- Within the footprint also water surfaces with a much lower brightness temperature than land is present (say, between 120-160 K). This obviously complicates the issue dramatically.
- Another issue is solar illumination. At C-band frequencies, this plays a major role. Both direct (backlobe reception) and indirect illumination (reflection from the Earth's surface) can make a huge contribution to the observed brightness temperature.
- Man-made noise from cities and naturally occurring noise sources will be picked up rendering it impossible to differentiate between the contribution from man-made and natural noise sources and the aggregate RLAN energy that this method purports to measure.
- One would need to fly another radiometer-channel with it (equally stable and in a 'clean' frequency band) to at least remove the influence of the above described physical phenomena. To have another measurement with the same frequency at another location

on the Earth (as described in the Canadian document), is completely irrelevant to the desired accuracy.

CONCLUSIONS

In summary, one would need to fly a multi-channel state-of-the-art radiometer with a dedicated high-gain antenna and very accurate calibration capabilities to accomplish this. This is clearly not a simple addition of a 'little (cheap) box'.

- The difficulty of performing accurate radiometry from space should not be oversimplified.
- The ability to identify the location of any noise contributions from RLAN deployments with a low gain antenna is dubious.
- The very weak signal variations needed to be measured will be masked by multiple effects, both man-made and naturally occurring, rendering it impossible to identify the contribution of the aggregate RLAN energy that this method purports to measure.
- This equipment is currently not part of the existing MSS payload, and might be prohibitively expensive in space, weight, and dollars, especially in light of the concerns as to the efficacy of these measurement techniques.
- Given the attempted measurement of exceedingly small noise differences, and the measurement uncertainties involved, the proposed methodology is akin to purporting to be able to detect a whispered conversation at a football game from the Goodyear blimp high overhead.

/s/

Carl R. Stevenson
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4991 Shimerville Road
Emmaus, PA 18049
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carl.stevenson@ieee.org

5 **Motion: To approve document 18-03-019r0_Canadian_Radiometer_Cmts.doc as an 802 document, authorizing the Chair of 802.18 to do necessary editorial and formatting changes, and to submit the document in a timely fashion to the US WRC preparatory process.**

Informative: This document was approved unanimously by 802.18 with the same editorial, formatting, and submission directions to the Chair. Also, this input was requested informally by USG.

10

Moved: Carl Stevenson/Mat Sherman

Passes: 11/0/1

15

5.30 ME Reply to FCC petition for rule making 10666 - Stevenson 2 4:39 PM

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In re Petition of)
)
NATIONAL TRANSLATOR)
ASSOCIATION)
Westminster, Colorado)
) RM-10666
For Amendment of Part 74 of the)
Commission’s Rules to Add a Rural)
Translator Service)

To: The Commission

Via the ECFS

OPPOSITION TO PETITION FOR RULEMAKING

IEEE 802¹ hereby respectfully offers its Opposition to the Petition for Rulemaking (the “Petition”) in the above-captioned Proceeding.²

The members of the IEEE 802 that participate in the IEEE 802 standards process are interested parties in this proceeding. IEEE 802, as a leading consensus-based industry standards body, produces standards for wireless networking devices, including wireless local area networks (“WLANs”), wireless personal area networks (“WPANs”), and wireless metropolitan area networks (“Wireless MANs”).

IEEE 802 is an interested party in this Proceeding and we appreciate the opportunity to provide these comments to the Commission.

¹ The IEEE Local and Metropolitan Area Networks Standards Committee (“IEEE 802” or the “LMSC”)

² This document represents the views of the IEEE 802. It does not necessarily represent the views of the IEEE as a whole or the IEEE Standards Association as a whole.

INTRODUCTION

1. In its Petition in the instant Proceeding, the National Translator Association (“Petitioner”) makes a number of allegations/representations with which we respectfully disagree:

- That “... rural America has been shortchanged for more than twenty years by a Commission policy of not promoting the delivery of broadcast services to those rural areas.”
- That the Commission’s Rules are, by implication, flawed in that they “... fail to differentiate among categories of auxiliary stations based on the nature of the service proposed.”
- That “The Commission’s policies do not allow for the grant, construction, and operation of sufficient translator stations to serve the needs of rural areas.”
- That “Cable cannot provide service due the prohibitive cost of wiring sparsely populated areas, and DBS services cannot provide either high definition television or full ‘local into local’ service due to spectrum limitations.”
- That “Rural areas are *entitled* (emphasis added) to the same level of service as urban areas.”
- (Further) that (by implication) the universal provision of “... free over-the-air broadcast television” is in some sense an “inalienable right.”

(and)

- That “The only way for that service to be provided is by integrating the use of translators directly into the Commission’s policy process.”

2. We will, as the first basis for our Opposition to the Petition, address each of these allegations in the following sections of this document.

3. Additionally, we will, as the second basis of our Opposition to the Petition, raise the issue of whether a dramatic proliferation of translator stations, as Petitioner seems to desire, is, in fact, the best and highest use of spectrum in light of the confluence of the facts that a) other viable options for program delivery exist and b) there are other potential uses of the spectrum in question that might more broadly serve the public interest.

**RURAL AMERICA HAS NOT BEEN “SHORTCHANGED” ... “BY A COMMISSION
POLICY OF NOT PROMOTING THE DELIVERY OF BROADCAST SERVICES ...”
(TO RURAL AREAS)**

4. Petitioner states that the Commission’s policies “shortchange rural America” in that they have not in some way favored rural areas, and proposes that a new “Rural Translator Service” be created through an amendment of Part 74 of the Commission’s Rules.
5. Further, Petitioner suggests that “rural America” should receive preferential treatment in the processing of applications for translator stations under the proposed new service and complains (in the section of the Petition entitled “Background”) about delays in the processing and grant of translator stations, due to the Commission’s practice of using “filing windows.”
6. We do not find Petitioner’s arguments to be at all convincing. Filing windows, or scheduled auctions, have been applied by the Commission to many services that the Commission regulates, and provide a fair and uniform way of providing notice to all potential licensees, enabling all interested parties to apply for licenses on equal terms.
7. In fact, to single out rural translators for expedited processing, as Petitioner requests, would amount to unequal treatment, relative to other classes of prospective licensees, and, thus would appear to violate the principle of “equal protection under the law,” setting an unfair and dangerous precedent.
8. For these, and other reasons elaborated below, we believe the Commission should reject Petitioner’s requests for the establishment of a special “Rural Translator Service” and to provide preferential treatment thereto.

THE PETITIONER HAS NOT SUBSTANTIATED THE PETITION'S CLAIMS THAT THE COMMISSION'S POLICIES PREVENT "SUFFICIENT TRANSLATORS TO SERVE THE NEEDS OF RURAL AREAS" OR THAT TRANSLATORS ARE, IN FACT, THE ONLY PRACTICAL, OR EVEN THE BEST, WAY TO SERVE RURAL AREAS

9. Petitioner argues for a scenario where, for the purposes of the "Rural Translator Service," a "rural area" would be defined as an area in which residents are unable to receive at least a grade B signal from four television stations (over-the-air reception is presumed to be the intent, though Petitioner does not explicitly state that in this section of the Petition).

10. Petitioner suggests that, for those areas outside the predicted grade B contours of four television stations, that no service be presumed, and that for areas within the predicted grade B contours, applicants demonstrate through the "Longley Rice Terrain Dependant Population Count" described in OET 69 that actual service is not available.

11. Petitioner argues that "the FCC's concern should be people, not area," and we agree with that basic premise, but find Petitioner's methodology for "justifying" the need for the "relief" requested in the Petition to be fundamentally flawed, for reasons that we will elaborate in the following sections.

12. The Petitioner's claims that neither cable nor DBS can provide adequate service to rural areas fly in the face of the facts and petitioner's "analysis" of the number of households "served" by translators significantly exaggerates the importance of translators

13. Petitioner asserts that "Cable and Satellite services are not effective substitutes for over-the-air service," and that translator stations are the only viable (or at least the best, in Petitioner's view) means of serving rural areas - assertions that Petitioner then attempts to "prove" through some rather "creative" arguments and juggling of numbers.

14. Petitioner appears to seek to, effectively, have the Commission render a determination that the threshold for “acceptable service” in rural areas would be defined as “able to receive over-the-air signals from [at least] all six [major broadcast] networks.”³

15. We would point out that readily available, alternate means of delivering programming content are capable of providing, and routinely do provide, a much larger variety of programming content than any reasonable deployment of translators could possibly provide, even if such a deployment were justifiable and represented the “best and highest use” of spectrum, which we dispute.

16. Additionally, alternate, readily available, means of delivering programming content are also capable of providing a variety of other services that translator stations are not capable of providing.

17. Thus, if the Commission were to accept Petitioner’s definition of “adequate service,” and Petitioner’s incorrect assertion that translator stations are the best, or only practical, means of delivering that service, the Commission would *then*, arguably, be shortchanging the vast majority of rural America (as well as adopting a policy that would result in inefficient use of the spectrum in question).

18. In “Appendix A” of the Petition, Petitioner presents a rather superficially impressive study⁴ (“the Study”) that purports to demonstrate the number of households “served” and “unserved” by both primary TV broadcast stations and translator stations for each of the major networks.

³ *Paraphrased from* the Petition, at the top of page 11.

⁴ *See* the Petition, Appendix A, “*Decisionmark Study of Households Served/Unserved*”, January 2002

19. We believe that the Study’s methodology, and the conclusions that it purports to support, are fundamentally flawed for the following reasons:

- First, the Study starts with a Longley Rice prediction of the grade B signal coverage area of both primary stations and translator stations.⁵
- Next, the Study correlates the coverage area obtained above with demographic data in an attempt to determine the number of “served” and “unserved” households based on the predicted coverage areas.
- One flaw in this methodology is that it automatically assumes that all households within the predicted grade B coverage area of either a single primary station or a single translator station are “served” by that station and, conversely, that households that fall outside of predicted the grade B coverage area of either are “unserved” by that station. While the “unserved” assumption is arguably correct to a first approximation, the “served” assumption is flawed, as elaborated below.
- Given that recent data indicates that only approximately 12% of Americans actually receive their television programming from over-the-air broadcasts, simply correlating coverage areas to the number of households that physically exist within those coverage areas, and then declaring that those households are “served” by the respective station, be it a primary station or a translator, exaggerates the number of households that are, in any reasonable and meaningful way, “served.” (Being irradiated by the signal of a station, while, in fact, receiving the corresponding content by other means, is fundamentally different than being “served” by that station.)
- If one examines the numbers presented by the Petitioner,⁶ it rapidly becomes abundantly clear that, to the Petitioner, only over-the-air reception “counts” as “service,” despite the fact that the overwhelming majority of Americans do not, in fact, receive their television programming in that manner. This distortion grossly misrepresents the importance of translator stations (and, in fact, primary television broadcast stations, as well) to the American public.

⁵ While this method of coverage prediction is generally accepted as producing reasonably accurate results, the way it is combined with other assumptions in the Study results in misleading conclusions.

⁶ Both in the “Rural Dependence on Translators” section of the Petition and in the Study.

20. Petitioner implies, if not asserts, that cable service is unlikely to provide service to a large proportion of rural Americans, due to the cost of “passing” households with cable infrastructure.

This would appear to be far from the truth, since available data shows that, as of 2002, cable systems “pass” approximately 97% of all American television households.⁷

21. Additionally, industry data from the same report indicates that cable providers are making substantial investments to expand and improve their facilities to provide even larger coverage areas and higher levels of service.

22. Since cable systems provide a far wider range of programming content than simply the six major over-the-air networks (including locally generated programming – many cable operators have their own production studios), can additionally provide high speed internet access and telephone service, and do all of this without consuming prime spectrum (by constraining their signals to fiber optic or coaxial cables, rather than indiscriminately radiating them over large geographical areas to the exclusion of other potential uses of the spectrum), it is abundantly obvious that cable systems can provide a much higher level and variety of service to the overwhelming majority of rural Americans, and can do so with almost absolute spectrum efficiency, because their non-radiating nature does not preclude reuse of the same spectrum in the same areas by other services.

23. Petitioner also asserts that DBS is not a viable solution to the television programming needs of rural America, because “[DBS systems] do not and cannot provide more than a few high-definition television signals, because the necessary spectrum is simply not available to them.”

24. Suffice it to say that we find this assertion difficult to accept, and we strongly suspect that the DBS operators would have a similar reaction to the Petitioner’s assertions.

⁷ See “Cable and Telecommunications Industry Overview 2002 Year-end,” page 26, table entitled “CABLE INDUSTRY FACTS-AT-A-GLANCE,” available in .pdf format from: http://www.ncta.com/industry_overview/aboutIND.cfm?indOverviewID=1

25. Like cable systems, DBS operators provide a much richer palette of programming options (including multiple HDTV channel offerings) than the “six major networks” that the Petitioners seem to consider as [at least minimally] “adequate service,” as well as other services, such as internet access, and these services are ubiquitously available throughout the United States, including even the most sparsely populated rural portions thereof.

26. In short, we are of the opinion that Petitioner’s derogations of competing methods of television program delivery to rural America (and America in general), such as cable and DBS, are inaccurate and self-serving to the point of misrepresenting of the facts, whether intentionally or not.⁸

**THE IMPLIED CONCEPTS OF “ENTITLEMENT” TO EQUAL SERVICE AND
“FREE” OVER-THE-AIR RECEPTION OF [AT LEAST] ALL SIX MAJOR
NETWORKS IN ALL AREAS OF THE COUNTRY DEFIES ECONOMIC REALITIES**

27. While we would not question the idea that it is desirable for rural America to have access to a broad, rich palette of television programming options, we believe that means other than translator stations make that programming, as well as other services, available to virtually all of the television households of rural America now, and that they do so in a more spectrally efficient and perhaps more economical way than would the much more widespread proliferation of translator stations that Petitioner advocates.

28. As far as “free” television is concerned, we would assert that, just as “There is no such thing as a free lunch,” in reality, there is no such thing as “free” television.

29. Virtually all U.S. television (even the “PBS” variety) costs money – money that is either derived from advertising revenues that support commercial stations (and contribute to the cost of products and services), or donations by interested viewers to public broadcast stations.

⁸ See Report and Order, GC Docket No. 02-37, adopted March 4, 2003, Concerning Truthful Statements to the Commission

30. In the case of translator stations, someone must pay for the construction, maintenance, and operation of these stations (no “free lunch”), and it would appear from the example, given in the Study, that existing networks of translator stations are in some way subsidized, either by local, state, or federal funding, or some combination thereof.

31. Thus, viewers pay for all forms of programming, in some cases in an indirect, hidden way. This inescapable fact renders the idea of “free” television invalid and the concept of an “entitlement” to “free” over-the-air reception of television broadcast programming is flawed in terms economic reality.

“INTEGRATING THE USE OF TRANSLATORS DIRECTLY INTO THE COMMISSION’S POLICY PROCESS” AND, IN FACT, THE USE OF TRANSLATORS, ARE NOT THE ONLY, OR EVEN THE BEST WAY OF PROVIDING SERVICE TO RURAL AREAS, NOR DO THEY REPRESENT THE BEST AND HIGHEST USE OF PUBLIC SPECTRUM ASSETS

32. The virtually ubiquitous availability of at least two alternates to translator stations for the delivery of television programming to virtually all Americans, both rural and urban, the ability of those alternates to offer a much richer palette of programming choices in an economical fashion, and the fact that “free” television programming is a fallacy, forces us to question the wisdom of allowing the continued proliferation of translator stations which consume valuable spectral resources that could be used to provide services that might provide greater benefit to a much broader segment of the public.

33. We also note that the Commission currently has open a Notice of Inquiry in ET Docket No. 02-380 (“the NOI”), which contemplates making geographically unused TV channels available for use by license-exempt devices on a non-interference basis to existing broadcast television stations. To allow continued proliferation of translator stations would result in a significant reduction in number of unoccupied channels over a larger area, limiting the ability to implement this proposal.

34. Compared to the limited benefits translator stations provide to a very minor percentage of the population and the alternatives that are available, we believe that the proposal contemplated in the NOI would likely result in a much higher public interest benefit than the proposals outlined in the Petition.

SUMMARY AND CONCLUSION

35. IEEE 802 again reiterates its Opposition to the Petition for all of the reasons elaborated above, and we respectfully recommend and request that the Commission expeditiously DENY and DISMISS the Petition and TERMINATE this Proceeding without further consideration or action.

Respectfully submitted,

/s/

Paul Nikolich
Chair, IEEE 802
18 Bishops Lane
Lynnfield, MA 01940
(857) 205-0050
p.nikolich@ieee.org

/s/

Carl R. Stevenson
Chair, IEEE 802.18 Radio Regulatory TAG
4991 Shimerville Road
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carl.stevenson@ieee.org

Motion: To approve document 18-03-021r0_802_Opp_Pet_RM-10666.doc as an 802 document, authorizing the Chair of 802.18 to do necessary editorial and formatting changes, and file the document in a timely fashion with the FCC.

- 5 Informative: This document was approved unanimously by 802.18, 802.11, 802.15, and 802.16 with the same editorial and filing directions to the Chair.

Moved: Carl Stevenson/Stuart Kerry

- 10 **Passes: 11/0/1**

5.31 ME Italy Clarification - Stevenson 2 4:43 PM

IEEE 802

Local and Metropolitan Area Network Standards Committee
Homepage at <http://ieee802.org/>

March 25, 2003

To: Mrs. Loredana Le Rose
Ministero delle Comunicazioni
Rome, Italy
lerose@comunicazioni.it

Reply to: Carl R. Stevenson
Chair, IEEE 802.18 Radio Regulatory
Technical Advisory Group
4991 Shimerville Road
Emmaus, PA 18049
phone: (610) 965-8799
mobile: (610) 570-6168
e-mail: carl.stevenson@ieee.org

From: Paul Nikolich,
Chair, IEEE Project 802
18 Bishops Lane
Lynnfield, MA 01940
(857) 205-0050
p.nikolich@ieee.org

Dear Mrs. Le Rose:

In reference to your communication:

"Oggetto: Hiperlan operanti nella banda dei 5GHz

Con riferimento al messaggio email del 3 febbraio 2003, si comunica che in merito alle applicazioni di tipo hiperlan operanti nelle bande 5150-5350 e 5470-5725 MHz in Italia si adottano le seguenti disposizioni

1 Banda di frequenze 5150-5250 MHz uso indoor

potenza massima 30 mW eirp

Dispositivi aggiuntivi: senza TPC ne DFS

2 Banda di frequenze 5150-5350 MHz, uso indoor

potenza massima 200 mW eirp

Dispositivi aggiuntivi: TPC e DFS conforme alla decisione ERC/DEC (99)23

3 Banda di frequenze 5470-5725 MHz

potenza massima 1 W eirp

Dispositivi aggiuntivi: TPC e DFS conforme alla decisione ERC/DEC (99)23"

We are doing a review on the Italian regulatory requirements in regards to IEEE 802.11a (HIPERLAN type system).

We would like to ask for a clarification in regards to your communication dated 7 Feb 03 (above).

Can it be assumed that the Ministero delle Comunicazioni is following the attached recommendation R&TTE CA (02) 22¹ - in regards to HIPERLAN type systems?

Specifically, with the TPC feature [as detailed in ERC/DEC (99) 23], will systems operating in 5150 -5250 MHz, indoor use, be allowed a maximum power of 60 mW EIRP, as outlined in R&TTE CA (02) 22?

Please let us know what your views and intentions are on this.

Thank you for your time.

Respectfully submitted,

/s/

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Attachment: Public_R&TTECA(02)22.pdf

¹ Please see Section 3. Guidance on 5 GHz Wireless LANs “Technical parameters for the interim solution” Subparagraph (d.)

5 **Motion: To approve document 18-03-023r0_Italy_Clarification.doc (a liaison letter, requesting a clarification of Italy's interim rules for 5 GHz) as an 802 document, authorizing the Chair of 802.18 to do necessary editorial and formatting changes, and to submit the document to the appropriate contact person in the Ministero delle Comunicazioni, along with a copy of Public_R&TTECA(02)22.pdf for their convenience.**

Informative: This document was approved unanimously by 802.18 with the same editorial, formatting, and submission directions to the Chair.

10 **Moved: Carl Stevenson/Tony Jeffree**

Passes: 10/0/2

15

5.32 ME Comments IB-01-185, IB-02-365 - Stevenson 2 4:46 PM

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of)
)
Flexibility for Delivery of Communications by) IB Docket No. 01-185
Mobile Satellite Service Providers in the 2 GHz)
Band, the L-Band, and the 1.6/2.4 GHz Bands;) IB Docket No. 02-364

Review of the Spectrum Sharing Plan Among
Non-Geostationary Satellite Orbit Mobile Satellite
Service Systems in the 1.6/2.4 GHz Bands

To: The Commission

Via the ECFS

COMMENTS OF IEEE 802

IEEE 802¹ hereby respectfully offers its Comments in the above-captioned Proceeding.²

The members of the IEEE 802 that participate in the IEEE 802 standards process are interested parties in this proceeding. IEEE 802, as a leading consensus-based industry standards body, produces standards for wireless networking devices, including wireless local area networks (“WLANs”), wireless personal area networks (“WPANs”), and wireless metropolitan area networks (“Wireless MANs”).

As an interested party in this Proceeding we appreciate the opportunity to provide these comments to the Commission.

¹ The IEEE Local and Metropolitan Area Networks Standards Committee (“IEEE 802” or the “LMSC”)

² This document represents the views of IEEE 802. It does not necessarily represent the views of the IEEE as a whole or the IEEE Standards Association as a whole.

INTRODUCTION

1. IEEE 802 offers the following comments in support of extending the authorized frequency spectrum in the 2.4 GHz band in Part 15.247 in accordance with the request for comment in the Commission's Report and Order and Notice of Proposed Rulemaking in the instant proceeding namely:

“Finally, we seek comment on the possibility of re-allocating any returned Big LEO spectrum. Under the plan adopted in this Order, spectrum in the 2483.5-2492.5 MHz and 2498-2500 MHz bands could be available for other uses. For instance, we seek comment on allowing unlicensed devices to operate in any returned spectrum. Currently, we restrict the operation of unlicensed devices in the 2483.5-2500 MHz band to avoid interference to MSS.”

IEEE 802 RECOMMENDS EXTENDING THE 2.4 GHZ “PART 15” BAND TO ADD THE SEGMENTS 2483.5 TO 2492.5 MHZ AND 2498 TO 2500 MHZ

2. Commercially available IEEE 802 Wireless Local Area Network (WLAN) and Wireless Personal Area Network (WPAN) devices operating in the 2.4 GHz band include 802.11b WLAN (11 Mbps), and 802.15.1 WPAN (1 MHz) devices. Soon, commercially available devices will include 802.11g WLAN (54 Mbps), 802.15.3 WPAN (55 Mbps), and 802.15.4 WPAN (250 kbps) devices.

3. Presently, 802.11b devices are being deployed for WLAN applications including home and office networking, network bridging, wireless hotspots and many other uses at an unprecedented rate, resulting in significant economic growth in the related sectors of the US economy.

4. In addition, 802.15.1 (Bluetooth) devices are beginning to see wider applications in the US, and are proposed as the standard for wireless networking applications like the newly created Automotive Multimedia Interface Collaboration (AMI-C) initiative in automotive telematics, and a standard cord replacement interface for a variety of digital devices, including PDA's and mobile phones.

5. The imminent release of the 802.11g, 802.15.3 and 802.15.4 standards are expected to enable similar growth in both high rate (up to 55 Mbps) and low rate (250 kbps), low power applications in the 2.4 GHz band.

6. The additional contiguous bandwidth offered by extending the present band to 2492.5 MHz would permit IEEE 802 to accomplish the following extensions to the present suite of standards in the 2.4 GHz band:

- 802.11b/g: 3 additional channel center frequencies: 2467 MHz, 2472 MHz, 2477 MHz, including a non-overlapping channel at 2472 MHz, allowing the operation of four simultaneous non-overlapping channels in one physical location.
- 802.15.1: (Bluetooth) 11 additional 1 MHz channels, 2481-2490 MHz to facilitate more robust adaptive hopping in congested network environments.
- 802.15.3: 2 additional channels in frequency plan: 2469, and 2477 assuming channels are extended on 8 MHz centers.
- 802.15.4: (Zigbee) 1 additional channel at 2485 MHz

7. The additional flexibility offered by the extension to 2492.5 MHz enhances support for mixed mode applications, and permits frequency planning within the network application space to minimize the impact of interference on link throughput. Some hypothetical network configurations/applications that could benefit from this flexibility include:

- Sensor networks employing 802.15.4 devices using one or more 802.15.1 devices as data aggregation nodes linked to an 802.11b backhaul to a wired network. Such a network could support smart-building applications, industrial control and monitoring networks, and facility security implementations.
- Robust combinations of 802.11b and 802.11g hotspots with a full four channels to mix and match based on required capacity.
- Voice over IP networks using 802.15.1 handsets linked to a network of distributed 802.15.3 devices that are tied via 802.11b/g nodes or via 802.16 wireless MAN nodes to the larger wired network.
- Other combinations are obviously possible.

8. We believe that extending the 2.4 GHz band to 2492.5 MHz enhances the synergy offered by our suite of wireless standards, enabling a wide variety of yet to be discovered applications for multi-mode wireless networks.

IEEE 802 RECOMMENDS COMPLETELY REMOVING THE BAND 2483.5 TO 2500 MHz FROM THE LIST OF RESTRICTED FREQUENCIES UNDER PART 15.205

9. We understand the Commission's desire to protect MSS ATC operations in the this band, and that the Commission might choose to modify the restricted band to cover the range 2492.5 to 2498 MHz in order to provide protection to ATC operations in that segment of the MSS band consistent with previous protections.

10. We believe that the actual deployment of ATC operations in the context of MSS may be questionable based on the economic status of the parties involved. We further argue that the full utilization of the 2483.5-2492.5 MHz band by IEEE 802 based networks offers more immediately achievable economic value to the US wireless economy if the less restrictive 20 dB rule would replace the more onerous 500 uV/m at 3 m requirement in a new regime for devices operating near the 2492.5 MHz band edge.

11. Specifically, our analysis indicates that the following extensions of 802 wireless standards operations could result if the restricted band rule were replaced with the 20 dB rule:

- 802.15.1 channel assignments could be extended to an additional 2 channels: 2490 MHz, and 2492 MHz, an additional 2 channels useful for interference avoidance through selective frequency hopping.
- 802.15.3 channel assignments could be extended to 2485 MHz, allowing an additional frequency assignment .
- 802.15.4 channel assignments could be extended to an additional channel at 2490 MHz.
- 802.11b channel assignments could be extended to an additional channel at 2482 MHz, allowing an additional channel which could be used in to the overlapping frequency plan, increasing the available channels to a total of 8 channels from the current 6 channel limit.

12. These additional channels would be highly valuable in support of mixed mode wireless network applications.

IEEE 802 RECOMMENDS EXTENDING THE PART 15 FREQUENCY ALLOCATION TO THE FULL 2400 TO 2500 MHZ IN THE EVENT THE MSS LICENSEES FAIL TO MEET ATC BUILD OUT SCHEDULES IMPOSED BY THE COMMISSION

13. The added contiguous spectrum would significantly improve IEEE 802 wireless network usefulness in mixed mode applications, extending the channel assignments to provide the possibility of increasingly complex and flexible network applications, with better coexistence between subnets. The additional flexibility will increase the incentives to deploy useful networks, leading to further economic growth based on our suite of standards.

Respectfully submitted,

/s/

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/s/

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Motion: To approve document 18-03-024r0_Cmts_IB-01-185_IB-02-364_Addtl_2.4GHz_Spectrum.doc as an 802 document, authorizing the Chair of 802.18 to do necessary editorial and formatting changes, and file the document in a timely fashion with the FCC.

5

Informative: This document was approved unanimously by 802.18, 802.11, 802.15, and 802.16 with the same editorial and filing directions to the Chair.

Moved: Carl Stevenson/Stuart Kerry

10

Passes: 10/0/1

5.33 ME Press release - Stevenson 2 4:49 PM

Motion: Authorize the Chair of 802.18 to work with IEEE and/or IEEE SA PR staff on a press release about the recent agreement between industry and the US Government on interference mitigation requirements for incumbent services at 5 GHz that allows the US to actively support a 5 GHz globally harmonized frequency allocation for wireless access systems, including RLANs.

15

Moved: Carl Stevenson/Stuart Kerry

20

Objection was raised to this motion as a “blank check”. The response is simply to state that there is an agreement between industry and government on the mitigation requirements for the 5 GHz allocation.

Withdrawn

5.34 MI IEEE International Award Endorsement - Nikolich 2 4:52 PM

25

Paul described the nomination of Carl Stevenson for the IEEE International Award. He will forward a draft endorsement letter for approval by the SEC via email ballot. He will include the award criteria with the email ballot and letter.

5.35 ME Letter to ISTO on Broadband Wireless Internet Forum - Marks 5 4:54 PM

ME: Letter to ISTO Regarding BWIF

Motion: To send the following letter to the IEEE Industry Standards and Technology Organization

Dear [ISTO]:

IEEE 802 would like to enquire as to the status of the ISTO-managed group by the name of the Broadband Wireless Internet Forum.

According to the ISTO web site <<http://www.ieee-isto.org/programs.html>>, "The Broadband Wireless Internet Forum (BWIF) is an industry coalition that will deliver broadband fixed wireless Internet and voice services based on the Vector Orthogonal Frequency Division Multiplexing (VOFDM) technology standard."

A letter to BWIF of 16 November 2001 from our IEEE 802.16 Working Group on Broadband Wireless Access (IEEE 802.16I-01/23r2) remains unanswered. Also, it appears to us as if the BWIF web site has not been updated since October 2001. Therefore, the 802.16 Working Group, and much of the industry, believes that BWIF is no longer active. However, given that ISTO continues to maintain its web site, it seems likely that many users might be led to believe that BWIF is still active in promoting specifications for broadband wireless access. We have even been informed that the IEEE President, in a January 2003 conference address, mentioned, in a slide on "Broadband Wireless Activity in the IEEE," that "IEEE Industry Standards and Technology Organization (IEEE-ISTO) has one industry program: Broadband Wireless Internet Forum."

If BWIF is indeed inactive, then the misperception that it is encouraging its own proprietary specifications as an alternative to consensus standards developed and published by the IEEE-SA (namely IEEE Standard 802.16, including 802.16a and 802.16c) would be confusing, and potentially damaging, to the industry. We are confident that this is not the intent of ISTO.

If BWIF is inactive, we urge you to immediately remove any reference to it from your web site and other publications, and also to inform us in writing of the cessation of BWIF's activities.

Best regards,

Paul Nikolich Chair, IEEE 802 LAN/MAN Standards Committee

cc: Judy Gorman

-
- IEEE 802.16 Working Group Motion #18 of 13 March 2002:

- "To forward the letter as modified to ISTO regarding BWIF"
- *Carried by unanimous voice vote.*

[Return to 802.16 Issues for LMSC Closing meeting of 14 March 2003](#)

Motion: to send the following letter to the IEEE Industry Standards and Technology Organization
Moved: Roger Marks/Tony Jeffree

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

5.36 -

5.37 -

LMSC Internal Business

5.38 MI Meeting services contract extension - Quackenbush 2 4:57 PM

Motion: To extend the contract with Face to Face Events dated March, 12, 1999 to provide meeting planning and management services for the July 2003 802 plenary session under the terms and conditions of the referenced contract.

10 **Moved: Bill Quackenbush/Buzz Rigsbee**

Passes: 9/0/1

5.39 MI Contract for additional meeting services and web registration - Quackenbush 2 5:07 PM

15 **Motion: To contract with Face to Face Events of r the following services for the July 2003 802 plenary session for a total cost not to exceed \$4,000. The services include web registration services and additional meeting management services not provided under the contract with Face to Face Events dated March 12, 1999**

Moved: Bill Quackenbush/Buzz Rigsbee

Passes: 9/0/1

20

5.40 MI Resolution that phases 1-3 of the database contract are complete - Quackenbush 2 5: 09 PM

Resolved: that phases 1 through 3 of the contract with Plexus Consulting dated December 20, 2000 for the 802 database are determined to be completed as of March 20, 2003. (Phase 4, maintenance and support, will then complete March 20, 2004).

25 **Moved: Bill Quackenbush/Buzz Rigsbee**

Passes: 10/0/0

5.41 MI Authority to obtain professional financial analysis - Quackenbush 5 5:11 PM

30 **Motion: The treasurer is authorized to obtain professional financial analysis of the LMSC financial operations and recommendations for changes at a total cost not to exceed \$6,000.**

Moved: Bill Quackenbush/Bob Grow

35 This analysis would include whether there is anything that might complicate our relationship with the IEEE or affect our tax liability. A possibility might be that hiring a bookkeeping service could be recommended. Bill will return with recommendations at the July meeting.

Passes: 13/0/0

40 Roger Marks asked that the minutes reflect that he had to leave the meeting at this time.

5.42 MI Send Unregistered Attendees rules change to ballot - Quackenbush 5 5: 15 PM

Proposed IEEE 802 LMSC Policy and Procedure Revision Ballot
on
Unregistered Meeting Attendees

From: Bill Quackenbush

To: LMSC Executive Committee

Date: March 13, 2003

Duration: Expires March 14, 2003

Purpose: One line identifying to purpose of the P&P revision

Rationale for proposed text:

It became clear during a recent SEC email discussion that the current text of the 802 Rules is ambiguous with respect to the consequences of an individual not complying with the registration requirements for an LMSC meeting. There were at least two conflicting interpretations of said rules put forward. The first purpose of this proposal is to clarify said rules and bring them into alignment with the expressed opinion of a number of SEC members.

The current rules on LMSC meeting registration requirements and their consequences are also restricted to LMSC sponsored sessions, and in some cases only LMSC Plenary sessions. Given the current size of the LMSC groups and the difficulty of getting corporate sponsorship for interim sessions, it has become necessary to charge a registration fee for interim sessions and it is highly desirable that the registration requirements and their consequences be the same for all LMSC sessions. The second purpose of this proposal is to make the Registration requirements and their consequences uniform across all LMSC standards development group and subgroup sessions.

Proposed Text:

Delete the first and last sentence from the last paragraph of Section 2 as follows.

~~There is no membership requirement for attendance at the Plenary session; it is an open forum. The Plenary meetings are conducted by the LMSC Chair or a designated delegate. The LMSC Treasurer may collect fees from all attendees of any meeting held in conjunction with the Plenary session to cover the expenses of operating the LAN MAN Standards Committee.~~

Delete the fourth paragraph of Section 5.1.3.1

~~No participation credit will be granted to any individual who has outstanding financial obligations to LMSC; retroactive credit for participation in meetings shall not be granted if payment is not made prior to the start of the next meeting. (Note: Assumes LMSC Treasurer personally contacts individual, verbally or in writing, but with some assurance that communication was, in fact, received, and in sufficient time to respond.)~~

Add a new Section 6

6. LMSC Meetings

There is no membership requirement for attendance at an LMSC Plenary or LMSC interim session; they are open forums. However, those who attend a meeting of an LMSC standards development group or subgroup are obligated to comply with the registration requirements for the LMSC session of which the meeting is a part.

6.1 Meeting Registration Fees

The LMSC Treasurer may collect fees from all attendees of any meeting held in conjunction with an LMSC Plenary session to cover the expenses of the Plenary session and the expenses of operating the LAN MAN Standards Committee. The LMSC Treasurer may collect fees from all attendees of any meeting held in conjunction with an LMSC interim session that is financially sponsored by the LMSC to cover the expenses of the interim session.

6.2 Meeting Registration

Meetings of LMSC standards development groups (Working Groups, Technical Advisory Groups, Executive Committee Study Groups or any of their sub groups) are open to anyone who has fully complied with the registration requirements for the session of which the meeting is a part. Such compliance requires that an individual must:

1. have complied with the registration requirements for all previously attended LMSC standards development group or sub group sessions, and
2. have completed a valid registration for the session in question, including payment of any required registration fee.

An individual who attends any portion of an LMSC standards development group or subgroup meeting is obligated to comply with the registration requirements for that meeting.

An individual who attends any portion of an LMSC standards development group or subgroup meeting but does not comply with the registration requirements for that meeting, and further has not complied with those requirements within 60 days after the end of the meeting, including payment of any required registration fees, shall be subject to the following sanctions:

1. No participation credit will be granted for said session.
2. Any participation credit acquired before said session toward membership in any LMSC group is revoked.
3. No participation credit will be granted for attendance at any subsequent LMSC session until the individual has complied with the registration requirements for all previously attended 802 meetings by the start of said subsequent meeting.
4. Membership in any 802 group is terminated.

An individual who has lost membership in an LMSC group due to failure to comply with the registration requirements for an LMSC session may again earn membership in an LMSC group as follows.

1. Comply with the registration requirements for all LMSC sessions previously attended by the individual.
2. Acquire the participation credit required for group membership as required for an individual that had never previously attended an LMSC session.

The interpretation and implementation of this policy shall be the responsibility of the LMSC Treasurer and the LMSC Executive Secretary.

Motion: That the proposed LMSC rules change relating to unregistered attendees be distributed for Executive Committee ballot. Bill Quackenbush to collect the comments on this rule change.

Moved: Bill Quackenbush/Tony Jeffree

5 **Passes: 10/0/0**

Motion to amend the agenda to add items 5.47 and 5.48, and to modify item 5.60 to be an MI.

Moved: Mat Sherman/Carl Stevenson

10 **Passes: 12/0/0**

Paul designated Bill Quackenbush to conduct the rules change ballot and subsequent comment collection and resolution.

5.43 MI Approval of SEC Electronic Balloting rules change - Sherman 2 5:24 PM

In the following, text that differs from the current LMSC Rules/Policies and Procedures is underlined

3.4.2 Voting Between Plenary Meetings

At times, it may become necessary for the Executive Committee to render a decision that cannot be made prior to the close of one plenary but must be made prior to the following plenary. Such decisions shall be made using electronic balloting. Provision shall be made for the LMSC membership to observe and comment on Executive Committee electronic ballots. All comments from those who are not members of the Executive Committee shall be considered. Commenters who are not members of the Executive Committee are urged to seek an Executive Committee voting member (normally their Working Group or Technical Advisory Group Chair) include the viewpoint of the commenter in their vote.

3.4.2.1 Executive Committee Electronic Balloting

The Chair, or an Executive Committee member designated by the Chair (usually a Vice Chair), shall determine the duration of the ballot, issue the ballot by e-mail and tally the votes after the ballot is closed. Executive Committee voting members shall return their vote and comments by e-mail.

The minimum duration of an electronic ballot shall be 10 days unless the matter is urgent and requires resolution in less time. Maximum advance notice is encouraged for all ballots on urgent matters. The tally of votes shall not be made until at least 24 hours after the close of the ballot to allow time for delivery of the e-mail votes.

The affirmative vote of a majority of all voting members of the Executive Committee is required for an electronic ballot to pass.

3.6.2 Executive Committee Action on Proposed Policies and Procedures Changes

The proposed rules change shall be presented at an Executive Committee meeting in conjunction with a Plenary Session. The Executive Committee shall take one of three actions on the proposal: Approve for Distribution and Executive Committee Ballot, Assign for Study, or Reject.

Approval for Distribution and Executive Committee Ballot shall require the affirmative vote of at least two thirds of all voting members of the Executive Committee and will result in the distribution of the proposal and an Executive Committee electronic ballot on the change.

If Approval for Distribution and Executive Committee Ballot is not achieved, a vote to Assign the proposal for study is taken, (see "Assignment of the Proposal to Study"). Assignment for Study shall require the affirmative vote of at least one third of all voting members of the Executive Committee.

If Assignment is not achieved, no further action is taken on the proposal and it is Rejected.

3.6.3 Distribution and Executive Committee Ballot

Executive Committee ballots on Policies and Procedures changes shall be at least 30 days in duration and shall close at least 30 days before the opening of the next Plenary session (to allow time for comment resolution). Distribution of ballots on Policies and Procedures changes to the LMSC membership shall be accomplished as provided by Section 3.4.2

3.6.5 LMSC Approval

After distribution of a proposed Policies and Procedures change and an Executive Committee electronic ballot has been conducted, the Executive Committee member designated in accordance with Section 3.4.2.1 shall tabulate the ballot results, attempt to resolve the comments, and present the comments and proposed resolution at an Executive Committee meeting in conjunction with a Plenary Session. The Executive Committee shall approve, assign, or fail to accept the proposal.

LMSC approval of the revised text of the proposed Policies and Procedures change shall require the affirmative vote of at least two thirds of all voting members of the Executive Committee. LMSC approval will result in the rules change becoming effective at the end of Plenary Session during which approval is voted. The revised LMSC Operating Rules shall be forwarded to the Computer Society Standards Activities Board (CS SAB). If the revised Policies and Procedures are known to be in conflict with the CS SAB Policies and Procedures, the cover letter shall request formal CS SAB approval of the variance. In the case where the rules change is in conflict with the Policies and Procedures of CS SAB, the rule change will be put into effect as stated above but will be withdrawn immediately if rejected by the CS SAB. CS SAB rejection shall be announced to the LMSC Executive Committee by the most expeditious means available (e-mail, FAX, regular mail) and to the LMSC membership at the next Plenary Session.

If LMSC approval is not achieved, a vote to assign the proposal for further study and recommendation shall be taken. Assignment shall require the affirmative vote of at least one third of all voting members of the Executive Committee.

no further action is taken on the proposal.

5.1.5.1 Disbanding a Working Group

After all standards, recommended practices and Technical Reports for which a hibernating working group is responsible are withdrawn or transferred to another group or groups, an Executive Committee electronic ballot of 30 minimum duration will be conducted to whether the hibernating working group will be disbanded.

If the Executive Committee electronic ballot on disbanding the group passes, the Working Group is disbanded. If the ballot fails, then the Executive Committee Chair shall determine a future date when the disbanding of the group will be reballoted.

Motion: to approve the rule change for SEC Electronic Ballots with instruction to change the text “all voting members of the Executive Committee” to “all Executive Committee members with voting rights” in clauses 3.6.2 and 3.6.5.

Moved: Mat Sherman/Buzz Rigsbee

5

Passes: 10/0/2

5.44	MI	Approval of SEC Rules Titles rules change	-	Sherman	2	5:25 PM
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**Proposed Resolution for IEEE 802 LMSC Rules Revision Letter Ballot
on
Rules Title Change**

From: Matthew Sherman, 2nd Vice Chair IEEE 802

To: Sponsor Executive Committee

Date: February 28, 2003

Duration: Till March 14, 2003

Purpose: Clarify title of 802 Rules

Rationale for proposed text:

The IEEE-SA STANDARDS BOARD OPERATIONS MANUAL requires that “each Sponsor shall operate in accordance with a written set of policies and procedures (P &P).” Project 802 LMSC (as a sponsor organization) does maintain a set of policies and procedures that are in fact titled “OPERATING RULES OF IEEE PROJECT 802 LAN MAN STANDARDS COMMITTEE (LMSC)”. Particularly for new comers who may be less informed, it may not be obvious that the 802 “Operating Rules” satisfy the requirement to maintain policies and procedures. A title change can easily correct this.

Additional letter ballot resolutions incorporated (in Red):

- 1) Various adjustments to make the rules self consistent with their new title.
- 2) Subtitle for P&P to ease backwards compatibility issues with documents referencing the P&P.

Proposed Text:

Proposed text for rules change is shown below using revision markings against the text in the LMSC Rules as last revised July 12, 2002. Modifications will also be made to front matter, headers, and footers as needed for consistency.

**IEEE PROJECT 802 LAN MAN STANDARDS COMMITTEE
(LMSC)
POLICIES AND PROCEDURES
(Formerly known as OPERATING RULES OF IEEE PROJECT
802 LMSC)**

Deleted: OPERATING RULES OF

1. OVERVIEW

The scope of the IEEE Project 802 LAN MAN Standards Committee is to develop and maintain networking standards and recommended practices, using an open and accredited process, and to enable and advocate them on a global basis.

Project 802 (P802) is a Standards Committee which reports to the Standards Activity Board (SAB) of the IEEE Computer Society. It operates under sponsorship of the IEEE Computer Society. In the event of any conflict between this document and the IEEE Computer Society rules, the rules of the IEEE Computer Society shall take precedence.

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3.6 Change of Policies and Procedures

These LMSC Policies and Procedures may be changed as described in this section.

Deleted: Rules

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3.6.1 Initiation of Proposed Changes to LMSC Policies and Procedures

1. Proposed changes shall be in written form and include:

- a) The purpose, objective, or problem the proposed change is intended to address.
- b) The specific text of the change and the rationale for the chosen text.

Deleted: Rules Changes

2. Proposed changes may be created by:

- a) Any working group or technical advisory group. A proposal shall require the affirmative vote of at least three fourths of the members present when the vote is taken, quorum requirements shall be as specified in "Voting at a Meeting" in the section, "LMSC Standards Development Groups."

Deleted: rule

b) Any Executive Committee Member

Writers of proposed changes are encouraged to seek the advice of experienced members of the SEC to help form the wording in a manner appropriate for and consistent with the LMSC Policies and Procedures.

Deleted: rule

3.6.2 Executive Committee Action on Proposed Changes to LMSC Policies and Procedures

Deleted: Operating Rules

Deleted: Rules Changes

The proposed change shall be presented at an Executive Committee meeting in conjunction with a Plenary Session. The Executive Committee shall take one of three actions on the proposal: Approve for Distribution and Executive Committee Ballot, or Assign for Study, or Reject.

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Approval for Distribution and Executive Committee Ballot shall require the affirmative vote of at least two thirds of all voting members of the Executive Committee and will result in the distribution of the proposal and an Executive Committee letter ballot on the change.

If Approval for Distribution and Executive Committee Ballot is not achieved, a vote to Assign the proposal for study is taken, (see "Assignment of the Proposal to Study"). Assignment for Study shall require the affirmative vote of at least one third of all voting members of the Executive Committee. If less than one-third of the Executive Committee members support further consideration of a proposal then no further action is taken on the proposal and it is Rejected.

3.6.5 LMSC Approval

After distribution of a proposed change and an Executive Committee letter ballot has been conducted, the LMSC Vice Chair (or other LMSC Executive Committee member designated in accordance with Section 3.6.3) shall tabulate the ballot results, attempt to resolve comments, and present the comments and proposed resolution at an Executive Committee meeting in conjunction with a Plenary Session. The Executive Committee shall approve, assign, or fail to accept the proposal.

Deleted: rules

LMSC approval shall require the affirmative vote of at least two thirds of all voting members of the Executive Committee. LMSC approval will result in the change becoming effective at the end of Plenary Session during which approval is voted. The revised LMSC Policies and Procedures shall be forwarded to the Computer Society Standards Activities Board (CS SAB); when they are known to be in conflict with the CS SAB Policies and Procedures the cover letter shall request formal CS SAB approval of the variance. In the case where the change is in conflict with the Policies and Procedures of CS SAB, the change will be put into effect as stated above but will be withdrawn immediately if rejected by the CS SAB. CS SAB rejection shall be announced to the LMSC Executive Committee by the most expeditious means available (e-mail, FAX, regular mail) and to the LMSC membership at the next Plenary Session.

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If LMSC approval is not achieved, a vote to assign the proposal for further study and recommendation shall be taken. Assignment shall require the affirmative vote of at least one third of all voting members of the Executive Committee, otherwise no further action is taken on the proposal.

5.14.6 Precedence of Operating Rules

If Working Group operation conflicts with the LMSC Policies and Procedures, then the LMSC Policies and Procedures shall take precedence.

Deleted: Operating Rules

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Procedure 10

PROCEDURE FOR CONDITIONAL APPROVAL TO FORWARD A DRAFT STANDARD

1. The ballot cover letter shall include the following statement: “This ballot is being conducted under the procedure for conditional approval of the LMSC Policies and Procedures (add the exact reference and the current URL of the LMSC Policies and Procedures).”

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Motion: to approve the incorporation of the rules change titled “Rules Title Change” into the most current version of the Operating Rules of the IEEE Project 802 LAN/MAN Standards Committee (LMSC)

Moved: Mat Sherman/ Bill Quackenbush

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

5.45 MI Send Executive Committee Title rules change to ballot - Sherman 2 5:30 PM

Proposed IEEE 802 LMSC Rules Revision Letter Ballot
on
Executive Committee Title

From: Matthew Sherman, 2nd Vice Chair IEEE 802

To: Executive Committee

Date: March 10, 2003

Duration: Till March 14, 2003

Purpose: Address editorial issues on title used for executive committee

Rationale for proposed text:

Section 3 of the LMSC Rules clearly states that the Executive Committee should be referred to as the “Executive Committee” throughout the rules. In many places the Executive Committee is referred to as the SEC or the Sponsor Executive Committee. This makes the text confusing to follow as it sounds like there are multiple bodies with governance in the LMSC. This rules change replaces all but one occurrence each of the terms “SEC” and “Sponsor Executive Committee” respectively with the terms “EC” and “Executive Committee.” Minor editorial modifications are made in section 1 to introduce the term EC, and clarify our usage of terms. One use each of the terms “SEC” and “Sponsor Executive Committee” was deemed appropriate and left as is.

Proposed text for this rules change is shown on the following pages with revision markings against the text in the LMSC Rules as last revised July 12, 2002. In addition this rules change would also approve the replacement of the term “SEC” with the term “EC” and the term “Sponsor Executive Committee” with “Executive Committee” in any rules ballots that are approved and not yet incorporated in the rules, or are currently in process.

Proposed Text:

1. OVERVIEW

The scope of the IEEE Project 802 LAN MAN Standards Committee (**LMSC**) is to develop and maintain networking standards and recommended practices, using an open and accredited process, and to enable and advocate them on a global basis.

Project 802 (P802) is a Standards Committee which reports to the Standards Activity Board (SAB) of the IEEE Computer Society. It operates under sponsorship of the IEEE Computer Society. In the event of any conflict between these rules and the IEEE Computer Society rules, the rules of the IEEE Computer Society shall take precedence.

The P802 Standards Committee is directed by ~~the LMSC~~ Executive Committee (**EC**) which oversees the operation of a standards sponsoring organization (see Figure 1 PROJECT 802 REPORTING RELATIONSHIP). The P802 ~~LMSC~~ Executive Committee serves as the Executive Committee for both the sponsor ballot groups as well as the Standards Development Groups. The standards sponsoring organization is ~~the LMSC~~ and includes the Executive Committee (**EC**), a balloting pool for forming LMSC Sponsor balloting groups, and a set of Standards Development Groups.

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The terms “local area network” (LAN) and “metropolitan area network” (MAN) encompass a number of data communications technologies and the applications of these technologies. There is no single technology that is applicable to all applications. Correspondingly, no single local or metropolitan area network standard is adequate for all applications. In recognition of these facts, the standards developing organization has been divided into Working Groups and Technical Advisory Groups to standardize a small number of the technologies applicable to local or metropolitan area networks (see Figure 2 STANDARDS DEVELOPMENT GROUPS).

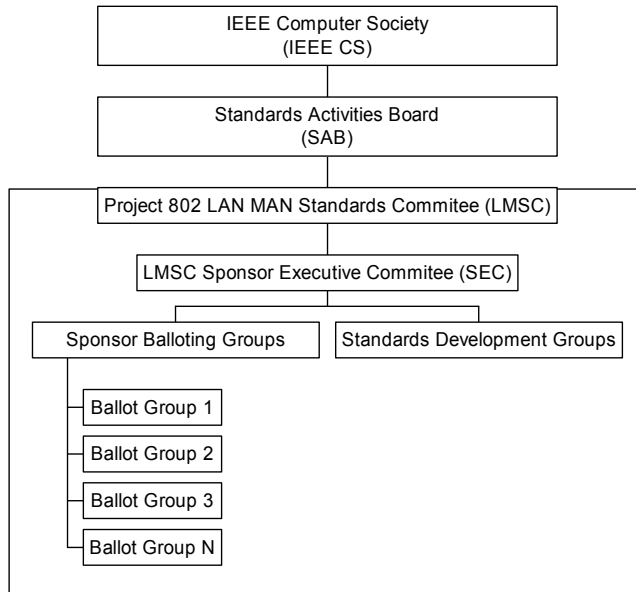


Figure 1 PROJECT 802 REPORTING RELATIONSHIP

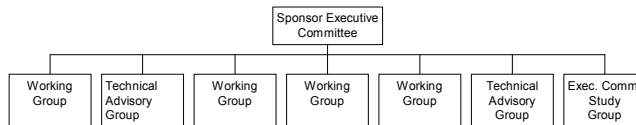


Figure 2 STANDARDS DEVELOPMENT GROUPS

The division of the Standards Development Groups into Working Groups, Study Groups, and Technical Advisory Groups is necessitated by:

- a) Getting the standards out in a reasonable time, with each group working at its own pace and reflecting the maturity of the particular technology.
- b) Each group maintaining and revising its own standard, as appropriate.

On the other hand, overall coordination of the Working Groups and Technical Advisory Groups is necessary to:

- a) Keep the individual standards within the scope of Project 802's charter.
- b) Prevent overlap or conflict between the individual standards.
- c) Promote common technologies between the individual standards in the interest of compatibility.

The P802 LMSC Executive Committee provides this coordination as a portion of its function.

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Described below are the rules under which the LMSC will operate.

2. LAN MAN STANDARDS COMMITTEE PLENARY

The Plenary session consists of the Opening Plenary meetings, Executive Committee meetings and Working Group meetings. The Plenary meeting is a meeting of individuals interested in local and metropolitan area network standards. The function of the Plenary meetings is information dissemination:

- a) Status reports from the Working Groups and Technical Advisory Groups.
- b) Liaison reports from other standards organizations such as ASC X3, ECMA, etc.
- c) Reports on schedules for future Plenary and Working Group meetings.
- d) Announcements and general news.

The main object of the Opening Plenary meeting will be to welcome new attendees and to inform the 802 membership about what is being done in the Working Groups and Executive Committee Study Groups. This report must include background on the relationship of the work to other Groups. It should not be a detailed statement about Standards Numbers and Progress.

At most 10 minutes should be taken by each Working Group for this material.

Each Working Group, Technical Advisory Group, and Executive Committee Study Group Chair shall provide a status report to the EC Recording Secretary no later than one hour after the end of closing Executive Committee meeting. This status report shall include a description of the progress made during the week, as well as plans for further work and future meetings. The Recording Secretary shall post these status reports on the 802 web page no later than one week after the close of the Plenary meeting.

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There is no membership requirement for attendance at the Plenary session; it is an open forum. The Plenary meetings are conducted by the LMSC Chair or a designated delegate. The LMSC Treasurer may collect fees from all attendees of any meeting held in conjunction with the Plenary session to cover the expenses of operating the LAN MAN Standards Committee.

3. LMSC EXECUTIVE COMMITTEE

The LMSC Executive Committee functions as the Sponsor Executive Committee (SEC) and the Executive Committee of the standards developing organization. It shall be referred throughout this document as the Executive Committee (EC).

3.1 Function

The function of the Executive Committee is to oversee the operation of the LAN MAN Standards Committee in the following ways:

- a) Charter the Study Groups, Working Groups and Technical Advisory Groups.
- b) Appoint the initial Chairs of the Working Groups and Technical Advisory Groups. (The Chairs of Working Groups and Technical Advisory Groups are confirmed or elected by the Working Group and Technical Advisory Group members themselves.)
- c) Provide procedural and, if necessary, technical guidance to the Working Groups and Technical Advisory Groups as it relates to their charters.

- d) Oversee Working Group and Technical Advisory Group operation to see that it is within the scope of Project 802, and the charter of the Working Groups and Technical Advisory Groups.
- e) Examine and approve Working Group draft standards for proper submission to sponsor ballot group (see Section 4); not for technical content.
- f) Consider complaints of Working Group and Technical Advisory Group members and the resolutions of the Plenary, Working Groups and Technical Advisory Groups.
- g) Manage the Functional Requirements and other global Project 802 issues.
- h) Handle press releases and other external organization matters.
- i) Manage Project 802 logistics, i.e., concurrent Working Group and Technical Advisory Group meetings, finances, etc.
- j) Oversee formation of sponsor ballot groups and sponsor ballot process.

3.2 Membership

Executive Committee membership, including all rights and responsibilities thereof, is acquired by Working Group/Technical Advisory Group Chairs upon appointment to the position of Chair of a Working Group/Technical Advisory Group and confirmed by the members of the Working Group/Technical Advisory Group, and by all other Executive Committee members when confirmed by the Executive Committee. Membership is retained as in Working Groups (see Retention). All voting members of the Executive Committee shall be members or affiliates of the IEEE or the IEEE Computer Society. Membership of the Executive Committee is composed of the following:

- a) LAN MAN Standards Committee Chair.
The Chair is elected by the Executive Committee and confirmed by the Standards Activities Board. The LMSC Chair is also the Chair of the Executive Committee.
- b) The Vice Chair(s), the Executive Secretary, the Recording Secretary, and the LMSC Treasurer.
These positions are appointed by the LMSC Chair and confirmed by the Executive Committee.
- c) The LMSC Chair may appoint a 2nd Vice Chair. A Vice Chair will be responsible for such duties as may be assigned by the LMSC Chair. In the case of unavailability or incapacity of the Chair, the 1st Vice Chair shall act in the capacity of the Chair.
- d) Chairs of the Working Groups.
- e) Chairs of the Technical Advisory Groups (TAG).

The 802 Chair will ensure that those 802.0 members who are not Chairs of active Working Groups have specific areas of interest to cover in order to encourage a wider view to be taken than that specifically covered by the Chairs of active Working Groups.

Each member of the Executive Committee shall, prior to confirmation by the executive committee, file with the Recording Secretary a letter of endorsement from their sponsoring organization. This letter is to document several key factors relative to their participation on the Executive Committee and is to be signed by both the executive committee member and an individual who has management responsibility for the Executive Committee member. This letter shall contain at least the following:

1. statement of qualification based on technical expertise to fulfill the assignment, and
2. statement of support for providing necessary resources (e.g., time, travel expenses to meetings), and
3. recognition that the individual is expected to act in accordance with the conditions stated in 3.4.1 Voting Guidance dealing with voting “as both a professional and as an individual expert.”

3.3 Reaffirmation

All members of the Executive Committee are reaffirmed at the first Plenary session of each even numbered year. The Working Group and TAG chairs are reaffirmed by their representative groups while other members of the Executive Committee are reaffirmed in the Executive Committee meeting.

3.4 Voting Rules

Voting in the Executive Committee is by simple majority. The Chair only votes to break ties. A quorum is at least one-half of the Executive Committee voting members.

3.4.1 Voting Guidance

It is expected that LMSC Executive Committee members will vote as both professionals and as individual experts, except under the Directed Position provisions of Procedure 8, and not as a member of any affiliate block (organization, alliance, company, consortium, special interest group, etc.). If substantive evidence is presented to the LMSC Chair that this provision is violated, the LMSC Executive Committee will meet to consider what, if any, action to take on the presented evidence. Such action may include any action up to and including a recommendation for removal from office.

3.4.2 Voting Between Plenary Meetings

At times, it may become necessary for the Executive Committee to render a decision that cannot be made prior to the close of one plenary but must be made prior to the following plenary. The EC electronic balloting mechanism may be used at the discretion of the Chair or the 1st Vice Chair. The electronic balloting mechanism shall include a means by which non-EC members can observe and comment on the discussion.

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3.4.2.1 Electronic Balloting

The Chair or the 1st Vice Chair shall issue, tally the results of the ballot and determine the minimum duration of the ballot. A majority of eligible voting EC members must vote approve in order for the ballot to pass.

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3.5 Meetings

Executive Committee meetings are open to observers. An open discussion or requests to participate in a particular discussion is determined by the Chair.

3.6 Change of Rules

These rules of the operation of the LMSC may be changed as described in this section.

3.6.1 Initiation of Proposed Rules Changes

1. Proposed changes shall be in written form and include:
 - a) The purpose, objective, or problem the proposed change is intended to address.
 - b) The specific text of the rule change and the rationale for the chosen text.
2. Proposed changes may be created by:
 - a) Any working group or technical advisory group. A proposal shall require the affirmative vote of at least three fourths of the members present when the vote is taken, quorum requirements shall be as specified in "Voting at a Meeting" in the section, "LMSC Standards Development Groups."
 - b) Any Executive Committee Member

Writers of proposed rule changes are encouraged to seek the advice of experienced members of the EC to help form the wording in a manner appropriate for and consistent with the LMSC Operating Rules.

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3.6.2 Executive Committee Action on Proposed Rules Changes

The proposed rules change shall be presented at an Executive Committee meeting in conjunction with a Plenary Session. The Executive Committee shall take one of three actions on the proposal: Approve for Distribution and Executive Committee Ballot, or Assign for Study, or Reject.

Approval for Distribution and Executive Committee Ballot shall require the affirmative vote of at least two thirds of all voting members of the Executive Committee and will result in the distribution of the proposal and an Executive Committee letter ballot on the change.

If Approval for Distribution and Executive Committee Ballot is not achieved, a vote to Assign the proposal for study is taken, (see "Assignment of the Proposal to Study"). Assignment for Study shall require the affirmative vote of at least one third of all voting members of the Executive Committee. If less than one-third of the Executive Committee members support further consideration of a proposal then no further action is taken on the proposal and it is Rejected.

3.6.3 Distribution and Executive Committee Ballot

The Executive Committee Vice Chair, (or other Executive Committee member) designated by the LMSC Chair, shall distribute the proposed change to all persons who have attended the current Plenary Session or one of the preceding two Plenary Sessions at least sixty (60) days prior to the next Plenary Session and further; invite and collect comments for presentation to the Executive Committee.

Concurrent with distribution to the LMSC members, an Executive Committee letter ballot shall be conducted, to close thirty (30) days prior to the next Plenary Session.

3.6.4 Assignment of the Proposal to Study:

If the Executive Committee votes to assign a proposal to further study, the Executive Committee Vice Chair or others designated by the LMSC Chair, shall complete appropriate additional study of the proposal and respond to the Executive Committee expeditiously for its reconsideration for Distribution and Executive Committee Ballot.

3.6.5 LMSC Approval

After distribution of a proposed rules change and an Executive Committee letter ballot has been conducted, the LMSC Vice Chair (or other LMSC Executive Committee member designated in accordance with Section 3.6.3.) shall tabulate the ballot results, attempt to resolve comments, and present the comments and proposed resolution at an Executive Committee meeting in conjunction with a Plenary Session. The Executive Committee shall approve, assign, or fail to accept the proposal.

LMSC approval shall require the affirmative vote of at least two thirds of all voting members of the Executive Committee. LMSC approval will result in the rules change becoming effective at the end of Plenary Session during which approval is voted. The revised LMSC Operating Rules shall be forwarded to the Computer Society Standards Activities Board (CS SAB); when the rules are known to be in conflict with the CS SAB Policies and Procedures the cover letter shall request formal CS SAB approval of the variance. In the case where the rules change is in conflict with the Policies and Procedures of CS SAB, the rule change will be put into effect as stated above but will be withdrawn immediately if rejected by the CS SAB. CS SAB rejection shall be announced to the LMSC Executive Committee by the most expeditious means available (e-mail, FAX, regular mail) and to the LMSC membership at the next Plenary Session.

If LMSC approval is not achieved, a vote to assign the proposal for further study and recommendation shall be taken. Assignment shall require the affirmative vote of at least one third of all voting members of the Executive Committee, otherwise no further action is taken on the proposal.

4. LAN MAN STANDARDS COMMITTEE (LMSC)

The LAN MAN Standard Committee (LMSC) is the standards sponsor organization and focal point for Local and Metropolitan Area Network Standards Sponsor activities. The LMSC includes the Executive Committee and a balloting pool for forming LMSC Sponsor Balloting Groups. All members of the Balloting Groups shall be members or affiliates of the IEEE or the IEEE Computer Society unless otherwise requested by the Executive Committee and approved by the Standards Activity Board. The Balloting Groups are formed by soliciting members of the LMSC balloting pool who are interested in voting on specific documents to be balloted, such as draft standards, recommended practices or guidelines. The LMSC Sponsor Ballots will be administered by the Executive Committee in accordance with Section 5 of the IEEE Standards Manual and Procedure 7 of these rules.

5. LMSC STANDARDS DEVELOPMENT GROUPS

The LMSC standards developing organization consists of the Executive Committee and the Working Groups and Technical Advisory Groups that develop the draft standards, recommended practices and guidelines.

5.1 LMSC Working Groups

5.1.1 Function

The function of the Working Group is to produce a draft standard, recommended practice or guideline. These must be within the scope of the LMSC, the charter of the Working Group and an approved PAR, or a PAR under consideration by the IEEE Standards Board, as established by the Executive Committee. After the approval of the Working Group's standard, recommended practice or guideline, the function of the Working Group is to review, revise, and affirm its documents.

5.1.2 Chair

LMSC Working Group Chairs and Vice Chairs shall be elected by the Working Group and confirmed by the LMSC Executive Committee. Terms shall end at the end of the first Plenary session of the next even numbered year.

Initial appointments, and temporary appointments to fill vacancies due to resignations or removals for cause, may be made by the Chair of the LMSC, and shall be valid until the end of the next Plenary session.

An individual who has served as Chair or Vice Chair of a given Working Group for a total of more than eight years in that office may not be elected to that office again.

A Working Group may elect a new Chair at any Plenary session, subject to confirmation by the LMSC Executive Committee. A motion to hold an election must be passed by 75% of the voting members of the Working Group present.

5.1.3 Membership

Membership belongs to the individual, not an organization, and may not be transferred.

5.1.3.1 Establishment

All persons participating in the initial meeting of the Working Group become members of the Working Group. Thereafter, membership in a Working Group is established by participating in the meetings of the Working Group at two out of the last four Plenary sessions, and (optionally) a letter of intent to the Chair of the Working Group. Participation is defined as at least 75% presence at a meeting. Membership starts at the third Plenary session attended by the participant. One duly constituted interim Working Group or task group meeting may be substituted for the Working Group meetings at one of the two Plenary sessions (See 5.1.3.5 Meetings and Participation).

Attendees of the Working Group who have not achieved member status are known as observers. Liaisons are those designated individuals who provide liaison with other working groups or standards bodies.

Although not a requirement for membership in the Working Group, participants are encouraged to join the IEEE, IEEE Standards Association (IEEE-SA) and the IEEE Computer Society. Membership in the IEEE SA will also allow participants to join the sponsor level ballot group. Working Group members shall participate in the consensus process in a manner consistent with their professional expert opinion as individuals, and not as organizational representatives.

No participation credit will be granted to any individual who has outstanding financial obligations to LMSC; retroactive credit for participation in meetings shall not be granted if payment is not made prior to the start of the next meeting. (Note: Assumes LMSC Treasurer personally contacts individual, verbally or in writing, but with some assurance that communication was, in fact, received, and in sufficient time to respond.)

Membership may be declared at the discretion of the Working Group Chair (e.g. for contributors by correspondence or other significant contributions to the Working Group).

5.1.3.2 Retention

Membership is retained by participating in at least two of the last four Plenary session meetings. One duly constituted interim Working Group or task group meeting may be substituted for one of the two Plenary meetings.

5.1.3.3 Loss

Membership may be lost if two of the last three Working Group letter ballots are not returned, or are returned with an abstention other than “lack of technical expertise.” This rule may be excused by the Working Group Chair if the individual is otherwise an active participant. Membership may be re-established as if the person were a new candidate member.

5.1.3.4 Rights

The rights of the Working Group members include the following:

- a) To receive a notice of the next meeting.
- b) To receive a copy of the minutes.
- c) To vote at meetings if and only if present.
- d) To vote in Working Group Letter Ballots.
- e) To examine all Working Draft documents.
- f) To lodge complaints about Working Group operation with the Executive Committee.
- g) To petition the Executive Committee in writing. (A petition signed by two-thirds of the combined members of all Working Groups forces the Executive Committee to implement the resolution.)

5.1.3.5 Meetings and Participation

Working Group meetings are open to anyone who has complied with the registration requirements (if any) for the meeting. Only members have the right to participate in the

discussions. The privilege of observers to participate in discussions may be granted by the Working Group Chair.

Interim Working Group or Technical Advisory Group meetings are to have as a goal: 1) Reasonable notification (>4 weeks) in addition to any announcement given at a plenary, and 2) Few last minute shifts in location (<< 1 per year).

5.1.4 Operation of the Working Group

The operation of the Working Group has to be balanced between democratic procedures that reflect the desires of the Working Group members and the Working Group Chair's responsibility to produce a standard, recommended practice, or guideline, in a reasonable amount of time. Roberts Rules of Order shall be used in combination with these operating rules to achieve this balance.

5.1.4.1 Chair's Function

The Chair of the Working Group decides procedural issues. The Working Group members and the Chair decide technical issues by vote. The Working Group Chair decides what is procedural and what is technical.

5.1.4.2 Voting

There are two types of votes in the Working Group. These are votes at meetings and votes by letter ballot.

5.1.4.2.1 Voting at Meeting

A vote is carried by a 75% approval of those members voting "Approve" and "Do Not Approve". No quorum is required at meetings held in conjunction with the Plenary session since the Plenary session time and place is established well in advance. A quorum is required at other Working Group meetings. The Working Group Chair may vote at meetings. A quorum is at least one-half of the Working Group members.

5.1.4.2.2 Voting by Letter Ballots

The decision to submit a draft standard or a revised standard to the Sponsor Ballot Group must be ratified by a letter ballot. Other matters may also be decided by a letter ballot at the discretion of the Working Group Chair. The Working Group Chair may vote in letter ballots.

The ballot shall contain three choices:

- Approve. (May attach non-binding comments.)
- Do Not Approve. (Must attach specific comments on what must be done to the draft to change the vote to "Approve".)
- Abstain. (Must include reasons for abstention.)

To forward a draft standard or a revised standard to the Executive Committee for approval for Sponsor Ballot Group voting, a letter ballot (or confirmation letter ballot) must be done first within the Working Group. A 75 percent approval of the Working Group confirmation letter

ballot is necessary with at least 50 percent of the members voting. The 75 percent figure is computed only from the “Approve” and “Do Not Approve” votes. Subsequent confirmation ballots to the Sponsor Ballot Group do not require Executive Committee approval.

The Working Group Chair determines if and how negative votes in an otherwise affirmative letter ballot are to be resolved. Normally, the Working Group meets to resolve the negatives or assigns the task to a ballot resolution group.

There is a recirculation requirement. For guidance on the recirculation process see Section 5.4.3.2 Resolution of comments, objections, and negative votes in the IEEE-SA Standards Board Operations Manual.

The letter ballot shall be conducted by electronic means. The response time shall be at least thirty days. However, for recirculation ballots, and for letter ballots not related to the submission of draft standards, the response time shall be at least fifteen days.

Submission of a draft standard or a revised standard to the Executive Committee must be accompanied by any outstanding negative votes and a statement of why these unresolved negative votes could not be resolved.

5.1.4.3 Working Group Chair’s Responsibilities

The main responsibility of the Working Group Chair is to produce a draft standard, recommended practice, or guideline, or to revise an existing document. The responsibilities include:

- a) Call meetings and issue a notice for each meeting at least four weeks prior to the meeting.
- b) Issue meeting minutes and important requested documents to members of the Working Group, the Executive Committee, and liaison groups. The meeting minutes are to include:
 - List of participants
 - Next meeting schedule
 - Agenda as revised at the start of the meeting
 - Voting record
 - . Resolution
 - . Mover and second
 - . Numeric results

Sufficient detail shall be presented in the minutes to allow a person knowledgeable of the activity, but not present at the discussion, to understand what was agreed to and why.

Minutes shall be distributed within 45 days of the meeting to the attendees of the meeting, all members and all liaison people.

- c) Maintain liaison with other organizations at the direction of the Executive Committee or at the discretion of the Working Group Chair with the approval of the Executive Committee.

If in the course of standards development any Working Group utilizes a standard developed or under development by another organization within Project 802, by another IEEE group or

by an external organization, the Working Group shall reference that standard and not duplicate it.

If a standard cannot be utilized as is and modifications or extensions to the standard are necessary, the Working Group should:

- 1) define the requirements for such changes,
- 2) make these requirements known to the other organization, and
- 3) solicit that organization for the necessary changes.

Only if the required changes cannot be obtained from the other organization, can the Working Group, with the concurrence of the Executive Committee, develop these changes itself. Even in the latter case, the Working Group should seek the concurrence of the other organization by joint meetings, joint voting rights or other mechanisms on the changes being made.

- d) Provide a full accounting to the LMSC Treasurer of all fees collected and retained, under authority of 5.1.4.4 Working Group Chair's Authority, to meet Working Group expenses, and the disposition of these funds.
- e) Speak for the Working Group to the Executive Committee and, in the case of a "Directed Position" vote the will of the Working Group in accordance with Procedure # 8.

5.1.4.4 Working Group Chair's Authority

To carry out the responsibilities cited in 5.1.4.3 Working Group Chair's Responsibilities, the Working Group Chair has the authority to:

- a) Call meetings and issue meeting minutes.
- b) Decide which issues are technical and which are procedural.
- c) Establish Working Group rules beyond the Working Group rules set down by the Executive Committee. These rules must be written and all Working Group members must be aware of them.
- d) Assign/unassign subtasks and task leaders or executors, e.g. secretary, subgroup chair, etc.
- e) Determine if the Working Group is dominated by an organization, and, if so, treat that organizations' vote as one (with the approval of the Executive Committee).
- f) Make final determination if and how negative letter ballots are to be resolved when a draft standard, recommended practice, or guideline, is to be sent to the Executive Committee for approval for Sponsor Ballot Group voting.
- g) Collect fees to meet Working Group expenses.

5.1.4.5 Removal of Working Group Chairs or Vice Chairs.

The procedures specified in 5.1.2 Chair are to be followed under normal circumstances. If a Working Group or TAG feels it is being inappropriately led or significantly misrepresented by its Chair or a Vice Chair and is unable to resolve the issue internal to the Working Group or TAG, then it is the responsibility of that Working Group to make and pass (75% of voting members present required) a motion to that effect and so notify the 802 Executive Committee with the recommended action and all supporting rationale in written form. The process for removal of committee Chairs, Vice Chairs, and other officers is prescribed in the IEEE

Computer Society, Standards Activities Board “SAB Policies and Procedures” Section 4.8.3.1, Removal of Chairs and Vice Chairs, is included here with relative terminology (e.g., subsidiary committee) translated to LMSC terms (e.g., Working Group).

The LMSC Executive Committee may remove the Chair or a Vice Chair of a Working Group or TAG for cause.

The Chair of the LMSC Executive Committee shall give the individual subject to removal a minimum of thirty (30) days written mail notice, with proof of delivery, of a meeting of the LMSC Executive Committee at which the removal is to be decided. The individual subject to removal shall have the opportunity to confront the evidence for removal, and to argue in his or her behalf.

In the clear and documented case of gross misconduct, the Chair of the LMSC Executive Committee may suspend the Chair of a Working Group, with the concurrence of the IEEE Computer Society VP of Standards. A meeting or teleconference of the LMSC Executive Committee shall be convened as soon as practical, but in no case later than thirty (30) days, to review the suspension as provided for above.

5.1.4.6 Precedence of Operating Rules

If Working Group operation conflicts with the LMSC Operating Rules, then the LMSC Operating Rules shall take precedence.

5.1.5 Deactivation of Working Group

The LMSC Executive Committee may deactivate a Working Group. If the Working Group has not generated standards or recommended practices, the Working Group can be disbanded. If the Working Group has produced standards or recommended practices, the Working Group should be hibernated.

5.1.5.1 Disbanding a Working Group.

After all standards, recommended practices and Technical Reports for which a hibernating working group is responsible are withdrawn or transferred to another group or groups, the hibernating working group will be disbanded.

The disbanding of a Working Group requires a letter ballot of the LMSC Executive Committee. A disbanded Working Group is then completely abolished.

5.1.5.2 Hibernation of a Working Group

A Working Group can be hibernated at the request of the Working Group chair and the approval of the LMSC Executive Committee. The hibernating Working Group can be returned to active status by the LMSC Executive Committee.

5.1.5.2.1 Core of Experts

The chair of a hibernating Working Group shall maintain a list of experts that are available to answer questions and provide clarification about the standards and/or recommended practices generated by the Working Group.

5.1.5.2.2 Inquiries/Interpretations

Inquiries and interpretations of standards and recommended practices that were generated by a hibernating Working Group shall be directed to the chair of the hibernating Working Group. The chair shall attempt to resolve the inquiry or interpretation using the core of experts, as necessary. If the chair is unable to resolve the inquiry or interpretation, the chair may petition the LMSC Executive Committee to activate the Working Group.

5.1.5.2.3 Executive Committee Representation

The chair of a hibernating Working Group may retain voting rights on the LMSC Executive Committee for three LMSC Plenary meetings after the WG has hibernated:

- a) if the chair of the hibernating WG was the chair of the WG when it entered hibernation, and
- b) if the chair of the hibernating WG maintains attendance by attending at least 75% of both the opening and closing Executive Committee meetings at two of the last four plenary sessions.

New non-voting hibernating Working Group chairs to replace vacancies may be appointed by the LMSC chair as soon as practical and affirmed by the LMSC Executive Committee at the next plenary meeting. A non-voting Hibernating Working Group Chair of the Executive Committee shall be recognized as a full member of the EC, having all rights and meeting privileges except the right of voting on EC motions.

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5.2 LMSC Technical Advisory Groups (TAG)

The function of a Technical Advisory Group is to provide assistance to Working Groups. The TAGs operate under the same rules as the Working Groups, with the following exceptions:

- a) A TAG may not write standards, but may write recommended practices and guidelines.
- b) A TAG is established by the Executive Committee at the request of one or more Working Groups to provide assistance within a technical topic area.
- c) The primary responsibility of a TAG is to provide assistance within its topical area as specifically requested by one or more of the Working Groups.
- d) The decision to submit a draft recommended practice or draft guideline to Sponsor Ballot Group voting shall be governed by the same rules as those governing the submission of a draft standard (see 5.1.4.2.2 Voting by Letter Ballots).
- e) Any report generated by a TAG that is forwarded to any Working Group in the name of the TAG, needs to get a 75% approval vote of the TAG members present who vote “Approve” and “Do Not Approve”.

5.3 Study Groups

Study groups are formed when enough interest has been identified for a particular area of study such as a new access method or modified use of an existing access method. Two types of Study Groups are specified:

1. An Executive Committee Study Group (ECSG) is initiated by vote of the Executive Committee and the ECSG Chair is appointed and approved by the Executive Committee. The ECSG Chair has the same responsibilities as a Working Group Chair as specified in 5.1.4.1 but does not have Executive Committee voting rights.

2. A Working Group Study Group (WGSG) is initiated by vote of the Working Group or TAG and approved by the Executive Committee. The WGSG Chair is appointed and approved by the Working Group or TAG.

The Study Group shall have a defined task with specific output and a specific time frame established within which they are allowed to study the subject. It is expected that the work effort to develop a PAR will originate in a ECSG or WGSG. A Study Group shall report its recommendations, shall have a limited lifetime, and is chartered meeting-to-meeting. After the Study Group recommendation(s) has been accepted by the parent body, the Study Group will be disbanded no later than the end of the next Plenary Session.

The decision of whether to utilize an existing Working Group or TAG, or to establish a new Working Group or TAG to carry out work items recommended by a Working Group shall be made by the Executive Committee with due consideration of advice from the Study Group.

5.3.1 Study Group Operation

Progress of each Study Group shall be presented at Opening Plenary meetings by the Working Group, TAG, or ECSG Chair. Study Groups may elect officers, other than the Chair, if necessary and will follow the general operating procedures for Working Groups specified in 5.1.3.5 and 5.1.4. Because of the limited time duration of a Study Group no letter ballots are permitted.

5.3.2 Voting at Study Group Meetings

Any person attending a Study Group meeting may vote on all motions (including recommending approval of a PAR). A vote is carried by 75% of those present and voting “Approve” or “Disapprove.”

Procedure 1

USE OF LMSC FUNDS

The purpose of having a LMSC treasury is to:

1. Pay for the cost of conducting the Plenary session and other LMSC meetings held in conjunction with the Plenary session for:
 - cost of hotel meeting rooms
 - document reproduction
 - meeting administration
 - equipment/supplies/services needed for the efficient conduct of business, etc.
2. Reimburse individuals for LMSC expenses not covered by other sources, e.g. corporations, other IEEE organizations, etc.
3. Expedite the setting of LAN/MAN standards, e.g. printing of draft standards and conducting ballots.
4. To support the publication and dissemination of standards.

The source of funds for LMSC are the joint meeting fees from meeting participants.

Specific policies regarding the treasury are listed below:

1. The LMSC Executive Committee shall authorize all expenditures.
2. The LMSC Chair, Executive Secretary, Recording Secretary, Treasurer, and each Working Group and TAG Chair shall be reimbursed for expenditures up to \$200 between LMSC Plenary sessions without specific authorization from the Executive Committee. If circumstances arise where an expense beyond the \$200 is likely to occur, this expense should be cleared by contacting 6 members of the LMSC Executive Committee and the LMSC Treasurer and getting their approval.
3. The cost of providing documents or other benefits to parties outside LMSC should be shifted to these parties, e.g. the use of commercial printers, or the IEEE Computer Society, to distribute documents on a cost basis should be encouraged.
4. Major expenses or commitments, such as hotel arrangements or large draft printings, that are to occur between LMSC Plenary sessions should be estimated and approved by the Executive Committee prior to making these commitments.
5. A separate checking account will be kept for LMSC. This account will be administered by the LMSC Treasurer. The Treasurer will provide reports about LMSC finances to the LMSC membership at large at LMSC Plenary sessions and to the Executive Committee. The Treasurer's Report will be included in the Executive Committee meeting minutes which are distributed to the IEEE Computer Society's Executive Director and the IEEE Computer Society's VP for Standards.
6. The LMSC Treasurer shall strive to maintain an operating reserve (uncommitted funds on hand) between 75% and 100% of the expenses of a single LMSC Plenary session.
7. Executive Committee approval of a meeting site for a LMSC Plenary session constitutes authority for the Treasurer to pay all ordinary expenses for that meeting and any extraordinary expenses presented as part of the meeting site proposal.

Procedure 2

PROCEDURE FOR PARS

1. Any standards activity whose aim is to produce a Standard, Recommended Practice or Guideline must submit a PAR within six months of beginning their work.

Refer to Working Guide for Submittal of Project Authorization Request (PAR) and PAR Form, 1 January 1990.

Add pages, as necessary, of more detailed information than is on the PAR form about the Scope, Purpose and Coordination of the proposed project, but include summary text under Scope and Purpose.

2. Submit proposed PAR and, if applicable, responses to the five criteria per 6.0 below to LMSC Executive Committee for approval prior to sending outside of LMSC.

(Approval is contingent on inclusion of responses describing how the proposed PAR meets **the five criteria** and a work plan for the development of managed object definitions, either as part of the PAR or as a part of an additional PAR. PARs which introduce no new functionality are exempt from the requirement to provide responses to the 5 Criteria. Examples of such PARs are:: Protocol Implementation Conformance Statements (PICS), Managed Object Conformance Statements (MOCS), PARs to correct errors and PARs to consolidate documents.)

Complete PARs shall be delivered to all Executive Committee members not less than 30 days prior to the day of the Opening Executive Committee meeting of an LMSC Plenary session. At the discretion of the LMSC Chair, PARs for ordinary items (like Maintenance PARs) and PAR changes essential to the orderly conduct of business (like division of existing work items or name changes to harmonize with equivalent ISO JTC-1 work items) may be placed on the Executive Committee agenda if delivered to Executive Committee members 48 hours in advance.

Delivery may be assumed if sent by either FAX or e-mail one full working day prior to the deadline, or if sent by express delivery service with guaranteed delivery one working day prior to the deadline, or if sent by US Mail, or Air Mail ten working days prior to the deadline. All PARs must be accompanied by supporting documentation which must include at least:

Explanatory technical background material

Expository remarks on the status of the development of the PAR, e.g., approved by WG, Draft pending Working Group approval at next meeting, etc.

3. In order to ensure wide consideration by the 802 members, PARs for significant new work (those that will result in a new Standard/Recommended Practice/Guideline or an addition to an existing one) must pass through the following process during the Plenary session week in which Executive Committee approval is sought:

The PAR must be presented in summary at the opening Plenary meeting to the general 802 membership. Supporting material must be available in sufficient detail for members of other Working Groups to understand if they have an interest in the proposed PAR, i.e., if they would like to contribute/participate in the proposed work, or identify if there is conflict with existing or anticipated work in their current Working Group. It is highly recommended that a tutorial be given at a previous Plenary session for major new work items.

Working Groups, other than the proposing Working Group, must express concerns to the proposing Working Group as soon as possible and must submit written comments to the proposing Working Group and the Executive Committee not later than 5:00 p.m. on Tuesday.

The proposing Working Group must respond to commenting Working Groups and to the Executive Committee together with a Final PAR not later than 5:00 p.m. on Wednesday. It will be assumed that insufficient coordination and/or inter Working Group consideration had occurred prior to the submission of the PAR if this deadline is not met, and the proposed PAR will not be considered by the Executive Committee at their closing Executive Committee meeting.

4. Working Group Chair shall sign the copyright acknowledgment.
5. LMSC Chair shall as sponsor submit the PAR to the following:
 - a. Chair, CS Standards Activities Board
 - b. IEEE Standards Office Secretary to NESCOM

6.0 CRITERIA FOR STANDARDS DEVELOPMENT (FIVE CRITERIA)

6.1 Broad Market Potential

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

- a) Broad sets of applicability.
- b) Multiple vendors and numerous users.
- c) Balanced costs (LAN versus attached stations).

6.2 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.

6.3 Distinct Identity

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

- a) Substantially different from other IEEE 802 standards.
- b) One unique solution per problem (not two solutions to a problem).
- c) Easy for the document reader to select the relevant specification.

6.4 Technical Feasibility

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

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

6.5 Economic Feasibility

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

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

7. Withdrawn PARs.

Occasionally a PAR is withdrawn. When a PAR is to be withdrawn, the responsible WG chair in consultation with the WG shall consider whether the most current draft has content that should be archived. If so, the WG chair shall ensure the most current draft of the proposed standard is placed on the IEEE Document Distribution Service list. The WG chair shall add a cover page to the draft alerting the reader that the PAR has been withdrawn for this work, giving the specific date of the withdrawal and the rationale for the withdrawal.

The withdrawn draft shall be maintained on the IEEE Document Distribution Service list for a period of 3 years after the time of withdrawal, after which it shall be removed from the list.

Procedure 3

PROCEDURE FOR COORDINATION WITH OTHER STANDARDS BODIES

All communications shall comply with clause 5.1.4 (Position Statements on standards to legislative bodies, government agencies, and international organizations) of the IEEE Standards Association Standards Board Operations Manual.

IEEE 802 communications

- Communications from the LMSC to external standards bodies shall not be released without prior approval by the EC. Such approval indicates that the communication represents the position of IEEE 802.

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- All communications by IEEE 802 with external standards bodies shall be issued by the LMSC Chair and shall be copied to the EC.

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Working Group communications

- Working Group communications with external standards bodies that are not "Information Only" shall be copied to the EC.

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- Working Group communications with external standards bodies shall not imply that they represent the position of IEEE or IEEE 802. They shall be issued by the Working Group Chair and the LMSC Chair shall be included in the distribution list.

- EC members receiving incoming liaison letters from external standards bodies shall forward a copy to the LMSC Chair.

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Informal communications shall not imply that they are a formal position of IEEE 802 or of the working group.

Procedure 4

PROCEDURE FOR COMMUNICATION WITH GOVERNMENT BODIES

All communications shall comply with clause 5.1.4 (Position Statements on standards to legislative bodies, government agencies, and international organizations) of the IEEE Standards Association Standards Board Operations Manual.

These procedures apply to communications with government and intergovernmental bodies on regulatory issues.

IEEE 802 position statements

- Position statements to government bodies shall not be released without prior approval by the EC (requires 2/3 majority as per section 15 of the Nov. 14, 1999 IEEE Policy and Procedure). Deleted: s
- All position statements shall be issued by the LMSC Chair as the position of IEEE 802 (stated in the first paragraph of the statement). Position statements shall be copied to the EC and the IEEE SA Standards Board Secretary and shall be posted on the IEEE 802 web site. The IEEE 802 web site shall state that all such position statements shall expire five years after issue. Deleted: s

Working group position statements

- Working Group position statements with government bodies shall not be released without prior approval by a 75% majority of the Working Group. Such position statements may proceed unless blocked by an EC vote. For position statements not presented for review in an EC meeting, EC members shall have a review period of at least five days; if, during that time, a motion to block it is made, release of the position statement will be withheld until the motion fails. Deleted: s
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- Working Group position statements shall be identified in the first paragraph as the position of only the Working Group and shall be issued by the Working Group Chair and shall include the LMSC Chair in the distribution. Such statements shall not bear the IEEE or IEEE 802 logos.

Incoming liaison letters to EC members shall be forwarded to the LMSC Chair. Deleted: s

Informal communications shall not imply that they are a formal position of the IEEE 802 or of the working group.

Proposed position statements that need to be issued by other IEEE entities shall be forwarded to the IEEE SA Standards Board Secretary for further processing upon approval by the EC. Deleted: s

Procedure 5

PROCEDURE FOR LIMITING THE LENGTH OF THE IEEE LMSC EXECUTIVE COMMITTEE MEETINGS

1. The reports from the Working Groups and TAGs should deal primarily with issues related to LMSC as a whole or inter-group coordination. Reports of those items that will be covered in the Plenary meeting should be minimized.
2. Roberts Rules of Order shall be used in Executive Committee meetings. Issues brought before the Executive Committee for resolution by vote should be phrased as a motion and distributed, if possible, to the Executive Committee members before the meeting.
3. The maker of the motion has up to five minutes of uninterrupted time to explain the motion and to answer questions about it. After this, the seconder of the motion will be sought.
4. Each Executive Committee member has two minutes of uninterrupted time to state an opinion about the motion. It is not necessary that all two minutes be used.
5. The following debate will be confined only to the motion.
6. Motions needing concurrence of the Working Group(s) will be tabled for review at the next Executive Committee meeting.
7. The opening Executive Committee meeting shall start at 8AM and end no later than 10:30AM on Monday morning and the closing Executive Committee meeting shall start at 1PM and shall end no later than 6 PM on Friday of the Plenary session.
8. If the Executive Committee so modifies a Working Group's motion that the Working Group Chair believes the Working Group membership may no longer support the revised motion then the Working Group should be given the opportunity to reconsider what action it wishes to take and present it to the Executive Committee at the next Executive Committee meeting. This action can be accomplished by a Privileged Non-debatable "Request To Defer Action" made by the affected Working Group Chair which will automatically cause all action on the motion to be deferred until the end of the next regular Executive Committee meeting.

Procedure 6

POLICY FOR DISTRIBUTION OF NEW IEEE LMSC STANDARDS PUBLICATIONS

1. Books will be distributed to those participants of the Working Group and major contributors listed in front matter of the standard who directly contributed to that standard or supplement. The LMSC Chair will establish the book distribution policy. The Executive Secretary in conjunction with the Working Group chair will implement the policy including generating information to provide to the IEEE Office for any distribution by IEEE Standards.
2. CD-ROMs, containing all IEEE 802 standards available at that point in time, available normally at the July Plenary on an annual basis, will be distributed to registered attendees who are Working Group voting members or EC members at the issuing meeting, and at subsequent plenary meetings for those not attending the issuing meeting until a new CD-ROM is available. Handout will occur on Wednesday (8AM-5PM).

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The CD-ROM program will be reviewed annually by the IEEE 802 Chair and the IEEE Standards Department to ensure its appropriateness and to make any adjustments in the product development process and business arrangements that might be necessary.

Procedure 7

IEEE LMSC DOCUMENT NUMBERING PLAN

1. This numbering scheme applies to all LMSC Working Groups and TAGs.
2. It will cover all draft documents as well as other 802.x Working Group/TAG submissions to provide a complete index of all Working Group/TAG documents.
3. The format for the document numbers will be as follows:
 - either 802.na/Di-yy/m (formal draft standards)
 - or 802.n{tg}-yy/m (all other documents & correspondence)

where:

- n = a Working Group/TAG Designator (i.e. 0, 1, ..., 11),
- a = a PAR Series Designator (i.e. _, A, B, C,...) for drafts of a document produced under an active PAR, and must include the {/Di} field,
- i = a Draft Revision Number for working documents produced under an active PAR, which starts at 1 and is increased by 1 with each new revision,
- yy = a year designator (i.e. 87, 88, 89, ...) to indicate the year in which the document number was assigned,
- m = a sequence number which starts at 1 at the beginning of each year and is increased by 1 each time a document number is assigned,
- tg = an optional task group designator to be used specifically for tracking task group submissions that are independent of the Working Group/TAG as a whole. Documents relevant to the whole Working Group/TAG will use the 802.n-yy/m form. The allowed formats for a task group designator are: one letter, two letters, or one letter followed by one number. All other characters are specifically prohibited.

Procedure 8

PROCEDURE FOR PROJECT MANAGEMENT

1. Update the Working Group or Technical Advisory Group status report and Sponsor Ballot milestone chart after every LMSC meeting. (Administered by LMSC Chair).
2. Send the minutes of each Working Group or Technical Advisory Group meeting, and any new drafts, to the IEEE Standards Secretariat.
3. Prepare or update a list of Working Group or Technical Advisory Group papers, drafts, minutes, etc. which may be of interest to outside people who follow the progress of the work. Send the list and the materials to the IEEE Standards Secretariat. (Administered by the LMSC Executive Secretary)
4. Sponsor ballots will be conducted by the IEEE Standards Secretariat. (Two response ballots with a copy to the Standards Secretariat and a copy to the Working Group Chair)

Procedure 9

PROCEDURE FOR ESTABLISHING A DIRECTED POSITION

Members of the LMSC Executive Committee have a responsibility to act in the best interest of the LMSC as a whole. Working Group Chairs have a responsibility to represent their Working Group on the Executive Committee. At times these responsibilities are in conflict with each other.

Decisions of a Working Group may be of such a nature that the Working Group members deem it necessary to "Direct" the Working Group Chair to vote a specific way on Executive Committee motions related to a Working Group decision. When directed, through the process described below, the Working Group Chair shall vote as mandated by the Working Group resolution for the specified subject on any formal vote(s) in the Executive Committee. It would be anticipated that the use of a directed (i.e., instructed) vote is an exceptional situation and hence used infrequently, e.g., critical PAR votes, formation of new Working Groups and Study Groups.

Working Group developed positions are not to be considered as automatic "Directed Positions." After a Working Group motion has been passed that establishes the Working Group's position, a separate Directed Position (75% required to pass per 5.1.4.2 Voting) motion is required to make that Working Group Position a Directed Position. A Directed Position motion applies only to a specific, bounded, Working Group issue that is to be brought before the Executive Committee. Directed Position motions may not be combined, nor may any procedure be adopted that diminishes the extraordinary nature of establishing a "Directed Position."

The Working Group Chair, however, has the freedom to express other views in an attempt to persuade members of the Executive Committee to consider them, however, such views shall be identified as distinct from and not the formal Working Group Directed Position. The Working Group Chair is required to disclose to the Working Group his/her intent to offer a position contrary to a Directed Position. When presenting a Directed Position to the Executive Committee, the Working Group Chair is obligated to present and support the Working Group's Directed Position Motion with voting results, along with pros and cons behind the motion.

Procedure 10

PROCEDURE FOR CONDITIONAL APPROVAL TO FORWARD A DRAFT STANDARD

Rationale: This procedure is to be used when approval to forward a draft standard to LMSC letter ballot or to REVCOM is conditional on successful completion of a Working Group or LMSC recirculation ballot, respectively.

Seeking conditional approval is only appropriate when ballot resolution efforts have been substantially completed and the approval ratio is sufficient.

The conditional approval expires at the opening of the next plenary.

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

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

In the vote tally, Approve votes (and Abstain votes) include those votes that were initially Disapprove where the voter has accepted the resolution of the voter's comments and changed the vote to Approve (or Abstain). Disapprove votes include only those votes where some comment resolutions have not been accepted by the voter and the voter continues to disapprove. Where a voter has accepted some comment resolutions and rejected others, only the comments of which the voter has not accepted resolution should be presented.

When conditional forwarding to LMSC ballot has been approved, the conditions shall be met before initiating LMSC ballot. When conditional forwarding to REVCOM has been approved, the submittal may be forwarded to REVCOM before the conditions have been fulfilled in order to meet the submittal requirements for the next REVCOM meeting. However, the submittal shall be withdrawn from the REVCOM agenda if the conditions have not been met one week before the REVCOM meeting.

Conditions:

1. The ballot cover letter shall include the following statement: "This ballot is being conducted under the procedure for conditional approval of the IEEE 802 Operating Rules (add the exact reference and the current IEEE 802 Operating Rule URL here)."
2. Confirmation ballot is completed. Generally, the confirmation ballot and resolution should occur in accordance with the schedule presented at the time of conditional approval.
3. After resolution of the confirmation ballot is completed, the approval percentage is at least 75% and there are no new DISAPPROVE votes.
4. No technical changes, as determined by the Working Group Chair, were made as a result of the confirmation ballot.

5. No new valid DISAPPROVE comments on new issues that are not resolved to the satisfaction of the submitter from existing DISAPPROVE voters.
6. If the Working Group Chair determines that there is a new invalid DISAPPROVE comment or vote, the Working Group Chair shall promptly provide details to the EC.
7. The Working Group Chair shall immediately report the results of the ballot to the EC including: the date the ballot closed, vote tally and comments associated with any remaining disapproves (valid and invalid), the Working Group responses and the rationale for ruling any vote invalid.

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Motion: to approve distribution for the rules change ballot the proposed rules change titled "Executive Committee Title"
Moved: Mat Sherman/ Bill Quackenbush
Passes: 10/0/0

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5.46 MI Send Minimum Sponsor Ballot Durations rules change to ballot - Grow 2 5:37 PM

**PROPOSED RULES CHANGE
SPONSOR BALLOT PERIODS
Moved: Bob Grow**

Proposed Change:

3.1 Function – Move item “j)” to follow item “e)” and insert new item “g)” after it.

Relabel the following list items beginning with old “f” becoming “h)”:

g) Ensure minimum sponsor ballot periods are followed, with minimum sponsor ballot periods the same as those required for working group ballots (see 5.1.4.2.2).

5.1.4.2.2 Voting by Letter Ballots – Change the 6th paragraph to read:

The letter ballot shall be conducted by electronic means. The response time shall be at least thirty days (i.e., at least 720 hours). However, for recirculation ballots, and for letter ballots not related to the submission of draft standards, the response time shall be at least fifteen days (i.e., at least 360 hours). Response time shall be measured from the later of electronic time stamp of announcement or availability of the subject matter of the ballot, until the time of ballot close indicated in the announcement.

Objective: Establish consistent minimum working group and sponsor ballot periods for all 802 working groups. Fix a “hole” in our P&P (no minimum sponsor ballot periods are currently specified for 802 drafts).

Problem: The IEEE Ballot Center does not enforce any particular ballot period, nor does there appear to be any requirement for them to do so. They do have defaults (30 day initial ballot and 10 day recirculation), but those periods are negotiable to shorter times. The ballot center also allows a fractional day to be counted as a day (e.g., a “10 day” recirculation actually being 9.x days in duration). Because sponsor ballot announcements go out during USA Eastern Time working hours, in practice, this favors USA and similar time zone participants). IEEE 802 produces international standards and this USA-centric view of balloting is inappropriate. Counting dates instead of days allows even shorter ballot durations than those practically achieved through the ballot center.

A “10 day” ballot announced late Friday only provides slightly more than 5 working days (assuming no holidays) for review. While theoretically this might be appropriate in limited circumstances, it can be used by 802 working groups for 1st recirculation ballots on large documents implementing hundreds of changes with dozens of unsatisfied negative comments. Announcement during the weekend (anywhere in the world) should not be assumed to be received until the next work day, and 10 days in hand has been our objective in the past. A 10 day recirculation ballot period does not meet this objective.

Precedent: IEEE-SA staff has reported that other sponsor groups include minimum ballot periods in their rules, and the ballot center is capable of working with those periods. This rules change is submitted with encouragement from IEEE staff.

Motion: to forward for rules change on Sponsor Ballot periods for SEC ballot

Moved: Bob Grow/Geoff Thompson

Passes: 10/0/1

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Paul designated Bob Grow to conduct the rules change ballot and subsequent comment collection and resolution.

5.47 MI Approval of SEC Appeals Rule change to ballot - Sherman 5:35 PM

**Proposed IEEE 802 LMSC Rules Revision Letter Ballot
on
Appeals Process**

From: Matthew Sherman, 2nd Vice Chair IEEE 802

To: Sponsor Executive Committee

Date: March 10, 2003

Duration: Till March 14, 2003

Purpose: Address requirement for appeals process in rules.

Rationale for proposed text:

Section 5.1 of the IEEE-SA Standards Board Operations Manual states:

“The P&P for the Sponsor shall define the process by which the Sponsor handles appeals (see subclause 5.4 of the IEEE-SA Standards Board Bylaws and 5.8).”

Currently the IEEE 802 rules (P&P) have no such process defined. This rules change addresses that issue by proposing a process based on section 5.8 of the Standard Association Board Operations Manual. There are some deviations from the process defined in 5.8 to simplify its implementation in the IEEE 802 format. The key deviations are:

- 1) The entire SEC serves as the appeals pool rather than electing one at the beginning of every year
- 2) If the appeals panel cannot easily be selected, the matter will be referred to the [Computer Society](#) SAB

Proposed Text:

Proposed text for rules change is shown below as a revision against the text in the LMSC Rules as last revised July 12, 2002. Note that it is incorporated as an entirely new section, so no existing text has been changed. Revisions are relative to draft circulated on March 9th.

3.7 Appeal and complaint process

Every attempt should be made to resolve concerns informally, since it should be recognized that a formal appeals process has a tendency to negatively, and sometimes permanently, affect the goodwill and cooperative relationships between and among persons. If the informal attempts to resolve a concern are unsuccessful, the following formal procedure shall be invoked.

3.7.1 Appeals pool

The entire SEC shall serve as an “appeals pool” to hear complaint and appeals on activities within IEEE 802, and documents which they develop. Former SEC members who are in good standing with the LMSC and have achieved status through attendance may also be included in the appeals pool.

3.7.2 Complaint

The appellant shall file a written complaint with the Recording Secretary of the SEC (Secretary) within 30 days after the date of notification / occurrence of an action or at any time with respect to inaction. The complaint shall state the nature of the objection(s) including any adverse effects, the clause(s) of the procedures or the standard(s) that are at issue, actions or inaction that are at issue, and the specific remedial action(s) that would satisfy the appellant’s concerns. Previous efforts to resolve the objection(s) and the outcome of each shall be noted. The appellant shall include complete documentation of all statements in the complaint. Within 10 days of receipt of the complaint, the Secretary shall send the appellant a written acknowledgment of receipt of the complaint, shall send the respondent (the chair of the committee at issue) a copy of the complaint and acknowledgment, and shall send the parties a written notice of the time and location of the hearing with the appeals panel. The hearing with the appeals panel shall be scheduled at the location set for, and during the period of, the first LMSC plenary meeting (nominally Wednesday evenings) that is at least 60 days after receipt of the complaint by the Secretary.

3.7.3 Response

Within 45 days after receipt of the complaint by the Secretary, the respondent should send the appellant and Secretary a written response, specifically addressing each allegation of fact in the complaint to the extent of the respondent’s knowledge. The response shall include complete documentation of all statements in the response.

3.7.4 Appeals Panel

The IEEE 802 SEC Chair shall appoint from the appeals pool an appeals panel consisting of a chair and two other members who have not been directly involved in the matter in dispute, and who will not be materially or directly affected by any decision made or to be made in the dispute. At least two members shall be acceptable to the appellant and at least two shall be acceptable to the respondent. If the parties to the appeal cannot agree on an appeals panel within a reasonable amount of time, the whole matter shall be referred to the Computer Society Standards Activity Board (SAB) for consideration.

Deleted: IEEE-SA Standards Board

3.7.5 Conduct of the Hearing

The hearing shall be open except under the most exceptional circumstances at the discretion of the SEC chair. The appellant has the burden of demonstrating adverse effects, improper actions or inaction, and the efficacy of the requested remedial action. The respondent has the burden of demonstrating that the committee took all actions relative to the appeal in compliance with its procedures and that the requested remedial action would be ineffective or detrimental. Each party may adduce other pertinent arguments, and members of the appeals panel may address questions to individuals. The appeals panel shall only consider documentation included in the complaint and response, unless

- a) Significant new evidence has come to light; and
- b) Such evidence reasonably was not available to the appellant or respondent, as appropriate, at the time of filing; and
- c) Such evidence was provided by the appellant or respondent, as appropriate, to the other parties as soon as it became available.

Robert's Rules of Order (latest edition) shall apply to questions of parliamentary procedure for the hearing not covered herein.

3.7.6 Appeals Panel Decision

The appeals panel shall not consider technical issues, but shall limit its consideration to procedural matters. The appeals panel shall render its decision in writing within 30 days of the hearing, stating findings of fact and conclusions, with reasons there for, based on a preponderance of the evidence. Consideration may be given to the following positions, among others, in formulating the decision:

- a) Finding for the appellant, remanding the action to the group involved, with a specific statement of the issues and facts in regard to which fair and equitable action was not taken;
- b) Finding against the appellant, with a specific statement of the facts that demonstrate fair and equitable treatment of the appellant and the appellant's objections;
- c) Finding that new, substantive evidence has been introduced, and remanding the entire action to the appropriate group for reconsideration.

3.7.7 Request for Re-hearing

The decision of the appeals panel shall become final 30 days after it is issued, unless one of the parties files a written notice of request for re-hearing prior to that date with the Recoding Secretary, in which case the decision of the appeals panel shall be stayed pending review by the SEC at its next meeting. At that time, the SEC shall decide

- a) To adopt the report of the appeals panel, and thereby deny the request for re-hearing; or
- b) To direct the appeals panel to conduct a re-hearing.

Further complaints shall be referred to the Computer Society SAB.

Deleted: IEEE-SA Standards Board

Motion: to approve for distribution for rules change the proposed rules change titled "Appeals Process"

Moved: Mat Sherman/ Bill Quackenbush

Passes: 10/0/0

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5.48 MI Authorize press release on 802.20 status - Nikolich 5:40 PM

Proposed press release:

Geoff Thompson is appointed interim chair of 802.20

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The 802.20 officer positions resulting from the March 13, 2003 election results were not affirmed by the IEEE 802 Executive Committee. The Chair has appointed and the Executive Committee has affirmed the appointment of Geoff Thompson <Thompson@ieee.org> as interim chair of 802.20. Mr. Thompson will be acting as interim chair until new elections are held. The date for new elections will be announced at a later date, but the elections will not occur before the July 2003 Plenary.

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Motion: to approve the above text as the formal communication to the 802all and the 802.20 reflectors.

Moved: Geoff Thompson/Bob Grow

Passes: 9/1/0

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5.49 -
5.50 -
5.51 -
5.52 -
5.53 -
5.54

Information Items

 -

5.55 II Network Services - Heile 5

5.56 II 802 Task Force update - Nikolich 5

25

5.57 II Survey Results - Quackenbush 2

5.58 II Interim meetings - Nikolich 2

5.59 II 10GBASE-T Study Group Extension - Grow 2

30

5.60 MI 802.11n HT PAR update - Kerry 2 5:59 PM

Motion: To continue the charter of the 802.11 HTSG through the July 2003 Plenary to process comments from the SEC on the PAR and 5 criteria response and to facilitate the transition to Task Group n.

Moved: Stuart Kerry/Carl Stevenson

Passes: 9/0/1

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5.61 -
5.62 -
5.63 -
5.64 -
5.65 II 802 News Bulletin - Klerer 10

ADJOURN SEC MEETING

- Nikolich

06:00 PM

ME - Motion, External MI - Motion, Internal

DT- Discussion Topic II - Information Item

5 All Information Items (items 5.55 through 5.59) will be sent out to the SEC reflector.

Motion to adjourn.
Moved: Stevenson/Sherman

10 **Passes: 10/0/0**
The LMSC meeting was adjourned at 6:00pm.

15 Respectfully Submitted,
Bob O'Hara
Recording Secretary