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

Monday, November 8, 1999 - 8:00 a.m.

Hyatt Regency, Kauai, HI

1. MEETING CALLED TO ORDER

Jim Carlo called the meeting to order at 8:05am. Members in attendance were:

Jim Carlo	- Chair, IEEE 802 LAN / MAN Standards Committee
Paul Nikolich	- Vice Chair, IEEE 802 LAN / MAN Standards Committee
Buzz Rigsbee	- Executive Secretary, IEEE 802 LAN / MAN Standards Committee
Howard Frazier	- Recording Secretary, IEEE 802 LAN / MAN Standards Committee
Bob Grow	- Treasurer, IEEE 802 LAN/MAN Standards Committee
Bill Lidinsky	- Chair, IEEE 802.1 - HILI Working Group
Dave Carlson	- Chair, IEEE 802.2 - Logical Link Control Working Group
Geoff Thompson	- Chair, IEEE 802.3 - CSMA/CD Working Group
Bob Love	- Chair, IEEE 802.5 - Token Ring Working Group
Jim Mollenauer	- Chair, IEEE 802.6 - Metro Area Network Working Group
Chip Benson	- Chair, IEEE 802.8 - Fiber Optic TAG
Vic Hayes	- Chair, IEEE 802.11 - Wireless LANs Working Group
Bob Heile	- Chair, IEEE 802.15 – WPAN Working Group
Roger Marks	- Chair, IEEE 802.16 – BWA Working Group

The meeting was attended by approximately 16 IEEE 802 Working Group members.

2. APPROVE OR MODIFY AGENDA

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       AGENDA  -  IEEE 802 LMSC EXECUTIVE COMMITTEE MEETING
        Monday, November 8, 1999 - 8:00 a.m.
              Hyatt Regency - Kauai, HI

1.      MEETING CALLED TO ORDER                  -Carlo    1   08:00 AM
2.      APPROVE OR MODIFY AGENDA                 -Carlo    4   08:01 AM
3.   *  APPROVE / MODIFY MINUTES OF PREVIOUS ME -Carlo    5   08:05 AM
4.      TREASURER'S REPORT                       -Grow     15  08:10 AM
   Category  (* = consent agenda)
5.1  ME IPF Fund Discussions and Alternatives   -Carlo    20  08:25 AM
5.2  ME IEEE Stds Distribution Proposal         -Walker   15  08:45 AM
5.3  ME Liaison statements from ITU-T SG 11 and -Thompson 5   09:00 AM
5.4  ME 802.3ae and 802.3af PARs                -Thompson 5   09:05 AM
5.5  ME 802.15a PAR                             -Heile    5   09:10 AM
5.6  ME*802.16 to 802.16.1 PAR change           -Marks    5   09:15 AM
5.7  MI Rule Change Status                      -Nikolich 10  09:20 AM
5.8  DT Verification of Email address for LMSC  -Love     5   09:30 AM
5.9  DT IETF Joint Projects                     -Lidinsky 10  09:35 AM
5.10 DT Voting Membership Rule                  -Marks    5   09:45 AM
5.11 DT 802.14 Update                           -Nikolich 5   09:50 AM
5.12 DT Network support update                  -Kerry    5   09:55 AM
5.13 II CDROM Distribution                      -Frazier  5   10:00 AM
5.14 II Tutorial Schedule and Social            -Rigsbee  5   10:05 AM
5.15 II Database update                         -Rigsbee  5   10:10 AM
5.16 II Plenary Schedule Feedback               -Carlo    5   10:15 AM
5.17 II Millennium Medal and 20th Year          -Carlo    5   10:20 AM
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5.18 II March 802 Officer Elections              -Carlo    5   10:25 AM

        ADJOURN SEC MEETING                                  0   10:30 AM
        BREAK                                                30  10:30 AM
        PLENARY MEETING                          ALL         60  11:00 AM
        ADJOURN PLENARY MEETING                                  12:00 PM
        ME - Motion, External          MI – Motion Internal
        DT- Discussion Topic           II - Information Item
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Note that Items 3 and 5.6 are on the consent agenda.

Thompson notes that 802.3 will be requesting approval of a maintenance PAR for 1802-3.

Lidinsky notes that items for 802.1 Technical Plenary must be submitted to him.

Motion to approve agenda Nikolich/Love 12/0/0 Passed at 8:10 am.

3. Approve/Modify Minutes of Previous Meeting

Approved as part of the consent agenda, with no modifications.

4. Treasurer's Report

(See file montreasrep.pdf)

IEEE Project 802
Statement of Operations
July 1999 Meeting

open	**4 Jul 1999 Operating Reserve**			**47,963**		
Jul 1999 Meeting Income:				***Actual***	*Budget*	
148	**Registrations@**	**$300**	**44,400**			
321	**Registrations@**	**$250**	**80,250**			
	Registrations@	**$100**	**0**			
Subtotal			**124,650**	**124,650**	101,250	
Deadbeat Registrations				**300**		
Registration Reversal				**(300)**		
Bank Interest				**202**		
Copying Income				**0**		
Other				**0**		
plus	**TOTAL Income**			**124,852**	101,250	
Jul 1999 Meeting Expenses:				***Actual***	*Budget*	
Audio Visual Rentals				**5,911**	5,000	
Bank Charges				**133**	20	
Copying				**2,384**	6,000	
Credit Card Discounts				**3,245**	2,946	*
International Program Fee				**42,000**	33,750	*
Meeting Administration				**32,999**	30,200	*
Phone & Electrical				**618**	600	
Refreshments				**9,988**	13,000	
Shipping				**1,855**	2,500	
Social				**7,125**	9,000	
Supplies					0	
Other				**70**		
minus	**TOTAL Meeting Expense**			**106,329**	103,016	
minus	**Equipment Expense**			**20,150**	21,000	
equals	**7 Nov 1999 Operating Reserve**			**46,336**		
	Net Change in Operating Reserve			**(1,627)**	(1,766)	

* Actual charges are based on registration, budget is based on registration forecast.

IEEE Project 802
2000 Budget

Meeting Income:	*March*	*July*	*Nov*	*2000*
Registrations	425	400	400	
Average Fee	265	260	260	
Subtotal	112,625	104,000	104,000	320,625
Bank Interest	200	200	200	600
TOTAL Income	112,825	104,200	104,200	321,225

Meeting Expenses:	*March*	*July*	*Nov*	*2000*
Audio Visual Rentals	5,000	5,000	5,000	15,000
Bank Charges	25	25	25	75
Copying	5,950	6,000	5,200	17,150
Credit Card Discounts	3,154	2,912	2,912	8,978
International Program Fee	38,200	36,000	36,000	110,200
Meeting Planners	31,625	30,600	30,600	92,825
Phone & Electrical	800	800	800	2,400
Refreshments	10,625	14,400	13,200	38,225
Shipping	3,000	3,000	3,000	9,000
Social	7,650	9,200	8,400	25,250
Supplies	200	200	200	600
Other			1,500	1,500
Meeting Equipment	5,000	5,000	5,000	15,000
TOTAL Meeting Expense	111,229	113,137	111,837	336,203

NET to Operating Reserve	1,597	(8,937)	(7,637)	(14,978)
Projected opening OR	36,554	38,151	29,214	21,577
Projected opening cash	25,354	26,951	18,014	10,377

5.1 IPF Fund Discussion and Alternatives

Carlo shows motion slide (which was postponed from July 1999 meeting to this meeting) concerning IPF.

Carlo introduces Jerry Walker and Janet Rutigliano from the IEEE Standards Office.

Carlo presents an update regarding international participation.

(See file carlo.pdf)

We initiated an application to become a category C liaison to JTC-1 SC6. 802 is a category C liaison with WG1 and WG3. We can submit documents directly to WG1 and WG3 without going through the US TAG.

Carlo presents International Program Fee summary.

Marks asks where our obligation is documented.

Carlo responds that there is no memo of understanding. We have been paying this fee since 1991.

Thompson notes that we have been discussing this issue for over a year, so we are not acting hastily.

Carlo states that if 802 decides to stop paying the IPF, he will have to draft a note in response to Steve Oksala.

We will set up a business meeting to discuss this subject further.

SEC Business Meetings

TIME	Purpose	Who	Location
MON			
5:00	802.14 Status	Nikolich	BDR
TUES			
1:00	IEEE802 Stds Availability	Walker(IEEE)	BDR
3:00	IPF Fee Discussion	Carlo, Carlson	BDR
WED			
8:00	Ballot Process	Love	BDR
9:00	Networking in Meetings	Kerry	BDR
10:00	Awards	Carlo	BDR
3:00			
4:00			
5:00			

SEC ATTENDANCE

MEETING	ABSENT
3/97	Vaman
7/97	-
11/97	Eastman, Mollenauer, Russell
3/98	Eastman, Vaman
7/98	Eastman, Mollenauer,
11/98	Frazier, Alonge, Russell,
3/99	Alonge, Vaman, Thaler, Mollenauer
7/99	Thaler, Mollenauer, Alonge, Vaman
9/99	Thaler, Russell, Vaman,

- Presence at both Mon and Thur SEC meetings is required.
- Eastman/Mollenauer/Alonge are no longer voting member of SEC.

SEC Motion 11Mar99

- Moved: _____ Seconded: _____
- Adopt the following policy regarding Internationalization of IEEE 802 standards.

- 1) Initiate application from IEEE 802 to be a Cat A Liaison organization to ISO/IEC JTC1 SC6 or other SC as appropriate with possible N&I reorganization. Reasons for Cat-A is to be able to submit NP's and Fast Track documents. Jim Carlo - By 1999. SC6 Approved - JTC1 In Process APPROVED

- 2) Initiate the following balloting process within 802:
- A) Send electronic liasions to SC6 on PAR approval, IEEE 802 draft WG ballots, IEEE Sponsor ballots.
- B) Request comments directly to ballot pointer within IEEE ballot time period.
- Tony Jeffree - Process through 802 - July 1999 Plenary
  Robin Tasker - Process through SC6 - June SC6 Meeting

- 3) After standard board approval of the IEEE 802 document:
- A) IEEE publish with IEEE designation.
- B) SC6 publish as an update to a Technical Report. That technical report catologues previously published joint JTC1/IEEE standards and IEEE standards that it has endorsed.
- C) IEEE 802 believes that ANSI designation is not a market requirement for IEEE 802 standards and may be a detriment for Internation Recognition.

- 4) Identify SC6 Technical Liaison from IEEE 802.
- Tony Jeffree recommended for Initial liaison. -DONE

IEEE 802 International Program

The following are IEEE 802 Process Changes for better recognition of IEEE 802 efforts in the International arena. This process conforms to IEEE-SA and Computer Society Guidelines regarding Internationalization of IEEE Standards.

1) IEEE 802 has submitted a request for Category C Liaison to both ISO/IEC JTC1/SC6/WG1&WG3. SC6 has approved this request and JTC1 is currently conducting a JTC1 ballot (J1n5832.pdf) to approve this liaison, with ballot to close in 12-October.

After approval of this liaison:

a) IEEE 802 drafts will be circulated within SC6/WG1&WG3 member bodies for comments back to IEEE 802 or the IEEE-SA balloting service. The schedule for comment response will be controlled by the normal IEEE-SA process.

b) IEEE 802 Projects with International Coordination to SC6 will interact directly with the JTC1/SC6 rather than through the USTAG for SC6/WG1&WG3(sponsored by the IEEE). IEEE 802 will continue to work with the USTAG as needed to develop US positions on all SC6/WG1&WG3 documents. While PARs may specify coordination with the USTAG, I request administrative change directly to SC6/WG1&WG3 and will inform both NesCom and RevCom.

c) IEEE 802 Working Group chairs have informally invited SC6 experts to join their balloting groups as observers to aid coordination.

2) JTC1/SC6 has initiated a proposal (with support from IEEE 802) for coordination and review of IEEE 802 standards. This proposal (SC6 N 11235 -Proposed Procedures for ISO/IEC SC6 and IEEE 802 Co-operative working)is currently under review by JTC1/SC6 and includes the following:

a) Circulation of drafts from IEEE 802 to JTC1/SC6/WG1&WG3 for comments directly into the IEEE-SA standards process. This can be handled directly coordination is today, through the IEEE-SA Balloting Service.

b) Development of a Technical Report that is updated yearly to reflect which IEEE 802 standards have support from the JTC1/SC6 member bodies. This Technical Report will help identify the current IEEE 802 standards and supplements that have received review by the member countries in SC6.

3) For those IEEE 802 standards where an SC6 country feels it is necessary to go to full Internationalization, the Fast-Track process in JTC1 will be utilized.

a) For each Fast-Track standard, the standard must be already approved by the IEEE Standards Board.

b) Each country requesting Fast-Track process will submit a request through the normal JTC1 Fast-Track process. The IEEE-SA Staff, after consultation with IEEE 802 chair, will approve the copyright release for Internationalization for each specific standard. It is expected that the IEEE 802 SEC will approve each Fast-Track item by separate vote prior to IEEE-SA staff releasing copyright permission to JTC1 for the joint standard. This check and balance ensures that the Fast-Track is appropriate on the specific standard in process.

c) Normally, after approval of the Fast-Track by JTC1, a separate page will be inserted into the IEEE-SA Standard stating that the standard is also recognized by JTC1. Separate publishing of the standard as a joint JTC1/IEEE-SA will be handled on a case-by case basis.

5) IEEE 802 standards will no longer have the ANSI designation, although approval by BSR is still part of the normal IEEE-SA standards process.

6) IEEE 802 expects that some IEEE 802 standards will be coordinated through the ITU-T and ETSI. A process for handling this will be documented separately.

IEEE 802 Monday Schedule - Hawaii

- For Hawaii meeting, a number of people suggested that the WG's need to spend more time together doing work.

- Monday Schedule (8 Nov 1999)
  - IEEE 802 SEC Meeting - 8:00am to 10:30am
  - IEEE 802 Plenary Meeting - 11:00am to 12:00noon
  - WG's start at 1:00pm until 5:00pm.

- DO WE ALSO STAY ON THIS SCHEDULE IN MARCH99?
  - Discussion at the Thursday SEC Meeting. Feedback requested

IEEE 802 20th Anniversary

- March Meeting is 20th Anniversary of IEEE 802.
- First meeting of IEEE802 on 22Feb80 in San Francisco.
- Special Tutorials and Programs
- Invited Speaker for 20th Anniversary
- Service Awards
- Pins, Tee-Shirts, Medallions

March 2000 Elections

- **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) Executive Officers**
  - The Vice Chair, the Executive Secretary, the Recording Secretary, the LMSC Treasurer and ex-officio members of the LMSC Executive Committee. These positions are appointed by the LMSC Chair and confirmed by the Executive Committee.
- **C) Working Group Chairs**
  - 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.
  - 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. Applies to Bill Lidinsky (1980) and Vic Hayes (1990)

IEEE802 Monday Plenary Agenda

• 11:00	Welcome and Review of SEC Meeting	Carlo
• 11:05	CD ROM Distribution	Frazier
• 11.08	Voting Rules and IEEE 802 Operating Rules	Nikolich
• 11:10	Treasurer's Report	Grow
• 11:15	IEEE Project Editors Status Report	Rutigliano
• 11:18	Power Line Tutorial	Buffkin
• 11:20	802.1 Management/VLANs	Lidinsky
• 11:25	802.3 CSMA/CD	Thompson
• 11:30	802.5 Token Ring	Love
• 11:35	802.8 Fiber Optic TAG	Benson
• 11:38	802.11 Wireless	Hayes
• 11:43	802.14 CATV Modem	Russell
• 11:45	802.15 WPAN	Heile
• 11:50	802.16 BWA	Marks
• 11:55	Tutorials, Meeting Arrangements	Rigsbee
• 12:00	ADJOURN	

http://grouper.ieee.org/groups/802/

Jim Carlo - IEEE 802 Chair

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- Phone: 214-693-1776 (Cellular)
- Fax: 214-853-5724
- Texas Instruments, Dallas, TX

- Goals for IEEE 802 -1999
  - Enable IEEE802 to develop consensus standards that benefits the World Wide Networking Society.
  - Maintain the imperative principals of due process, consensus, openness, balance and rights of appeal.
  - Electronic distribution of standards.

Patents -IEEE-SA Standards Board Bylaws (Jan 1999)

6. Patents

IEEE standards may include the known use of patent(s), including patent applications, if there is technical justification in the opinion of the standards-developing committee and provided the IEEE receives assurance from the patent holder that it will license applicants under reasonable terms and conditions for the purpose of implementing the standard. This assurance shall be provided without coercion and prior to approval of the standard (or reaffirmation when a patent becomes known after initial approval of the standard). This assurance shall be a letter that is in the form of either

a) A general disclaimer to the effect that the patentee will not enforce any of its present or future patent(s) whose use would be required to implement the proposed IEEE standard against any person or entity using the patent(s) to comply with the standard or

b) A statement that a license will be made available to all applicants without compensation or under reasonable rates, with reasonable terms and conditions that are demonstrably free of any unfair discrimination[5].

Patents - IEEE-SA Standards Board Operations Manual (Mar 1999)

6.3 Patents

The patent policy is set forth in clause 6 of the *IEEE-SA Standards Board Bylaws.*

Patent holders shall submit letters of assurance to the IEEE Standards Department (to the attention of the Staff Administrator, Intellectual Property Rights) before the time of IEEE-SA Standards Board review for approval. The IEEE will provide contact information about the patent holder upon request.

6.3.1 Public notice

The following notice shall appear when the IEEE receives assurance from a known patent holder prior to the time of publication that a license will be made available to all applicants either without compensation or under reasonable rates, terms, and conditions that are demonstrably free of any unfair discrimination. Attention is called to the possibility that implementation of this standard may require use of subject matter covered by patent rights. By publication of this standard, no position is taken with respect to the existence or validity of any patent rights in connection therewith. The IEEE shall not be responsible for identifying patents for which a license may be required by an IEEE standard or for conducting inquiries into the legal validity or scope of those patents that are brought to its attention. A patent holder has filed a statement of assurance that it will grant licenses under these rights without compensation or under reasonable rates and nondiscriminatory, reasonable terms and
conditions to all applicants desiring to obtain such licenses. The IEEE makes no representation as to the reasonableness of rates and/or terms and conditions of the license agreements offered by patent holders. Further information may be obtained from the IEEE Standards Department. If the IEEE has not received letters of assurance prior to the time of publication, the following notice shall appear:
Attention is called to the possibility that implementation of this standard may require use of subject matter covered by patent rights. By publication of this standard, no position is taken with respect to the existence or validity of any patent rights in connection therewith. The IEEE shall not be responsible for identifying patents for which a license may be required by an IEEE standard or for conducting inquiries into the legal validity or scope of those patents that are brought to its attention.

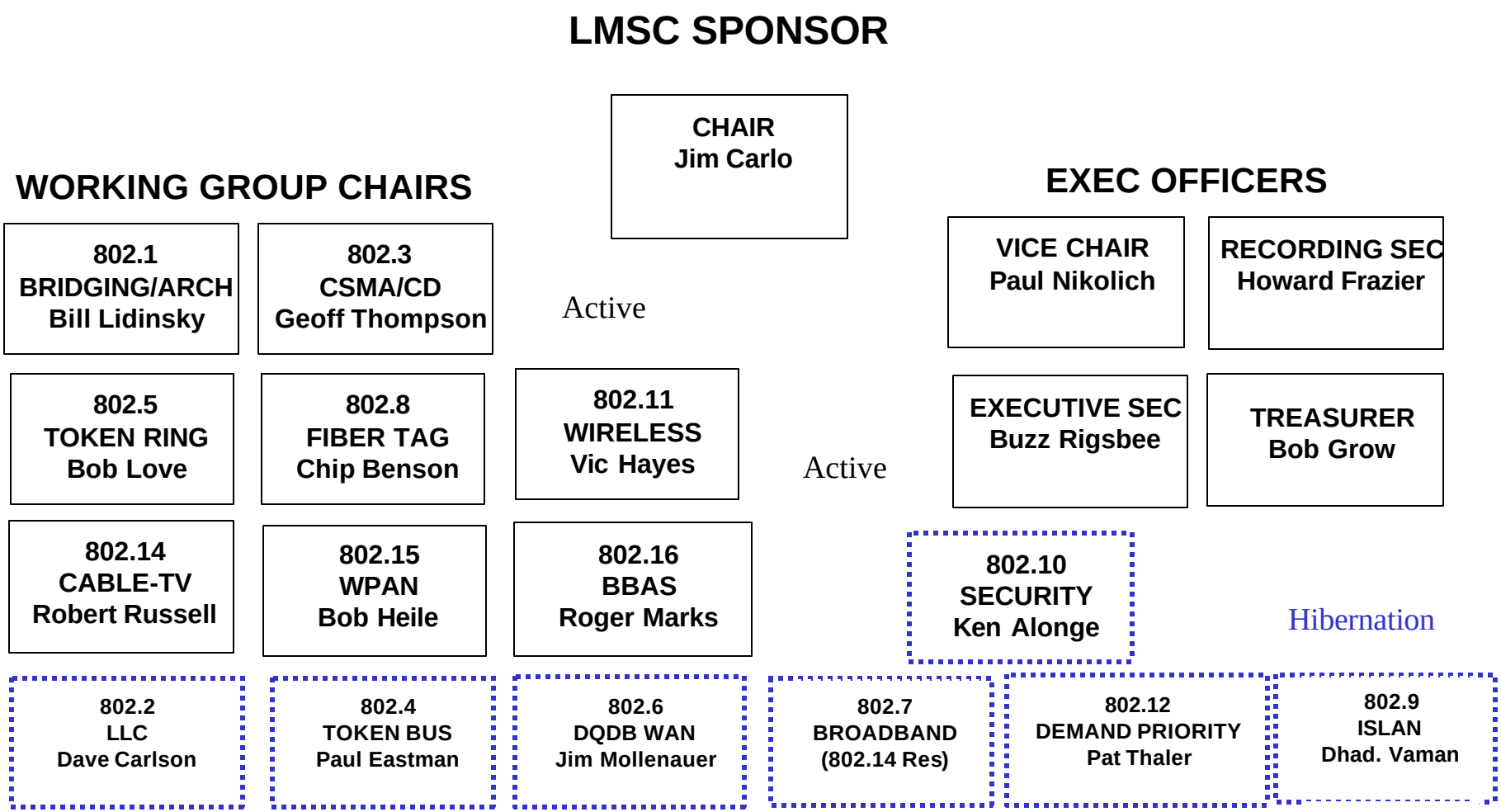
6.3.2 Submittal

Through the working group, the Sponsor chair shall request that known patent holders submit a statement either that the patent does not apply to the standard or that licenses will be made available without compensation or under reasonable rates, terms, and conditions. This assurance shall be obtained without coercion and submitted to the IEEE at the earliest practical time prior to the approval of an IEEE standard. The IEEE encourages early disclosure to the working group of patent information that might be relevant to the standard. While standards may include the known use of patents if there is technical justification, the working group should not attempt to determine whether or not a patent applies. The working group shall accept the view of the patent holder.

6.3.3 Disclaimer

The IEEE shall not be responsible for identifying all patents for which a license may be required by an IEEE standard or for conducting inquiries into the legal validity or scope of those patents that are brought to its attention.

IEEE 802 ORGANIZATION



IEEE 802 WEB PAGES

- IEEE 802 WEB Pages Now On-Line and Operational
- Responsibilities as as follows:
  - Howard Frazier - Main WEB page
  - Paul Nikolich - Operating Rules and 802 Documents
  - Buzz Rigsbee - LMSC Plenary Meetings
  - 802.1 Sundar Subramaniam
  - 802.3 David Law
  - 802.5 Neil Jarvis/John Messenger
  - 802.10 Richard McAllister
  - 802.11 Vic Hayes
  - 802.14 Robert Russell
  - Denise Pribula - IEEE page pointers

- ***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.

IEEE 802 WG Voting Rules

5.1.3 Membership
All persons participating in the initial meeting of the Working Group become voting members of the Working Group. Thereafter, voting 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. Membership starts at the third Plenary session. 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).

Members of the Working Group who have not achieved voting status are known as observers. Liaison members are those designated individuals who provide liaison with other working groups or standards bodies.

IPF Summary

- IPF is administered by ITCC (ANSI Information Technology Consultative Committee) AT&T, Compaq, HP, IBM, Sun, Unisys, ITI, DoDm NCS, NIST
- For Reference:
  - JTC1 US Policy is administered by JTC1 TAG
  - JTC1/SC6 is administered by EIA US TAG
  - JTC1/SC6/WG1&WG3 is administered by IEEE US TAG
- IPF fees have been in-place since 1991
- Prior to 1991 ITCC paid all support ($75K/yr to members)

IPF BASIC PRINCIPALS

- Internationalization of IEEE 802 standards
  - Aids World-Wide adoption
  - ISO/IEC Designation helpful for Third-World Countries
- Current system, though expensive to 802, works
  - Little opposition to IEEE 802 standards
  - Most IEEE 802 standards are pass-through
- Fairness being addressed at Computer Society Level
  - LMSC collects $100/meeting (Three per year)
  - PASC collects $75/meeting (Four per year)
  - Other groups under pressure to conform

JTC1 Infrastructure

• US Support	**SC6 (data int),** SC11(flex), SC22(lang), SC31(data capt)*, SC32(data mng)* JTC1(admin)
• UK Support	SC17(id cards), SC24(graphics)
• Japan Support	SC23(optic), SC26(micro), SC29(code)
• Germany Support	**SC25(intercon),** SC27(security)
• France Support	SC1(vocab), SC2(char)
• Canada Support	SC7(soft eng)
• Brazil Support	SC28 (off equip)

- * - These SC's are supported by specific group

JTC1 ANSI Revenue/Expenses

• YEAR	1996	1997	1998
• IPF Fee	538K	466K	438K
• ITCC	150K	165K	150K
• DoD/NIST	0	50K	25K
• TOTAL Revenue	688K	681K	613K
• TOTAL Expense	658K	597K	612K

ANSI IP Expenses

CATEGORY	EXPENSE	
– JTC1 ADMIN	150K	
– JTC1 MIS	126K	
– SC6	106K	
– SC11	12K	
– SC22	63K	
– SC32	64K	
– SC33	63K	(Disbanding - Move into SC6)
– ANSI ITCC	28K	
TOTAL	612K	

Estimated 1998 IPF Fee (438K)

- ORGANIZATION — TOTAL
  - AIMUSA — 11.1k
  - DISA — 1.8
  - EIA — 5.4
  - **IEEE** — **126 (90% from 802)**
  - JTC1 TAG — 12
  - **NCITS** — **273**
  - TIA — 8.4

IPF Note 11/1/99

- Jim: I would urge you and 802 to not be hasty on this. First of all, I think everyone is aware that secretariats get committed on a one year basis; so I would hope that 802 would not take action that would leave the rest of the community in the lurch. Second, I would like to think that the whole situation would get evaluated - if 802 drops funding, presumably it is also dropping the TAG responsibility. And with nobody else involved, that would also mean dropping the secretariat for SC 6 and potentially even the P membership. I don't know what the answers are, but I would like to see a total plan and not just one that abandons a system that IEEE had previously signed up for and which, under the rules of the road, IEEE is still obligated to meet.

Regards, Steve Oksala

IEEE 802 Meeting Fees

- MAR 1999
  - Pre-Registration - $275
  - On-Site Registration - $300

- July 1999
  - Pre-Registration - $250
  - On-Site Registration - $300

IEEE 802 Friday Plenary Agenda

• 8:00	Review of Agenda	Carlo
• 8:05	Review of Thursday Evening Executive Meeting	Carlo
• 8:15	Rules Changes	Nikolich
• 8:25	Treasurer's Report	Grow
• 8:40	802.1 Management/VLANs	Lidinsky
• 8:45	802.3 CSMA/CD	Thompson
• 8:50	802.5 Token Ring	Love
• 9:00	ECSG on Broadband Wireless Access	Carlo
• 9:05	802.8 Fiber Optic TAG	Benson
• 9:10	802.11 Wireless	Hayes
• 9:15	802.14 Cable Modem	Russell
• 9:20	802.15 Wireless PAN	Heile
• 9:25	802.16 BWA	Marks
• 9:30	QOS/FC Study Group	Amer
• 9:35	Future Meeting Arrangements	Rigsbee
• 9:40	Adjourn	
• 10:15	Plenary Foils Available Outside Office	Frazier

- **http://grouper.ieee.org/groups/802/**

5.2 IEEE Stds Distribution Proposal Jerry Walker

Jerry wants to separate the proposal for distribution of standards from the IPF discussion.

(See file walker.pdf)

SEC business meeting to develop/refine proposal 1:00 PM to 3:00 PM on Tuesday afternoon.

Use second tutorial slot 8:00 to 9:30 Tuesday evening to discuss with wide audience.

No/Low Cost Availability Proposal for 802 Standards

Jerry Walker

802 Plenary

Kauai - November 7-12, 1999

IEEE SA & IEEE 802 Proposal

- Background
- Sales History
- Options
- Recommendation
- Next steps

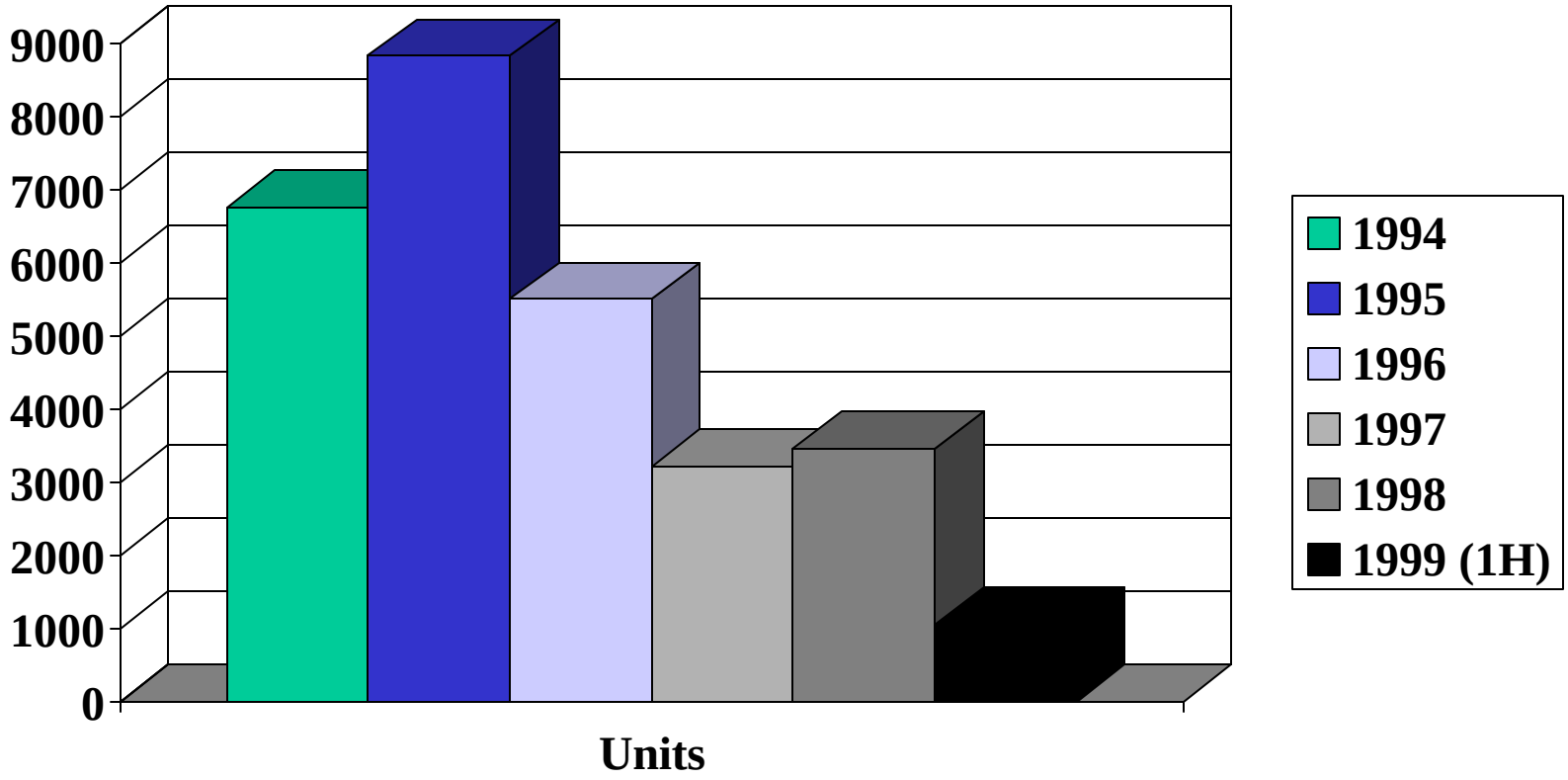
Background

- IEEE 802 LMSC desires to make IEEE 802 standards available at no (low) charge to anyone desiring them
- IEEE 802 may subsidize this service at the level of $120K annually

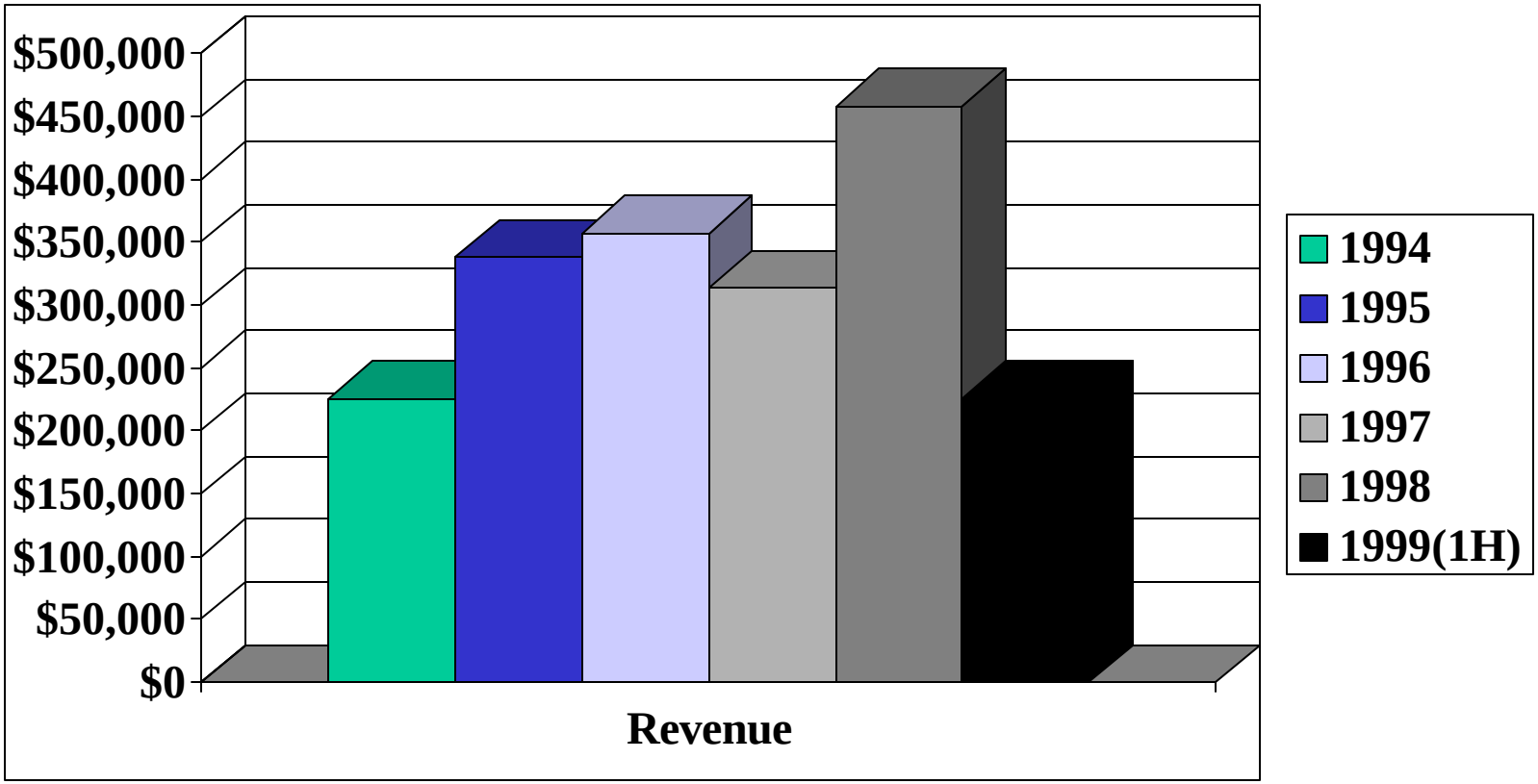
IEEE SA - IEEE 802 History

- November 1995 - Agreement with AlphaGraphics for reproduction
- 1997 - Electronic copies for 802 Plenary
- 1997 - CD-ROM for 802 Plenary
- 1998 - CD-ROM for 802 Plenary extended
- 1999 - Find a way to make 802 standards available at no (low) charge

802 Sales History - Units



802 Sales History - Revenue



#1 -Available at No Charge

- Pros
  - No processing fees
  - Free to user
  - No processing delays
  - No other impediments
- Cons
  - Frivolous downloading
  - Possible IP abuse
  - No/Partial verifiable customer record
  - Reseller access
  - No sales reports
  - Customer backlash

#2 Available at Minimal Charge

- Pros
  - Less frivolous downloading
  - Full customer record
  - Sales reports
  - Not available to resellers
  - Demonstrate value
- Cons
  - Nominal charge to users
  - Processing delay

Proposal

- Preserve Revenue Stream (c. $425K)
  - Sell hardcopy and subscriptions
  - Deliver pdf at nominal charge (e.g. $25)
- Ensure customer awareness of subsidy
  - "This …made available for a limited time through contributions of IEEE 802…"
  - Discontinue once limit reached

IEEE SA & IEEE 802 Proposal

- Pdf price = ??
- Customer pays $25 per download
- IEEE 802 cover $?? - $25 per download
- IEEE SA work to retain other revenue
  - Keep large (Enterprise) subscriber base
  - Keep 50% small subscriber base
  - Keep 75% of hardcopy base

IEEE SA & IEEE 802 Proposal

- Additional solutions to overcome obstacles
  - No special marketing
  - Target marketing (e.g Non-US, Industry)
  - Select versus all IEEE 802 standards
  - Corporate sponsorship to extend offer
  - Extend offer if hardcopy and subscriber revenue performance better than expected
  - Becomes easier with IEEE E-commerce

Next Steps

- Get IEEE 802 LMSC approval of recommended proposal
- Establish start date (2/00)
- Monitor closely and revise offer as necessary
- Conduct follow-up and recommend future actions and/or adjustments

5.3 Liaison statements from ITU-T SG 7 and SG 14 and TIA 42

Thompson will work on drafting responses to liaison letters

5.4 802.3ae and 802.3af PARs

(see file 802_3ae_PAR.pdf)

(see file 802_3ae_5criteria.pdf)

(see file 802_3af_PAR.pdf)

(see file 802_3af_5criteria.pdf)

Geoff introduces Jonathan Thatcher, who gives overview of 802.3ae and announces tutorial.

Geoff also gives overview of 802.3af PAR

Geoff also mentions that a PAR for maintenance on 1802-3 will be offered on Thursday

802.3 HSSG 5 Criteria

Draft Prepared for the September, 1999

MEETING OF THE 802.3 HIGH SPEED STUDY GROUP (a.k.a. 10GbE)

York, England

Paul Bottorff, Nan Chen, Howard Frazier, Bob Grow, Steve Haddock, David Law, Jonathan Thatcher, Bruce Tolley, Peter Wang

1. Broad Market Potential

Broad set(s) of applications
Multiple vendors, multiple users
Balanced cost, LAN vs. attached stations

- Rapid growth of network and internet traffic has placed high demand on the existing infrastructure motivating the development of higher performance links. Quantitative presentations have been made to the 802.3 HSSG indicating significant market opportunity.
- 10 Gb/s 802.3 solution extends Ethernet capabilities providing higher bandwidth for multimedia, distributed processing, imaging, medical, CAD/ CAM, and pre-press applications by improving the performance of:
  - LAN Backbone and Server and Gateway Connectivity
  - Switch aggregation
  - the MAN, WAN, Regional Area Network (RAN), and Storage Area Network (SAN)
- 140 participants attended the 10 Gigabit call-for-interest, representing at least 55 companies, indicate that they plan to participate in the standardization of 10 Gb/s 802.3. 139 Indicated that this is the right time to start. Attendance and interest has increased steadily since that time.
- This level of commitment indicates that a standard will be supported by a large group of vendors. This in turn will ensure that there will be a wide variety of equipment supporting a multitude of applications.
- Prior experience scaling 802.3 across the range of 1 to 1000 Mb/ s indicates that the cost balance between adapters, switches, and the infrastructure remains roughly constant. 10 Gb/s Ethernet should continue this trend.

2. Compatibility with IEEE Standard 802.3

Conformance with CSMA/ CD MAC, PLS
Conformance with 802.2
Conformance with 802 FR

- **The proposed standard will conform to the full-duplex operating mode of the 802.3 MAC, appropriately adapted for 10 Gb/ s operation. Half-duplex (CSMA/CD) operation will not be supported at 10 Gb/s.**
- **As was the case in previous 802.3 standards, new physical layers will be defined for 10 Gb/s operation.**
- **The proposed standard will conform to the 802.3 MAC Client Interface, which supports 802.2 LLC.**
- **The proposed standard will conform to the 802.1 Architecture, Management and Interworking.**
- **The proposed standard will conform with the 802 Functional Requirements Document (with the possible exception of Hamming distance).**
- **The proposed standard will define a set of systems mangement objects which are compatible with OSI and SNMP system management standards.**

3. Distinct Identity

Substantially different from other 802.3 specs/ solutions
Unique solution for problem (not two alternatives/ problem)
Easy for document reader to select relevant spec

- The proposed standard is an upgrade path for 802.3 users, based on the 802.3 MAC, running at 10 Gb/s.
- By adapting the existing 802.3 MAC protocol for use at 10 Gb/s, this proposed standard will maintain maximum compatibility with the installed base of over 600 million Ethernet nodes.
- The established benefits of the 802.3 MAC include:
  - Deterministic, highly efficient full-duplex operation mode
  - Well-characterized and understood operating behavior
  - Broad base of expertise in suppliers and customers
  - Straightforward bridging between networks at different data rates
- The Management Information Base (MIB) for 10 Gb/s 802.3 will be extended in a manner consistent with the 802.3 MIB for 10 / 100 / 1000 Mb/s operation. Therefore, network managers, installers, and administrators will see a consistent management model across all operating speeds.
- Two PHY families will address two distinct application spaces, the LAN and the WAN.
- The proposed standard will be a supplement to the existing 802.3 standard, formatted as a collection of new clauses, making it easy for the reader to select the relevant specification.

4. Technical Feasibility

Demonstrated feasibility; reports - - working models
Proven technology, reasonable testing
Confidence in reliability

- **Technical presentations, given to 802.3, have demonstrated the feasibility of using the 802.3 in useful network topologies at a rate of 10 Gb/s.**
- **The principle of scaling the 802.3 MAC to higher speeds has been well established by previous work within 802.3. The 10 Gb/s work will build on this experience.**
- **The principle of building bridging equipment which performs rate adaptation between 802.3 networks operating at different speeds has been amply demonstrated by the broad set of product offerings that bridge between 10, 100, and 1000 Mb/s.**
- **Vendors of optical components and systems are building reliable products which operate at 10 Gb/s, and meet worldwide regulatory and operational requirements.**
- **Component vendors have presented research on the feasibility of physical layer signaling at a rate of 10 Gb/s on fiber optic media using a wide variety of innovative low cost technologies.**
- **10 Gb/s Ethernet technology will be demonstrated during the course of the project, prior to the completion of the sponsor ballot.**

5. Economic Feasibility

Cost factors known, reliable data
Reasonable cost for performance expected
Total Installation costs considered

- Cost factors are extrapolated from the OC-192 component supplier base and technology curves.
- A target cost increase of 3X of 1000BASE- X with a ten-fold increase in available bandwidth in the full duplex operating mode will result in an improvement in the cost- performance ratio by a factor of 3. This cost model has been validated during both the 100 and 1000 Mb/s Ethernet deployment.
- Customers will in some cases be able to re-use fiber that has been installed in accordance with ISO/ IEC 11801, and in other existing fiber facilities.
- Installation costs for new fiber runs based on established standards are well known and reasonable.
- Network design, installation and maintenance costs are minimized by preserving network architecture, management, software, and structured cabling.

Proposed IEEE P802.3ae (10 Gigabit Ethernet) PAR

==========

PAR FORM
Fill in the answers to the questions in the bracket provided.
A Hard Copy of this document must be printed, signed with the
appropriate signatures and mailed or faxed to the Standards
Department for submission to NesCom.

1. Sponsor Date of Request [Nov 12, 1999]

2. Assigned Project Number (confer with staff) [expected to be P802.3ae]

3. PAR Approval Date (leave blank) []

4. Project Title, Copyright Agreement and Working Group
Chair for This Project

I will write/revise a Standards Publication with the
following TITLE (Spell out all acronyms)

[X] Standard [for] (Document stressing the verb "SHALL."), or
[ ] Recommended Practice for (Document stressing the verb "SHOULD.") or
[ ] Guide for (Document stressing the verb "MAY.")

WRITE TITLE HERE
Supplement to:
Information Technology -
Local & Metropolitan Area Networks - Part 3:
Carrier Sense Multiple Access with Collision Detection
(CSMA/CD) Access Method and Physical Layer Specifications -
Media Access Control Parameters, Physical Layers and
Management Parameters for 10 Gb/s Operation]

I hereby acknowledge my appointment as Official Reporter (usually the W.G.
Chair) to the (Name of Working Group)[IEEE P802.3 CSMA/CD Working Group]
In consideration of my appointment and the publication of the Standards
Publication identifying me, at my option, as an Official Reporter, I agree to
avoid knowingly incorporating in the Standards Publication any copyrighted or
proprietary material of another without such other's consent and acknowledge
that the Standards Publication shall constitute a "work made for hire" as
defined by the Copyright Act, and, that as to any work defined, I agree to
and do hereby transfer any right or interest I may have in the copyright to
said Standards Publication to IEEE.

Signature of Official Reporter
Chair_____

Name [Geoffrey O. Thompson]
Date [ ]
Title [Chair. IEEE 802.3 Working Group]
Company [Nortel Networks]
Address [P.O. Box 8185]
City [Santa Clara]
State [CA]
Zip [95052-8185]

IEEE Member Number [02646453]
Telephone [+1 408 764 1339]
Fax [+1 408 988 5525]
E-Mail [gthompso@nortelnetworks.com]

5. Describe this project: (Choose ONE from each group below)
a. [No] Update an existing PAR
(Yes or No/project number/approval date)
Is this in ballot now? (Yes or No)

b. [No] New Standard (Yes or No)

[No] Revision) of an existing standard.
(No or Yes/standard number/year)

[YES/ANSI/IEEE Std 802.3 1998 Edition] Supplement to an existing standard (No or Yes/standard number/year)

c. [X] Full Use (5-year life cycle)
[ ] Trial Use (2-year life cycle)

d. [March 2002] Fill in target completion date for submittal to IEEE Standards Review Committee (RevCom).

6. Scope of Proposed Project (What is being done including the technical boundaries of the project?)
[Define 802.3 Media Access Control (MAC) parameters and minimal augmentation of its operation, physical layer characteristics and management parameters for transfer of LLC and Ethernet format frames at 10 Gb/s using full duplex operation as defined in the 802.3 standard. Add features that enable deployment of Ethernet over the Wide Area Network operating at a data rate compatible with OC-192c and SDH VC-4-64c payload rate.

7. Purpose of Proposed Project (Why is it being done, including the intended user(s) and benefits to that user(s))
[The purpose of this project is to extend the 802.3 protocol to an operating speed of 10 Gb/s and to expand the Ethernet application space to include Wide Area Network links in order to provide a significant increase in bandwidth while maintaining maximum compatibility with the installed base of 802.3 nodes, previous investment in research and development, and principles of network operation and management.]

8. Sponsor (Give full name; spell out all Acronyms) Society/Committee:
[Computer Society/
Local and Metropolitan Area Network Standards Committee (LMSC)]

9.
9(a.1) [No] Are you aware of any patents, relevant to this project? (YES, [attach explanation] or No).

9(a.2) [No] Are you aware of any copyrights relevant to this project? (YES, [attach explanation] or No)

9(a.3) [No] Are you aware of any trademarks relevant to this project?

9b. [No/explanation]Are you aware of any other standards or projects with a similar scope?

There is no other project that uses the 802.3 MAC at speeds above 1000 Mb/s.

9c. [YES/explanation]Is this standard intended to form the basis of an international standard? (Yes, or No [attach explanation])

It is intended to submit this work to ISO through SC6 at the time it is submitted for Sponsor Ballot.

It would be an addendum to ISO/IEC 8802-3

9d. [No]Is this project intended to focus on health, safety or environmental issues? (Yes, [attach explanation], No, or Do Not Know))

10. Proposed Coordination/Recommended Method of Coordination (Coordination is accomplished in any of the following three ways: Circulation of Drafts or Liaison Membership or Common Membership.)

10a. Mandatory Coordination

SCC 10 (IEEE Dictionary) Circulation of Drafts
IEEE Staff Editorial Review Circulation of Drafts
SCC 14 (Quantities, Units, & Letter Symbols) Circulation of Drafts

10b. IEEE Coordination requested by Sponsor: (Use additional page if necessary). If you believe your project will require a Registration Authority, please list IEEE RAC (refer to Working Guide).

[ASC X3S3 (as US TAG for SC6) Circulation of Drafts
ISO/IEC/JTC1 SC6/WG3 TAG Circulation of Drafts (via US TAG)
ISO/IEC/JTC1 SC25/WG3 TAG Circulation of Drafts (via US TAG)
ISO/IEC/JTC1 SC25/WG4 TAG Circulation of Drafts (via US TAG)
ASC T1X1 Circulation of Drafts]

If coordination is not required, please attach an explanation.

10c. Additional Coordination Requested by Others. (Leave blank. This will be completed by the Standards Staff).

11. Submitted by: (This MUST be the Sponsor Chair or the Sponsor's Liaison Representative to the IEEE Standards Board)
Signature of Submitter_____

Name [Jim Carlo]
Title [Chair, LAN/MAN standards Committee (LMSC)]
Date [11 Nov 1999]
Company [Texas Instruments]
Address []
City [Dallas]
State [Tx]
Zip []

DTE Power Via MDI – 5 Criteria

1) Broad Market Potential

- Broad set(s) of applications:
The following areas have been identified as potentially benefiting from power over MDI:

- IP Telephony
- Web Cameras
- Wireless Access Points
- Industrial Automation
- Home Automation
- Security Access Control and Monitoring Systems
- Point of Sale Terminals
- Lighting Control
- Gaming and Entertainment Equipment
- Building Management

- Multiple vendors, multiple users.
At the Call for Interest, 44 individuals from 34 companies supported this initiative, and 20 organizations stated an intention to work on the development of such a standard. Support for power via MDI has been requested by TIA/EIA TR-41.3.4 and TR-41.4. IEEE 802.11 has expressed interest in such a standard. There are existing proprietary and other potentially conflicting standard solutions (e.g. I.430) in the market. The goal of the standard is to reduce the issue of interoperability in the powered LAN market.

- Balanced cost, LAN vs. attached stations.
For some markets the cost of providing AC power is a barrier to the use of a LAN solution. Having a standard MDI power source brings a balance of cost in providing power to a level consistent with the silicon and applications.

2) Compatibility with IEEE Standard 802.3

- Conformance with CSMA/CD MAC, PLS.
It is our intention to be compatible with 10BASE-T and 100BASE-TX UTP, and do no harm to 1000BASE-T, with no changes to the existing MAC.

- Conformance with 802.2.
There will be no changes to the current MAC client interface.

- Conformance with 802 Functional Requirements.
The proposed standard will conform to the 802 Functional Requirements.

3) Distinct Identity

- Substantially different from other 802.3 specifications/ solutions.
No existing 802 standard or project addresses power.

- Unique solution for problem (not two alternatives per problem).
Only a single powering technique will be standardized. There will not be multiple alternatives.

- Easy for document reader to select relevant spec.
The specification will be added to the 802.3 standard as a new clause.

4) Technical Feasibility

- Demonstrated feasibility, reports - - working models.
A draft for P802.9f proposed methodologies that would address powering via an MDI. There are existing proprietary solutions in the market; however, they may not meet all of the objectives of this proposed project.

- Proven technology; reasonable testing.
This will be addressed as part of the project.

- Confidence in reliability.
This will be addressed as part of the project.

5) Economic Feasibility

- Cost factors known, reliable data.
This will be addressed as part of the project. Power supply and distribution are mature technologies and the cost factors well understood.

- Reasonable cost for performance expected.
The objective is to lower the total cost of ownership. This will be an enabler to numerous new classes of “network appliances.”

- Total installation cost considered.
An objective is to lower the total cost of installation.

Agree: 36, Oppose: 0, Abstain: 0 - Technical

IEEE-SA Standards Board Project Authorization Request (PAR) (1999-Rev 1)

1. Sponsor Date of Request [November 11, 1999]

2. Assigned Project Number [P802.3af]

3. PAR Approval DATE [ ] {IEEE Staff to fill in box}
{Copyright release must be received with appropriate signatures
by postal mail or FAX (1-732-562-1571)}
[ ] PAR Signature Page Received {IEEE Staff to check Box}

4. Project Title and Working Group/Sponsor for this Project
Document type : {Place an X in only one option below}
[X] Standard for {Document stressing the verb "SHALL"}
[ ] Recommended Practice for {Document stressing the verb "SHOULD"}
[ ] Guide for {Documents in which good practices are suggested}

TITLE: [Information technology—
Telecommunications and information exchange between systems—
Local and metropolitan area networks—
Specific requirements—
Part 3: Carrier sense multiple access with collision detection (CSMA/CD)
access method and physical layer specifications
Data Terminal Equipment (DTE) Power via Media Dependent Interface (MDI)—]

Name of Working Group(WG) : [IEEE 802.3 Working Group]

Name of Official Reporter (usually the WG Chair) who MUST be an SA member as well as an IEEE/Affiliate Member: [Geoffrey O. Thompson]
Title in WG: [WG Chair] IEEE/SA/Affiliate Member # [02646453—]{Required}
Company: [Nortel Networks] Telephone: [+1 408 495 1339]
Address: [PO Box 58185] FAX: [ ]
City/State/Zip: [Santa Clara, CA] EMAIL: [gthompso@nortelnetworks.com]

Name of WG Chair (if different than Reporter): [DNA]
IEEE/Affiliate Memb # [ ]{Required}
Company: [ ] Telephone: [ ]
Address: [ ] FAX: [ ]
City/State/Zip: [ ] EMAIL: [ ]

Name of Sponsoring Society and Committee: [LAN/MAN Standards Committee (LMSC)]
Name of Sponsoring Committee Chair: [Jim Carlo]
Company: [Texas Instruments] Telephone: [+1 972 480 2524]
Address: [9208 Heatherdale Drive] FAX: [+1 972 480 2611]
City/State/Zip: [Dallas, TX 75243] EMAIL: [jcarlo@ti.com]

5. Describe this Project by answering each of five questions below:

5a. Update an existing PAR? {Yes/No} [NO]

If YES: Indicated PAR number/approval date [ ]
If YES: Attach cover letter indicating changes/rationale for changes.
If YES: Is this project in ballot now? [ ] {Yes/No}

5b. Choose one from the following:
b1 -[ ] New Standard
b2 -[ ] Revision of existing standard {number and year} [ ]
b3 -[X] Amendment (Supplement) to existing standard {number and year} [ ]
b4 -[ ] Corrigenda to existing standard {number and year} [ ]

5c. Choose one from the following:
c1 -[X] Full Use (5-year life cycle)
c2 -[ ] Trial Use (2-year cycle)

5d. Choose one from the following:
d1 -[X] Individual Sponsor Ballot Process
d2 -[ ] Entity (not Individual) Sponsor Ballot Process

5e. Fill in Target Completion Date to IEEE RevCom [December, 2001]

6. Scope of Proposed Project
{what is being done, including technical boundaries on the work}
[Define methodology for the provision of power via unshielded twisted pair cabling to connected Data Terminal Equipment. The amount of power will be limited by cabling physics and regulatory considerations. Compatiblity with existing equipment will be considered.——] {This should be brief (less than 5 lines recommended)}

7. Purpose of Proposed Project:
{why it is being done, including intended users, and benefits to users}
[—To provide power for a new class of devices enabled by progress in silicon technology. These devices are characterized by low power requirements and LAN connectivity. ——] {This should be brief (less than 5 lines recommended)}

8. Intellectual Property {Answer each of the questions below}
8a. Are you aware of any patents relevant to this project?
[Yes] {Yes, with detailed explanation below/ No}
[Assurance letters will be actively solicited during the course of the project.] {Explanation}

8b. Are you aware of any copyrights relevant to this project?
[No] {Yes, with detailed explanation below/ No}
[ ] {Explanation}

8c. Are you aware of any trademarks relevant to this project?
[No] {Yes, with explanation below/ No}
[ ] {Explanation}

8d. Are you aware of any registration of objects or numbers relevant to this project?

[No] {Yes, with explanation below/ No}

9. Are you aware of other standards or projects with a similar scope?
[YES] {Yes, with explanation below/ No}
[TIA TR41.3.4 and TR41.4 hasve ~~this scope~~ within the scope of ~~its~~their projects for the specification of IP telephone sets. ~~That group~~TIA has asked 802.3 to provide a specification for them to use by reference] {Explanation}

10. International Harmonization
Is this standard planned for adoption by another international organization?
[YES] {Yes/No/?? if you don't know at this time}
If Yes: Which International Organization [ISO/IEC JTC1 SC6 WG3]
If Yes: Include coordination in question 13 below
If No: Explanation [ ]

11. Is this project intended to focus on health, safety or environmental issues?
[NO] {Yes/No/?? if you don't know at this time}
If Yes: Explanation? [ ]

12. Proposed Coordination/Recommended Method of Coordination

12a. Mandatory Coordination
SCC 10 (IEEE Dictionary) by DR
IEEE Staff Editorial Review by DR
SCC 14 (Quantities, Units and Letter symbols) by DR

12b. Coordination requested by Sponsor and Method:
[SC6/WG3 via US TAG~~-~~] by [DR] ~~{circulation of DRafts/LIaison memb/COmmon memb}~~
[SC25/WG3 via US TAG~~-~~] by [DR]~~]~~ ~~{circulation of DRafts/LIaison memb/COmmon memb~~}
[TIA TR41.3.4] by [DR] {circulation of DRafts/LIaison memb/COmmon memb}
[TIA TR41.4] by [DR] {circulation of DRafts/LIaison memb/COmmon memb}
{Choose DR or LI or CO for each coordination request}

12c. Coordination Requested by Others:
[ ] {added by staff}

Additional Explanation Notes: {Item Number and Explanation}
[ ]{If necessary, these can be continued on additional pages}

5.5 802.15a PAR

(see file item5_5.pdf)

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

Submission Title: Report to the Excom on Coexistence SG
Date Submitted: November 8,1999
Source: [Robert F. Heile] Company [GTE Technology Organization]
Address [40 Sylvan Road, Waltham, MA 02451]
Voice:[781-466-2057], FAX: [781-466-2575], E-Mail:[bheile@bbn.com]

Re: SG on Coexistence

Abstract: SG Status and Proposal for Operation

Purpose: To solicit Excom approval on the formation of a Task Group

Need for Coexistence Task Group

- It is important that IEEE 802.15 WPAN devices coexist with other wireless devices in the unlicensed frequency bands.
- In particular it is very important that 802.15 WPAN devices coexist with IEEE 802.11 WLAN devices.

Scope of Coexistence Task Group

- The goal will be to address coexistence of:
  - Any 802.15 WPAN with any 802.11 WLAN
  - Any 802.15 WPAN with any other 802.15 WPAN (assuming there will be more than one)
  - Any 802.15 WPAN with selected other devices in the same band (e.g. HomeRF).

Coexistence Task Group Charter

- Develop a Coexistence Model for the 2.4 band, that we can all agree to, which will help us assess the issues of Coexistence in a more quantitative way
- Recommend option selections from the existing 2.4 band standards that would further coexistence (much like writing a profile)

Coexistence Task Group Charter

- Develop a guidebook on band etiquette so that as new standards are developed or existing standards are enhanced, there is an organized way to improve the coexistence environment.
- Exam how multi-mode radios in the 2.4 band should go about the task of deciding what mode to be in and how to exchange information and data between environments

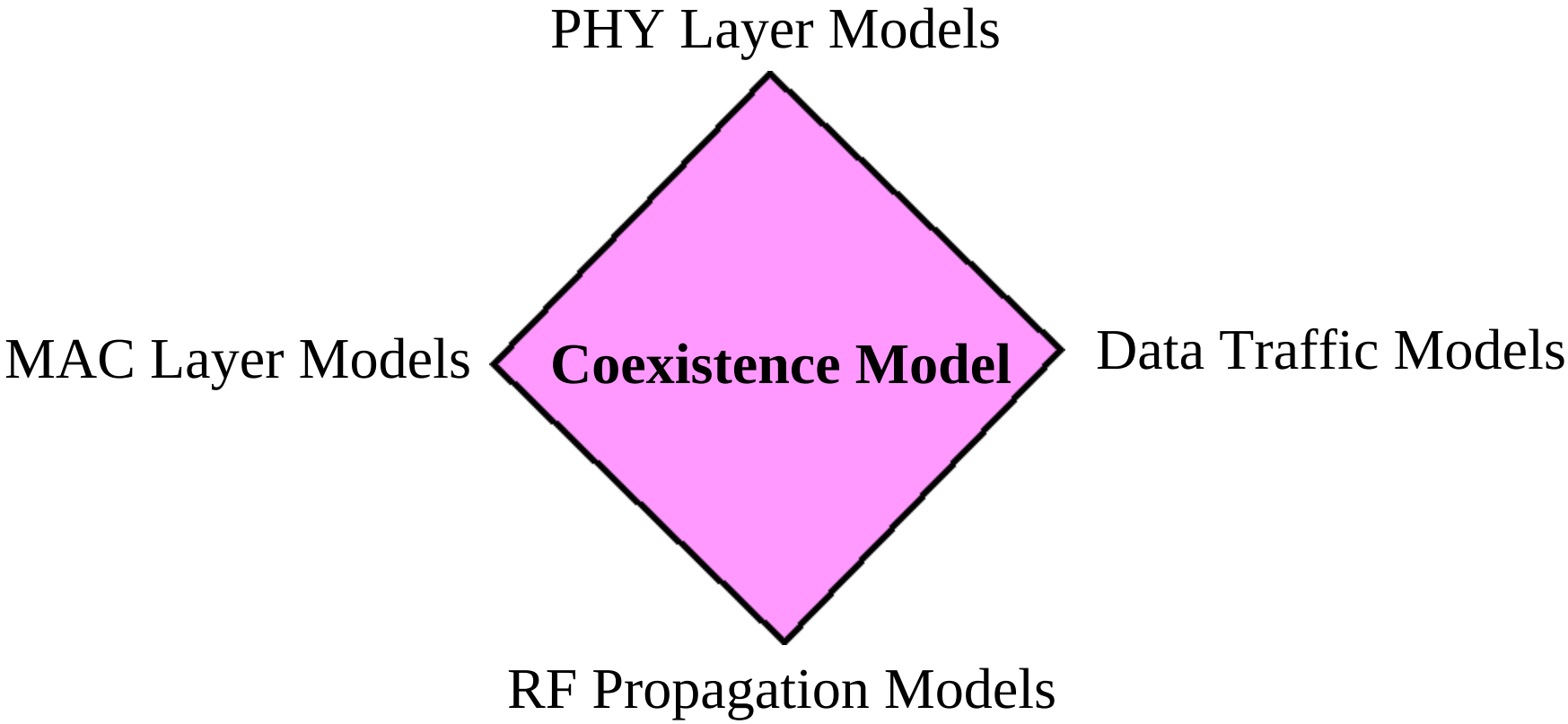
Coexistence Task Group Charter

- The output of the proposed Task Group would be a set of Recommended Practices

Coexistence Model

- The purpose of this model is:
  - To understand under what circumstance there is a coexistence problem and under what circumstances there is not a problem.
  - To develop *supporting evidence* to justify the recommended suggested practices

Coexistence Model



Coexistence Model

- Bring together the four parts of the model to predict the impact on the WPAN and WLAN networks.
  - Data throughput
  - Data latency

Proposal for Task Group Operation

- The Coexistence Study Group would become a Task Group in 802.15
- The Liaisons from 802.11 would be able to vote in the Task Group since they have voting rights in 802.15
- Progress of the group would be reported at the regularly scheduled 802.11/802.15 joint sessions

Proposal for Task Group Operation

- Once a draft Recommended Practice was ready for letter ballot it would be submitted to both the 802.15 and the 802.11 Working Groups for separate letter ballot.
- In order for the Recommended Practice to be forwarded to the Executive Committee for Sponsor ballot, the letter ballot must pass in both Working Groups.

Back-up slides

Definition of Coexistence

- Multiple wireless devices are said to "coexist" if they can be collocated without significantly impacting the performance of any of these devices.

Interoperability

- The IEEE currently defines three levels of interoperability
  - Physically exchanging two interoperable devices causes no damage to the devices
  - Similar to our definition of coexistence
  - Interoperable devices can exchange data
- We will allow but not require interoperability as a coexistence mechanism.

Coexistence Model

- PHY Models
  - Models of the 802.11 and 802.15 PHY layers which will predict the impact of mutual interference when multiple devices are operating simultaneously, based upon given signal power levels.

Coexistence Model

- Data Traffic Model
  - Model the data traffic flow based upon different application scenarios for both the WLAN and WPAN networks
    - Voice traffic
    - File transfer
    - Warehouse data collection
    - Video & Others

Coexistence Model

- MAC Layer Models
  - Model the WLAN and WPAN MAC layers.
  - Combine that with the Data Traffic models to determine when each of the networks are transmitting data

Coexistence Model

- RF Propagation Model
  - Model RF signal power levels at the different WPAN and WLAN nodes based on an RF propagation model.
  - Consider different application scenarios and physical distribution of devices.

5.6 802.16 to 802.16.1. PAR change

approved as part of consent agenda

(see file item5_6.pdf)

802.16 PAR Renumbering Request

- **Motion:**
  - To redesignate PAR 802.16 ("Air Interface for Fixed Broadband Wireless Access Systems") as "802.16.1"
- **History:**
  - Approved by 802.16, July 8 (unanimous consent)
  - Notified SEC on July 19 of motion for Nov. 1999
- **Consistent with 802.16's other PAR (802.16.2)**
- **Report from WG Strategy ad hoc (July 802 Plenary)**
  - Can WGs have multiple separate standards? Yes
  - Number the separate standards 802.16.1, 802.16.2, 802.16.3, etc.

5.7 Rule change status

The “Did Not Votes” have it. The proposed rule change did not pass.

5.8 Verification of email address for LMSC balloters

(see file item5_8.pdf)

Carlo clarifies that IEEE-SA ProCom has ruled that electronic ballots are a valid means of balloting and that electronic access can be a pre-requisite.

Bob Love gets action item to produce recommendation to IEEE (Mike Binder) regarding electronic balloting. Meet 8:00 to 9:00 am Wednesday morning.

Electronic LMSC Balloting

- Allow fully Electronic Process Including Initial Invitation to Ballot Letter
- Allow Chair to Require Confirmation of Electronic Address Before Accepting Voter on the list
- Allow No Exceptions to Electronic Process - i.e. no requirement for hard copy to ANYONE
- Allow removal of names that did not respond to a previous LMSC ballot of a document from that Working Group

5.9 IETF Joint Projects

Several areas of mutual interest to IEEE 802 and IETF will be discussed in 802.1 this week.

5.10 Voting membership rule

Marks asks for no change to the 802 rules at this time.

5.11 802.14 Update

Paul Nikolich introduces the Vice Chair of 802.14, Mathew Sherman.

Membership is declining. Cable industry as a whole is focused on DocSIS. Plan is to withdraw PARs. Robert Russell would like to see 802.14 remain constituted until March 2000.

No meeting time scheduled this week.

Report on ballot to withdraw PAR. 34 to withdraw, 0 against, 1 abstention. 48 total voting members in 802.14.

Carlo, Nikolich to meet with 802.14 members 5:00 to 5:30 Monday.

5.12 Network Support Update

Stuart Kerry reports on network infrastructure for this meeting. Unfortunately, several items remain to be resolved in order to get sponsorship parameters established. Who owns it, who is responsible for it.

5.13 CDROM Distribution

(see file cddist.pdf)

802 Standards CDROM
Y2K Edition

- Distributed to voting members of 802 Working Groups who register and pay their fees for this meeting, and who are not in arrears on fees for previous meetings
- CDROMs will be distributed at the registration desk

  2:00 pm to 5:00 pm on Wednesday
  8:00 am to 5:00 pm on Thursday

- You don’t have to return your old CDROM to get a new one

5.14 Tutorial schedule and social arrangements

Note that we are going to use the second tutorial slot on Tuesday for the discussion forum regarding distribution of standards.

5.15 Database update

Contemplating use of Automatic online registration for conference service from IEEE. This has resulted in a delay in the conversion from PFS to Access2000

5.16 Plenary schedule feedback

Please gather feedback from WGs on the revised schedule.

5.17 Millennium medal and 20th Year 802 Celebration

Business meeting 10:00 to 11:00 on Wednesday to plan the festivities.

5.18 March 2000 802 Officer Election

Reminder that the elections are coming up again.

The meeting was adjourned at 10:30 am.

IEEE P802 LMSC Opening Plenary Meeting

Monday November 8, 1999

Hyatt Regency Hotel, Kauai, HI

Jim Carlo called the meeting to order at 11:00 am

Things got rather heated at the beginning of the meeting.

11:00 Welcome and Review of SEC Meeting

Carlo reviews the results of the SEC meeting

Carlo reviews IEEE-SA patent policy

(see file carlo.pdf)

SEC Business Meetings

TIME	Purpose	Who	Location
MON			
5:00	802.14 Status	Nikolich	BDR
TUES			
1:00	IEEE802 Stds Availability	Walker(IEEE)	BDR
3:00	IPF Fee Discussion	Carlo, Carlson	BDR
WED			
8:00	Ballot Process	Love	BDR
9:00	Networking in Meetings	Kerry	BDR
10:00	Awards	Carlo	BDR
3:00			
4:00			
5:00			

SEC ATTENDANCE

MEETING	ABSENT
3/97	Vaman
7/97	-
11/97	Eastman, Mollenauer, Russell
3/98	Eastman, Vaman
7/98	Eastman, Mollenauer,
11/98	Frazier, Alonge, Russell,
3/99	Alonge, Vaman, Thaler, Mollenauer
7/99	Thaler, Mollenauer, Alonge, Vaman
9/99	Thaler, Russell, Vaman,

- Presence at both Mon and Thur SEC meetings is required.
- Eastman/Mollenauer/Alonge are no longer voting member of SEC.

SEC Motion 11Mar99

- Moved: _____ Seconded: _____
- Adopt the following policy regarding Internationalization of IEEE 802 standards.

- 1) Initiate application from IEEE 802 to be a Cat A Liaison organization to ISO/IEC JTC1 SC6 or other SC as appropriate with possible N&I reorganization. Reasons for Cat-A is to be able to submit NP's and Fast Track documents. Jim Carlo - By 1999. SC6 Approved - JTC1 In Process APPROVED

- 2) Initiate the following balloting process within 802:
- A) Send electronic liasions to SC6 on PAR approval, IEEE 802 draft WG ballots, IEEE Sponsor ballots.
- B) Request comments directly to ballot pointer within IEEE ballot time period.
- Tony Jeffree - Process through 802 - July 1999 Plenary
  Robin Tasker - Process through SC6 - June SC6 Meeting

- 3) After standard board approval of the IEEE 802 document:
- A) IEEE publish with IEEE designation.
- B) SC6 publish as an update to a Technical Report. That technical report catologues previously published joint JTC1/IEEE standards and IEEE standards that it has endorsed.
- C) IEEE 802 believes that ANSI designation is not a market requirement for IEEE 802 standards and may be a detriment for Internation Recognition.

- 4) Identify SC6 Technical Liaison from IEEE 802.
- Tony Jeffree recommended for Initial liaison. -DONE

IEEE 802 International Program

The following are IEEE 802 Process Changes for better recognition of IEEE 802 efforts in the International arena. This process conforms to IEEE-SA and Computer Society Guidelines regarding Internationalization of IEEE Standards.

1) IEEE 802 has submitted a request for Category C Liaison to both ISO/IEC JTC1/SC6/WG1&WG3. SC6 has approved this request and JTC1 is currently conducting a JTC1 ballot (J1n5832.pdf) to approve this liaison, with ballot to close in 12-October.

After approval of this liaison:

a) IEEE 802 drafts will be circulated within SC6/WG1&WG3 member bodies for comments back to IEEE 802 or the IEEE-SA balloting service. The schedule for comment response will be controlled by the normal IEEE-SA process.

b) IEEE 802 Projects with International Coordination to SC6 will interact directly with the JTC1/SC6 rather than through the USTAG for SC6/WG1&WG3(sponsored by the IEEE). IEEE 802 will continue to work with the USTAG as needed to develop US positions on all SC6/WG1&WG3 documents. While PARs may specify coordination with the USTAG, I request administrative change directly to SC6/WG1&WG3 and will inform both NesCom and RevCom.

c) IEEE 802 Working Group chairs have informally invited SC6 experts to join their balloting groups as observers to aid coordination.

2) JTC1/SC6 has initiated a proposal (with support from IEEE 802) for coordination and review of IEEE 802 standards. This proposal (SC6 N 11235 -Proposed Procedures for ISO/IEC SC6 and IEEE 802 Co-operative working)is currently under review by JTC1/SC6 and includes the following:

a) Circulation of drafts from IEEE 802 to JTC1/SC6/WG1&WG3 for comments directly into the IEEE-SA standards process. This can be handled directly coordination is today, through the IEEE-SA Balloting Service.

b) Development of a Technical Report that is updated yearly to reflect which IEEE 802 standards have support from the JTC1/SC6 member bodies. This Technical Report will help identify the current IEEE 802 standards and supplements that have received review by the member countries in SC6.

3) For those IEEE 802 standards where an SC6 country feels it is necessary to go to full Internationalization, the Fast-Track process in JTC1 will be utilized.

a) For each Fast-Track standard, the standard must be already approved by the IEEE Standards Board.

b) Each country requesting Fast-Track process will submit a request through the normal JTC1 Fast-Track process. The IEEE-SA Staff, after consultation with IEEE 802 chair, will approve the copyright release for Internationalization for each specific standard. It is expected that the IEEE 802 SEC will approve each Fast-Track item by separate vote prior to IEEE-SA staff releasing copyright permission to JTC1 for the joint standard. This check and balance ensures that the Fast-Track is appropriate on the specific standard in process.

c) Normally, after approval of the Fast-Track by JTC1, a separate page will be inserted into the IEEE-SA Standard stating that the standard is also recognized by JTC1. Separate publishing of the standard as a joint JTC1/IEEE-SA will be handled on a case-by case basis.

5) IEEE 802 standards will no longer have the ANSI designation, although approval by BSR is still part of the normal IEEE-SA standards process.

6) IEEE 802 expects that some IEEE 802 standards will be coordinated through the ITU-T and ETSI. A process for handling this will be documented separately.

IEEE 802 Monday Schedule - Hawaii

- For Hawaii meeting, a number of people suggested that the WG's need to spend more time together doing work.

- Monday Schedule (8 Nov 1999)
  - IEEE 802 SEC Meeting - 8:00am to 10:30am
  - IEEE 802 Plenary Meeting - 11:00am to 12:00noon
  - WG's start at 1:00pm until 5:00pm.

- DO WE ALSO STAY ON THIS SCHEDULE IN MARCH99?
  - Discussion at the Thursday SEC Meeting. Feedback requested

IEEE 802 20th Anniversary

- March Meeting is 20th Anniversary of IEEE 802.
- First meeting of IEEE802 on 22Feb80 in San Francisco.
- Special Tutorials and Programs
- Invited Speaker for 20th Anniversary
- Service Awards
- Pins, Tee-Shirts, Medallions

March 2000 Elections

- **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) Executive Officers**
  - The Vice Chair, the Executive Secretary, the Recording Secretary, the LMSC Treasurer and ex-officio members of the LMSC Executive Committee. These positions are appointed by the LMSC Chair and confirmed by the Executive Committee.
- **C) Working Group Chairs**
  - 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.
  - 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. Applies to Bill Lidinsky (1980) and Vic Hayes (1990)

IEEE802 Monday Plenary Agenda

• 11:00	Welcome and Review of SEC Meeting	Carlo
• 11:05	CD ROM Distribution	Frazier
• 11.08	Voting Rules and IEEE 802 Operating Rules	Nikolich
• 11:10	Treasurer's Report	Grow
• 11:15	IEEE Project Editors Status Report	Rutigliano
• 11:18	Power Line Tutorial	Buffkin
• 11:20	802.1 Management/VLANs	Lidinsky
• 11:25	802.3 CSMA/CD	Thompson
• 11:30	802.5 Token Ring	Love
• 11:35	802.8 Fiber Optic TAG	Benson
• 11:38	802.11 Wireless	Hayes
• 11:43	802.14 CATV Modem	Russell
• 11:45	802.15 WPAN	Heile
• 11:50	802.16 BWA	Marks
• 11:55	Tutorials, Meeting Arrangements	Rigsbee
• 12:00	ADJOURN	

http://grouper.ieee.org/groups/802/

Jim Carlo - IEEE 802 Chair

- EMAIL: jcarlo@ti.com
- Phone: 214-693-1776 (Cellular)
- Fax: 214-853-5724
- Texas Instruments, Dallas, TX

- Goals for IEEE 802 -1999
  - Enable IEEE802 to develop consensus standards that benefits the World Wide Networking Society.
  - Maintain the imperative principals of due process, consensus, openness, balance and rights of appeal.
  - Electronic distribution of standards.

Patents -IEEE-SA Standards Board Bylaws (Jan 1999)

6. Patents

IEEE standards may include the known use of patent(s), including patent applications, if there is technical justification in the opinion of the standards-developing committee and provided the IEEE receives assurance from the patent holder that it will license applicants under reasonable terms and conditions for the purpose of implementing the standard. This assurance shall be provided without coercion and prior to approval of the standard (or reaffirmation when a patent becomes known after initial approval of the standard). This assurance shall be a letter that is in the form of either

a) A general disclaimer to the effect that the patentee will not enforce any of its present or future patent(s) whose use would be required to implement the proposed IEEE standard against any person or entity using the patent(s) to comply with the standard or

b) A statement that a license will be made available to all applicants without compensation or under reasonable rates, with reasonable terms and conditions that are demonstrably free of any unfair discrimination[5].

Patents - IEEE-SA Standards Board Operations Manual (Mar 1999)

6.3 Patents

The patent policy is set forth in clause 6 of the *IEEE-SA Standards Board Bylaws.*

Patent holders shall submit letters of assurance to the IEEE Standards Department (to the attention of the Staff Administrator, Intellectual Property Rights) before the time of IEEE-SA Standards Board review for approval. The IEEE will provide contact information about the patent holder upon request.

6.3.1 Public notice

The following notice shall appear when the IEEE receives assurance from a known patent holder prior to the time of publication that a license will be made available to all applicants either without compensation or under reasonable rates, terms, and conditions that are demonstrably free of any unfair discrimination. Attention is called to the possibility that implementation of this standard may require use of subject matter covered by patent rights. By publication of this standard, no position is taken with respect to the existence or validity of any patent rights in connection therewith. The IEEE shall not be responsible for identifying patents for which a license may be required by an IEEE standard or for conducting inquiries into the legal validity or scope of those patents that are brought to its attention. A patent holder has filed a statement of assurance that it will grant licenses under these rights without compensation or under reasonable rates and nondiscriminatory, reasonable terms and
conditions to all applicants desiring to obtain such licenses. The IEEE makes no representation as to the reasonableness of rates and/or terms and conditions of the license agreements offered by patent holders. Further information may be obtained from the IEEE Standards Department. If the IEEE has not received letters of assurance prior to the time of publication, the following notice shall appear:
Attention is called to the possibility that implementation of this standard may require use of subject matter covered by patent rights. By publication of this standard, no position is taken with respect to the existence or validity of any patent rights in connection therewith. The IEEE shall not be responsible for identifying patents for which a license may be required by an IEEE standard or for conducting inquiries into the legal validity or scope of those patents that are brought to its attention.

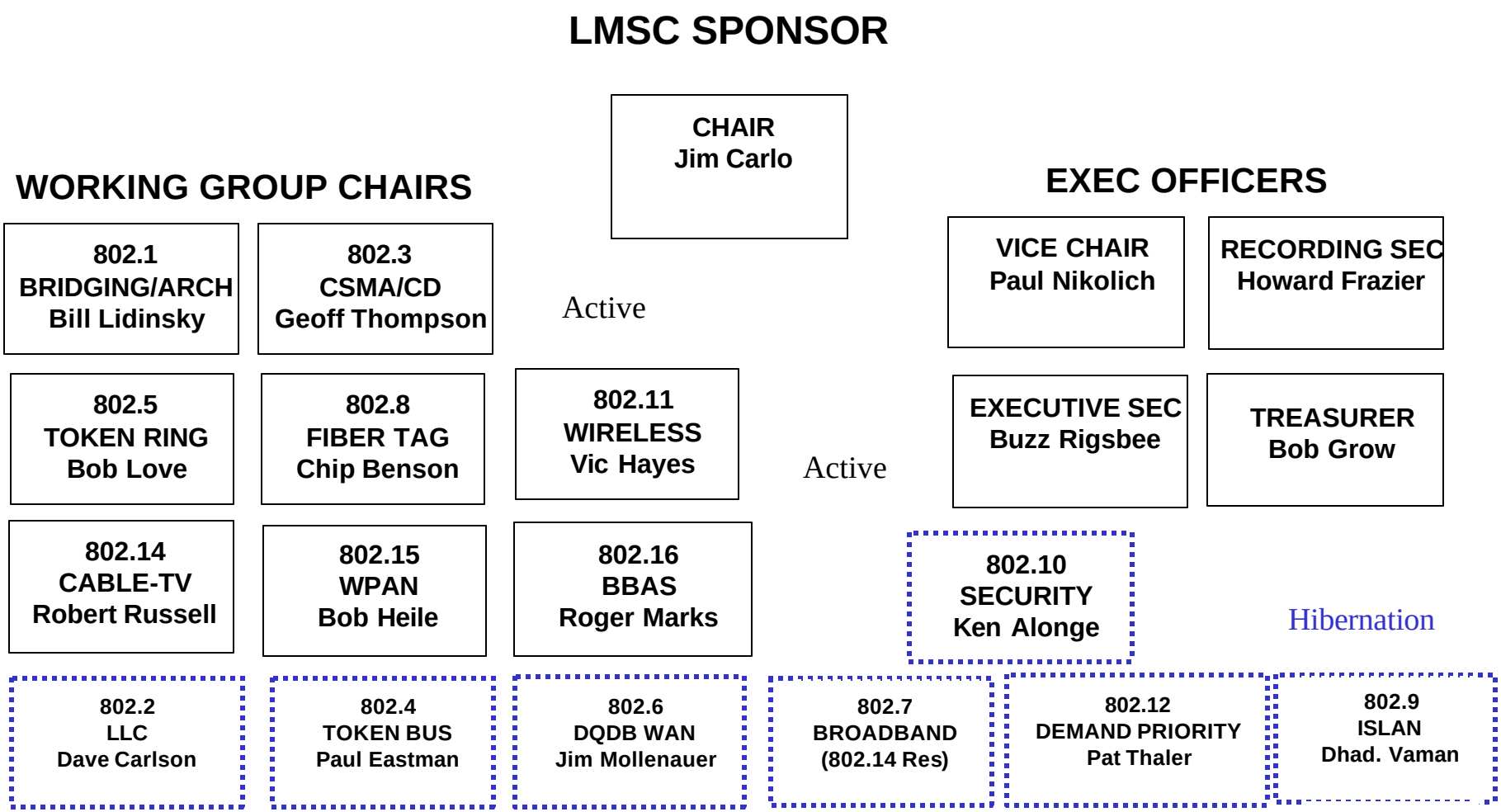
6.3.2 Submittal

Through the working group, the Sponsor chair shall request that known patent holders submit a statement either that the patent does not apply to the standard or that licenses will be made available without compensation or under reasonable rates, terms, and conditions. This assurance shall be obtained without coercion and submitted to the IEEE at the earliest practical time prior to the approval of an IEEE standard. The IEEE encourages early disclosure to the working group of patent information that might be relevant to the standard. While standards may include the known use of patents if there is technical justification, the working group should not attempt to determine whether or not a patent applies. The working group shall accept the view of the patent holder.

6.3.3 Disclaimer

The IEEE shall not be responsible for identifying all patents for which a license may be required by an IEEE standard or for conducting inquiries into the legal validity or scope of those patents that are brought to its attention.

IEEE 802 ORGANIZATION



IEEE 802 WEB PAGES

- IEEE 802 WEB Pages Now On-Line and Operational
- Responsibilities as as follows:
  - Howard Frazier - Main WEB page
  - Paul Nikolich - Operating Rules and 802 Documents
  - Buzz Rigsbee - LMSC Plenary Meetings
  - 802.1 Sundar Subramaniam
  - 802.3 David Law
  - 802.5 Neil Jarvis/John Messenger
  - 802.10 Richard McAllister
  - 802.11 Vic Hayes
  - 802.14 Robert Russell
  - Denise Pribula - IEEE page pointers

- ***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.

IEEE 802 WG Voting Rules

5.1.3 Membership
All persons participating in the initial meeting of the Working Group become voting members of the Working Group. Thereafter, voting 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. Membership starts at the third Plenary session. 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).

Members of the Working Group who have not achieved voting status are known as observers. Liaison members are those designated individuals who provide liaison with other working groups or standards bodies.

IPF Summary

- IPF is administered by ITCC (ANSI Information Technology Consultative Committee) AT&T, Compaq, HP, IBM, Sun, Unisys, ITI, DoDm NCS, NIST
- For Reference:
  - JTC1 US Policy is administered by JTC1 TAG
  - JTC1/SC6 is administered by EIA US TAG
  - JTC1/SC6/WG1&WG3 is administered by IEEE US TAG
- IPF fees have been in-place since 1991
- Prior to 1991 ITCC paid all support ($75K/yr to members)

IPF BASIC PRINCIPALS

- Internationalization of IEEE 802 standards
  - Aids World-Wide adoption
  - ISO/IEC Designation helpful for Third-World Countries
- Current system, though expensive to 802, works
  - Little opposition to IEEE 802 standards
  - Most IEEE 802 standards are pass-through
- Fairness being addressed at Computer Society Level
  - LMSC collects $100/meeting (Three per year)
  - PASC collects $75/meeting (Four per year)
  - Other groups under pressure to conform

JTC1 Infrastructure

• US Support	**SC6 (data int),** SC11(flex), SC22(lang), SC31(data capt)*, SC32(data mng)* JTC1(admin)
• UK Support	SC17(id cards), SC24(graphics)
• Japan Support	SC23(optic), SC26(micro), SC29(code)
• Germany Support	**SC25(intercon),** SC27(security)
• France Support	SC1(vocab), SC2(char)
• Canada Support	SC7(soft eng)
• Brazil Support	SC28 (off equip)

- * - These SC's are supported by specific group

JTC1 ANSI Revenue/Expenses

• YEAR	1996	1997	1998
• IPF Fee	538K	466K	438K
• ITCC	150K	165K	150K
• DoD/NIST	0	50K	25K
• TOTAL Revenue	688K	681K	613K
• TOTAL Expense	658K	597K	612K

ANSI IP Expenses

CATEGORY	EXPENSE	
– JTC1 ADMIN	150K	
– JTC1 MIS	126K	
– SC6	106K	
– SC11	12K	
– SC22	63K	
– SC32	64K	
– SC33	63K	(Disbanding - Move into SC6)
– ANSI ITCC	28K	
TOTAL	612K	

Estimated 1998 IPF Fee (438K)

- ORGANIZATION — TOTAL
  - AIMUSA — 11.1k
  - DISA — 1.8
  - EIA — 5.4
  - **IEEE** — **126 (90% from 802)**
  - JTC1 TAG — 12
  - **NCITS** — **273**
  - TIA — 8.4

IPF Note 11/1/99

- Jim: I would urge you and 802 to not be hasty on this. First of all, I think everyone is aware that secretariats get committed on a one year basis; so I would hope that 802 would not take action that would leave the rest of the community in the lurch. Second, I would like to think that the whole situation would get evaluated - if 802 drops funding, presumably it is also dropping the TAG responsibility. And with nobody else involved, that would also mean dropping the secretariat for SC 6 and potentially even the P membership. I don't know what the answers are, but I would like to see a total plan and not just one that abandons a system that IEEE had previously signed up for and which, under the rules of the road, IEEE is still obligated to meet.

Regards, Steve Oksala

IEEE 802 Meeting Fees

- MAR 1999
  - Pre-Registration - $275
  - On-Site Registration - $300

- July 1999
  - Pre-Registration - $250
  - On-Site Registration - $300

IEEE 802 Friday Plenary Agenda

• 8:00	Review of Agenda	Carlo
• 8:05	Review of Thursday Evening Executive Meeting	Carlo
• 8:15	Rules Changes	Nikolich
• 8:25	Treasurer's Report	Grow
• 8:40	802.1 Management/VLANs	Lidinsky
• 8:45	802.3 CSMA/CD	Thompson
• 8:50	802.5 Token Ring	Love
• 9:00	ECSG on Broadband Wireless Access	Carlo
• 9:05	802.8 Fiber Optic TAG	Benson
• 9:10	802.11 Wireless	Hayes
• 9:15	802.14 Cable Modem	Russell
• 9:20	802.15 Wireless PAN	Heile
• 9:25	802.16 BWA	Marks
• 9:30	QOS/FC Study Group	Amer
• 9:35	Future Meeting Arrangements	Rigsbee
• 9:40	Adjourn	
• 10:15	Plenary Foils Available Outside Office	Frazier

- **http://grouper.ieee.org/groups/802/**

11:05 IEEE 802 Standards CDROM - Frazier

(see file cddist.pdf)

802 Standards CDROM
Y2K Edition

- Distributed to voting members of 802 Working Groups who register and pay their fees for this meeting, and who are not in arrears on fees for previous meetings
- CDROMs will be distributed at the registration desk

  2:00 pm to 5:00 pm on Wednesday
  8:00 am to 5:00 pm on Thursday

- You don’t have to return your old CDROM to get a new one

11:08 Voting Rules and IEEE 802 Operating Rules – Nikolich

Nikolich reviews rules governing acquisition of voting rights.

11:10 Treasurer's Report – Grow

(see file montreasrep.pdf)

IEEE Project 802
Statement of Operations
July 1999 Meeting

open	**4 Jul 1999 Operating Reserve**			**47,963**		
Jul 1999 Meeting Income:				***Actual***	*Budget*	
148	**Registrations@**	**$300**	**44,400**			
321	**Registrations@**	**$250**	**80,250**			
	Registrations@	**$100**	**0**			
Subtotal			**124,650**	**124,650**	101,250	
Deadbeat Registrations				**300**		
Registration Reversal				**(300)**		
Bank Interest				**202**		
Copying Income				**0**		
Other				**0**		
plus	**TOTAL Income**			**124,852**	101,250	
Jul 1999 Meeting Expenses:				***Actual***	*Budget*	
Audio Visual Rentals				**5,911**	5,000	
Bank Charges				**133**	20	
Copying				**2,384**	6,000	
Credit Card Discounts				**3,245**	2,946	*
International Program Fee				**42,000**	33,750	*
Meeting Administration				**32,999**	30,200	*
Phone & Electrical				**618**	600	
Refreshments				**9,988**	13,000	
Shipping				**1,855**	2,500	
Social				**7,125**	9,000	
Supplies					0	
Other				**70**		
minus	**TOTAL Meeting Expense**			**106,329**	103,016	
minus	**Equipment Expense**			**20,150**	21,000	
equals	**7 Nov 1999 Operating Reserve**			**46,336**		
	Net Change in Operating Reserve			**(1,627)**	(1,766)	

* Actual charges are based on registration, budget is based on registration forecast.

IEEE Project 802
2000 Budget

Meeting Income:	*March*	*July*	*Nov*	*2000*
Registrations	425	400	400	
Average Fee	265	260	260	
Subtotal	112,625	104,000	104,000	320,625
Bank Interest	200	200	200	600
TOTAL Income	112,825	104,200	104,200	321,225

Meeting Expenses:	*March*	*July*	*Nov*	*2000*
Audio Visual Rentals	5,000	5,000	5,000	15,000
Bank Charges	25	25	25	75
Copying	5,950	6,000	5,200	17,150
Credit Card Discounts	3,154	2,912	2,912	8,978
International Program Fee	38,200	36,000	36,000	110,200
Meeting Planners	31,625	30,600	30,600	92,825
Phone & Electrical	800	800	800	2,400
Refreshments	10,625	14,400	13,200	38,225
Shipping	3,000	3,000	3,000	9,000
Social	7,650	9,200	8,400	25,250
Supplies	200	200	200	600
Other			1,500	1,500
Meeting Equipment	5,000	5,000	5,000	15,000
TOTAL Meeting Expense	111,229	113,137	111,837	336,203

NET to Operating Reserve	1,597	(8,937)	(7,637)	(14,978)
Projected opening OR	36,554	38,151	29,214	21,577
Projected opening cash	25,354	26,951	18,014	10,377

11:15 IEEE Project Editor's status report

Janet Rutigliano

11:18 Power Line Tutorial - Buffkin

11:20 802.1 Management/VLANs- Lidinsky

(see file dot1monplen.pdf) – NO FILE

Technical plenary agenda items due to Lidinsky by noon Tuesday.

11:25 802.3 CSMA/CD – Thompson

(see file dot3monplen.pdf)

802.3 CSMA/CD Working Group Status

- Major Activities:
  - 802.3ab/1000BASE-T PUBLISHED
  - 802.3ad/Link Aggregation
    Expected to Sponsor Ballot this week
  - 802.3 HSSG (10 Gigabit Ethernet)
    Presenting PAR this week
  - DTE Power via MDI
    Presenting PAR this week
  - Liaison reports: FO-2.2, TR-41, 42

802.3 CSMA/CD Working Group Officers

- 802.3 Chair: Geoff Thompson (Geoff_Thompson@baynetworks.com)
- 802.3 Vice Chair: David Law (davel@pdd.3Com.com)
- 802.3 Secretary: Bob Grow (bob@xInt.com)
- 802.3ad, Link Aggregation: Steve Haddock (shaddock@extremenetworks.com)
- 10 Gigabit Ethernet: Jonathan Thatcher (jonthan@picolight.com)
- DTE Power via MDI: Steve Carlson (scarlson@esta.org)

- 802.3 CSMA/CD Web site
- Information is always available on our web site:
  http://grouper.ieee.org/groups/802/3/index.html
- WE WILL MEET IN THIS ROOM

  START at 1:00 PM

11:30 802.5 Token Ring - Love

(see file dot5monplen.pdf) – NO FILE

11:35 802.8 Fiber Optic Tag - Benson

(see file dot8monplen.pdf)

IEEE 802.8
Fiber Optic Technical Advisory Group (FOTAG)

1. **At the July plenary, we formulated a response to each comment on the "Recommended Practice for Fiber Optic Local & Metropolitan Area Networks" sponsor ballot and drafted response letters to the three negative voters.**
2. **Comment responses and cover letters were emailed to the negative voters in the week after the July plenary.**
3. **Primary tasks this week:**
   a) **Prepare draft for recirculation**
   b) **Discuss possible hibernation for March 2000**
4. **Meetings start 8:30 AM Tuesday in the "Garden Lounge".**

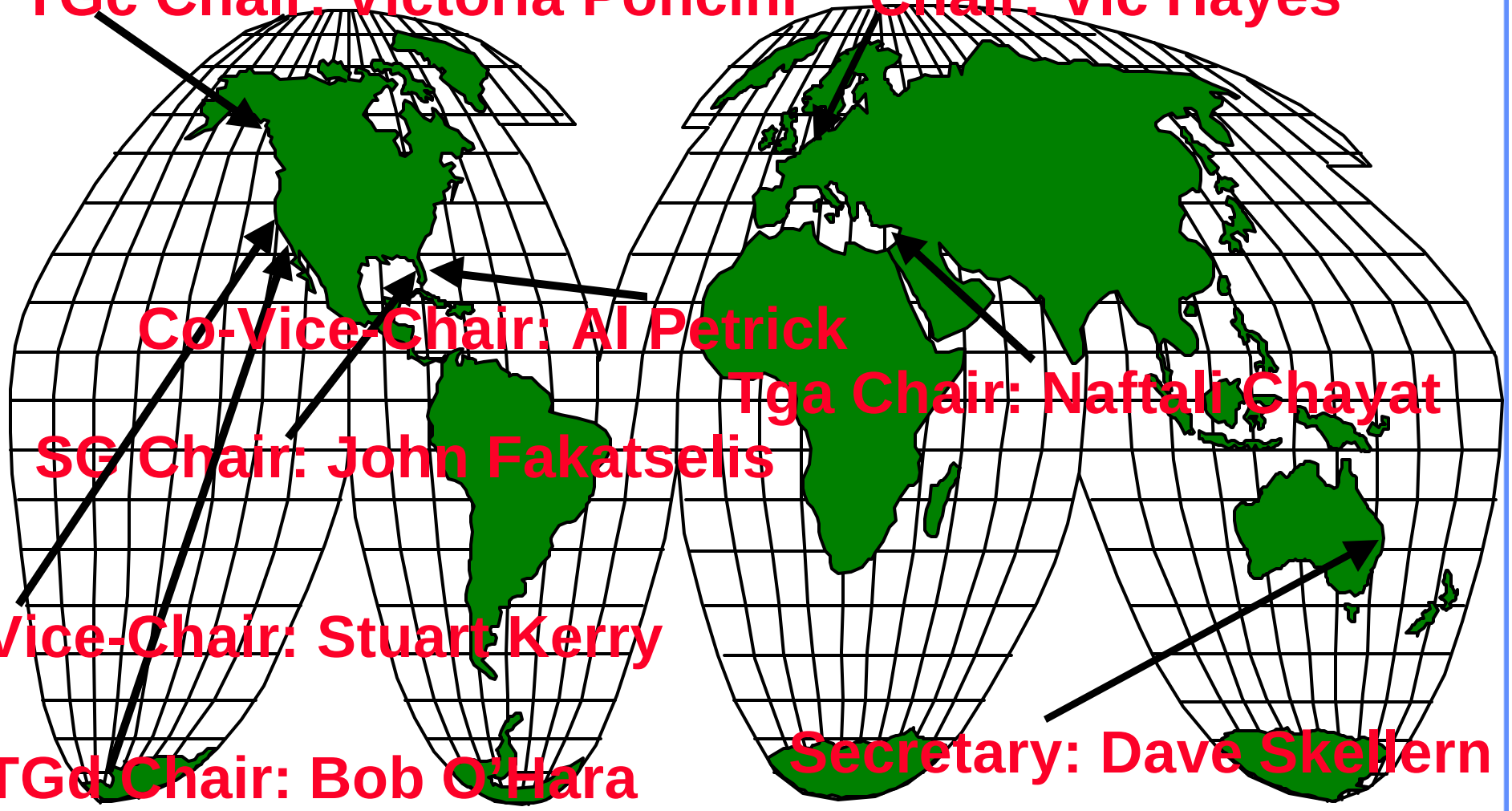
5. Ballot passed
70 ballots eligible
54 ballots returned (77%)
44 affirmative (93%)
3 negative
7 abstention

11:38 Wireless – Hayes

Awards presented for completion of 802.11rev.

(see file dot11monplen.pdf)

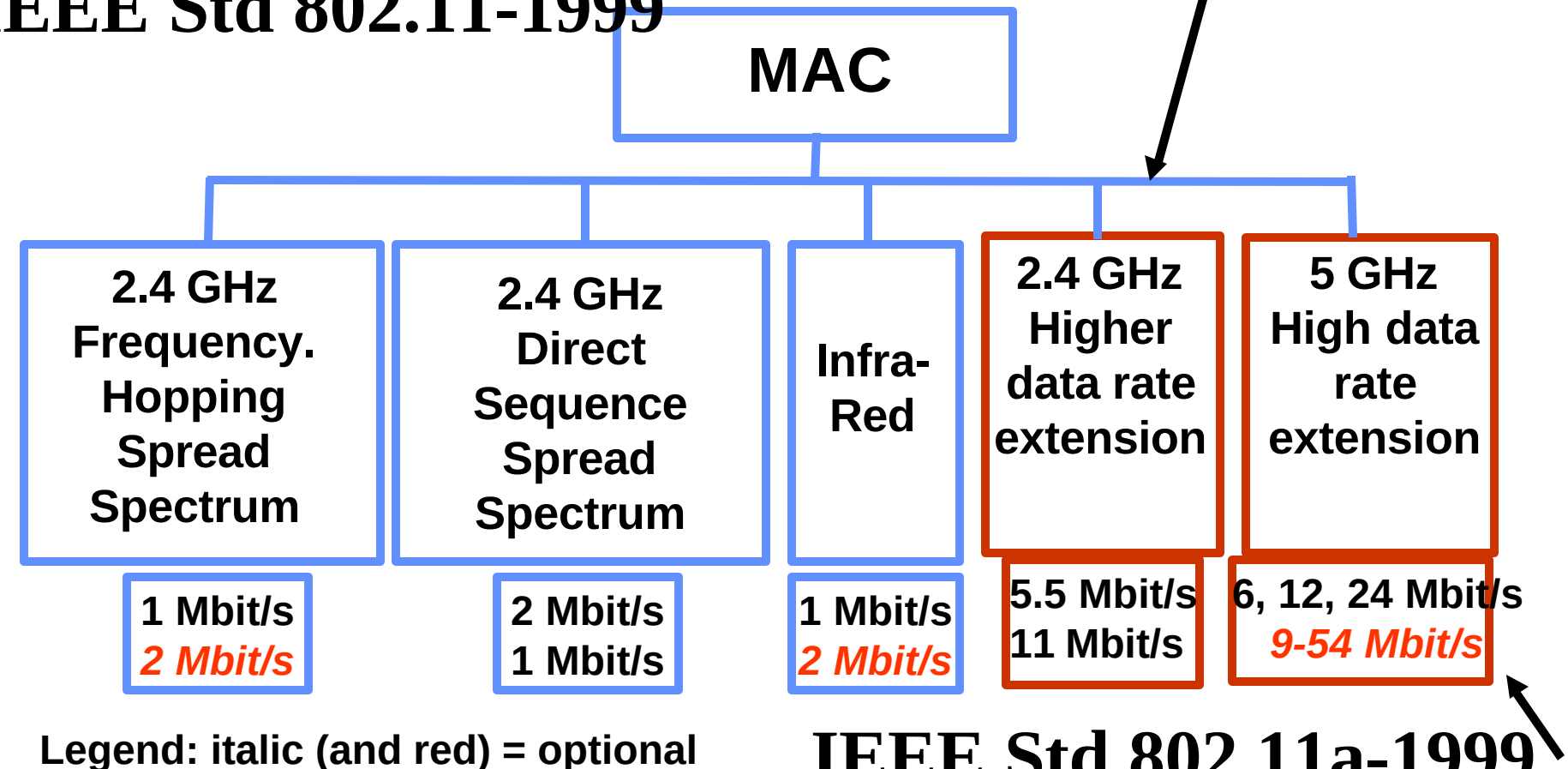
IEEE P802.11, Wireless LANs



IEEE P802.11, Wireless LANs

ISO/IEC 8802-11:1999

IEEE Std 802.11-1999



Legend: italic (and red) = optional

IEEE P802.11, Wireless LANs

IEEE 802.11-1999 and 802.11c

- IEEE Std 802.11-1999 was published August 9, 1999
- All people on the Working Group roster should have received a copy

- IEEE 802.11c is not published as such
- Was immediately folded into IEEE Std 802.11D
- All people on the Working Group roster should have received a copy of 802.11D

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Status of 802.11b

- Was conditionally approved for Submission to RevCom at the July meeting
- Recirculation ballot closed without response
- Approved by Standards Board on September 16, 1999
- Contents has been edited by Janet and the result has been approved by the chairs and Task Group editor
- There was a report of a problem with the compilation of the Management Information Base
- The extent of the problem will be assessed at this meeting
- There is a possibility of:

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Status of 802.11a

- Was conditionally approved for Submission to RevCom at July meeting
- Recirculation ballot closed with withdrawn response
- Approved by Standards Board on September 16, 1999
- Contents has been edited by Janet and the result has been approved by the chairs and Task Group editor

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802.11d
Regulatory
domain update

WG Study Group for
enhancements of 802.11

Liaison and Contact with
regulatory agencies

MAC

2.4 GHz Frequency. Hopping Spread Spectrum	2.4 GHz Direct Sequence Spread Spectrum	Infra-Red	2.4 GHz Higher data rate extension 802.11b	5 GHz High data rate extension 802.11a
1 Mbit/s *2 Mbit/s*	2 Mbit/s 1 Mbit/s	1 Mbit/s *2 Mbit/s*	5.5 Mbit/s 11 Mbit/s	6, 12, 24 Mbit/s *9-54 Mbit/s*

Legend: italic (and red) = optional

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Interim Meeting

- Held at Santa Rosa, California
- September 14-18, 1999, hosted by Alantro Communications, ~63 attendees
- Collocated with 802.15 meeting
- 802.11 network deployed for both 802.11 and 802.15
- Included a 128 kbit/s Internet Link!

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Achievements Santa Rosa

- 802.11d started collecting text
- Regulatory work
  - HomeRF WG caused FCC to propose new rules for Frequency Hopping
  - Bandwidth enlarged from 1 to 3 and 5 MHz in exchange for lower transmit power
  - IEEE LMSC already filed ex-parte letter in response to notice of rules change from July meeting
  - More analysis gave an opportunity to better describe our concern for more interference caused by the rules change
- LMSC filed 2 further ex-parte letters in the proceeding
  - Some individuals from HomeRF WG requested instructions how to appeal
- Held meetings with Chair and Technical Chair of HomeRF Working Group
  - “Adopted” motions to withdraw original ex-parte letter and request IEEE EMC group to analyze all ex-parte letters failed

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Other Regulatory issues

- 5 GHz band is reserved for so called “HIPERLAN” devices in Europe
- IEEE Standards Board sent a letter to ETSI Board requesting to adopt 802.11 and 802.11a as part of the HIPERLAN family
- ETSI_BRAN was not in favour to do so
- ETSI Board is studying the request in view of the IEEE-ETSI agreement
- In the meantime, the UK RadioCommunications agency has published a Consultation document to allow for competition in the 5 GHz band

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More regulatory work needed

- The 5 GHz band is currently available in the US and Canada
- Japan is studying rules changes to make spectrum available too
- Europe has rules, but only for HIPERLAN devices
- Just as we made the 2.45 GHz band available for our devices virtually worldwide we need to make the band worldwide available
- Need to place the subject on the agenda of the World Radio Conference (WRC) 2002
- Contact administrations

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Objectives for this meeting

- Draft text for 802.11d
- Draft PAR and 5 Criteria for SG MAC Enhancements
- Send letters to liaison groups and to regulatory agencies as needed, for example:
  - FCC NPRM ET Docket No. 99-231
  - FCC NPRM ET Docket No. 99-42
  - WRC 2000/2002

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Meeting plan

Large Room is Grand 3+4

Room 1 is Kauai 3

		Monday	Tuesday		Wednesday			Thursday	Friday
		Large Room	Room 1	Large Room	Room 1	Large Room	Room 1	Large Room	
08:30 - 10:00				SG	Regula	SG	Regula	SG	
	ExCom								802
10:30 - 12:00			Regula	SG	Regula	TGd	Regula	TGd	
	802								
13:00 - 15:00		Full WG	Regula	TGd		.11/.15		SG	
15:30 - 17:30		TGd	Regula	TGd		Full WG		Full WG	
18:30 - 20:00									
						Social		ExCom	
19:00 - 24:00									

11:43 802.14 CATV Modem – Russell

Mathew Sherman reports on 802.14

11:45 802.15 WPAN – Heile

(see file dot15monplen.pdf) – NO FILE

11:50 802.16 BWA – Marks

(see file dot16monplen.pdf) – NO FILE

11:55 Tutorials, Meeting Arrangements – Rigsbee

12:00 Adjourn

Respectfully Submitted,
Howard Frazier
Recording Secretary