# IEEE 802.3 Working Group Opening Plenary 12 November 2007

Robert M. Grow
Chair, IEEE 802.3 Working Group
bob.grow@ieee.org

### Administrative agenda

- Introductions and General announcements
  - Committee decorum
  - Logistics
- Revise/Approve agenda
  - www.ieee802.org/3/minutes/nov07
- General WG Business
  - Approve July 2007 minutes
  - Activities since last plenary meeting
  - Attendance procedures
  - Membership lists
  - Patent policy / Call for Patents

### **Introductions**

### Officers

- 802.3 Chair: Bob Grow (bob.grow@ieee.org)
- 802.3 Vice Chair: David Law (david\_law@3com.com)
- 802.3 Exec. Secretary: Steve Carlson (scarlson@esta.org)
- 802.3 Secretary: Wael Diab (wdiab@broadcom.com)
- 802.3 Treasurer: Brad Booth (bbooth@ieee.org)
- P802.3ar Congestion Mgt: contact WG Chair
- P802.3at DTE Power via the MDI Enhancements: Mike McCormack (mike\_mccormack@ti.com)
- P802.3av 10G EPON SG: Glen Kramer (glen.kramer@teknovus.com)
- P802.3az Energy Efficient Ethernet: Mike Bennett (mjbennett@lbl.gov)
- Higher Speed Study Group: John D'Ambrosia (jdambrosia@force10networks.com)

### **WG Decorum**



- Press (i.e., anyone reporting publicly on this meeting) are to announce their presence (2007 SASB Op Manual 5.3.3.5)
- Photography or recording by permission only (5.3.3.4)
- Cell phone ringers off
- Wear your badges at all times in meeting areas

### **Published Standards**

- IEEE Std 802.3<sup>TM</sup>-2005 (12 Dec 2005)\*
  - IEEE Std 802.3-2005/Cor 1-2006 (26 Jun 2006)\*
  - IEEE Std 802.3an<sup>™</sup>-2006 (1 Sep 2006)\*
  - IEEE Std 802.3aq<sup>™</sup>-2006 (16 Oct 2006)\*
  - IEEE Std 802.3as<sup>™</sup>-2006 (13 Nov 2006)\*
  - IEEE Std 802.3ap<sup>TM</sup>-2007 (22 May 2007)
  - IEEE Std 802.3-2005/Cor 2-2007 (17 Aug 2007)
- IEEE Std 1802.3<sup>TM</sup>-2001\*
- \* Available through Get IEEE 802 http://standards.ieee.org/getieee802/802.3.html

### Reflectors and WG information

- IEEE 802.3 Working Group (stds-802-3@ieee.org) is a monitored reflector for announcements of WG business
  - Not a general discussion reflector
  - Subscription limited to members and observers
  - Archive is password protected
- IEEE 802 plenary meeting announcements may be received by subscribing to: stds-802-all@ieee.org
- IEEE 802.3 interim meetings are announced on the 802.3 and relevant TF/SG reflector
- IEEE 802.3 TF/SG reflectors are the location for appropriate project related discussion
- Reflector subscription
  - Instructions are on the 802.3 and TF/SG web pages
- Web site
  - www.ieee802.org/3
  - Access information to private areas is announced by Vice Chair, TF/SG Chairs and in WG announcements

### WG documents for July business

- P802.3ar/D1.3 (Congestion Management)
  - Current and proposed modified PAR, Five Criteria and Objectives
- P802.3at (DTE Power Enhancements)
  - P802.3at/D1.0 (TF review)
- IEEE Std 802.3 Revision material
  - 802.3ay / P802.3/D2.0 (initial Sponsor ballot)
  - 802.3ax / P802.1AX/D2.0 (initial Sponsor ballot)
- Posted maintenance, interpretation and rules requests
  - Rules change 3-03/07 WG ballot comments

# Interim TF & SG meetings held

- Seoul, Korea 10-13 September 2007
  - P802.3at, DTE Power Enhancements
  - P802.3av, 10G EPON
  - Higher Speed SG
  - Energy Efficient Ethernet SG
  - Maintenance (802.3ax, 802.3ay)
- Richfield, Ohio, USA 17-19 October 2007
  - P802.3at, DTE Power Enhancements
  - Maintenance (802.3ax, 802.3ay)

### 802.3 ballots since July

### Working Group Ballots:

- 802.3ax (P802.1AX), D1.2, 2<sup>nd</sup> recirculation
- 802.3ay (P802.3), D1.2, 2<sup>nd</sup> recirculation
- 802.3ax (P802.1AX), D1.3, 3<sup>rd</sup> recirculation
- 802.3ay (P802.3), D1.3, 3<sup>rd</sup> recirculation
- 3-03/07 Rules change

### Sponsor Ballots:

- 802.3ax (P802.1AX), D2.0, initial (closes 2 Dec)
- 802.3ay (P802.3), D2.0, initial (closes 7 Dec)

### **Membership and Attendance**

- Membership requirements (gaining and retaining)
  - 75% attendance at 2 of last 4 plenary meetings (a qualifying interim may be substituted for one plenary)
  - Request to become member during 802.3 potential voter agenda item
  - Participate in 2 of last 3 WG ballots (retaining membership)
  - Maintain valid contact information (update in "red" book)
  - Consistent declaration of affiliation
- Attendance books
  - Declare affiliation
  - Sign in each day, only for that day, only for yourself, and not for any other Working Group (no parallel sign-ins)
  - Blue book members and observers (i.e., all that signed in the 802.3 books during the last year)
  - Red Book new attendees & update contact information

Abbas, Ghani

Abbott, John

Akasaka, Youichi

Alping, Arne

Anslow, Pete

Barnette, Jim

Barrass, Hugh

Barrick, Scott

\*Baumer, Howard

Beaudoin, Denis

\*Beck, Michaël

Beia, Christian

Bennett, Mike

Booth, Brad

Braun, Ralf-Peter

\*Brearley, Dave

\*Brunner, Robert

Busse, Robert

Cain, Jeff

Carlson, Steve

Carroll, J. Martin

Chadha, Mandeep

Chalupsky, David

Chang, Frank

\*Claseman, George

Cobb, Terry

D'Ambrosia, John

Daido, Fumio

Dallesasse, John

Darshan, Yair

Dawe, Piers

Delveaux, Bill

\*DeNicholas, Joe

DeSanti, Claudio

Dhamejani, Suveer

Di Minico, Chris

Diab, Wael

Dineen, Thomas

Dove, Dan

Dudek, Mike

Duelk, Marcus

Dupuis, Joseph E.

Effenberger, Frank J

Feldman, Daniel

Feng, Dongning

Fischer, Thomas

Flatman, Alan

Frazier, Howard

Frosch, Richard

Ganga, Ilango S.

\*Ghiasi, Ali

Goergen, Joel

Green, Larry

Grow, Robert M.

Gyugyi, Paul J.

\*Gyurek, Russ

Hajduczenia, Marek

Hankins, Greg

Healey, Adam

Herve, Pierre

Hirth, Ryan

Holden, Brian

Hopwood, Keith

Hotta, Yoshifumi

Huynh, Thong

Jaeger, John

Jetzt, John

Jewell, Jack L

Jiang, Wenbin

Jones, Chad

\*Jørgensen, Thomas K.

\*Kaku, Shinkyo

Kang, Tae Kyu

Katzenberg, Boris

Kimura, Mitsunobu

Koenen, David J.

Kolesar, Paul

Kramer, Glen

\*Krellner, Jan

Krishnamurthy, Subi

Lackner, Hans

Lamb, Lowell D.

Landry, D. Matthew

Lapak, Jeff

Lari, Ferdinando

Law, David

Lee, Dong-Soo

Leung, Raymond W. K.

Lingle, Jr., Robert

Lynch, Jeffrey

Lynskey, Eric R.

Maki, Jeffery J.

Mandin, Jeff

Marris, Arthur

Mathey, Thomas

McCormack, Michael S

Mei, Richard Y.

Miao, Tremont

\*Moore, Charles

Moorwood, Andy

Mueller, Wayne A.

Mukojima, Toshiaki

Muller, Shimon

Nicholl, Gary

Nishimura, Shinji

Nomura, Takumi

Nordin, Ron

Nowell, Mark

O'Hara, Steven

Obara, Satoshi

\*Oganessyan, Gourgen

Olsson, Bengt-Erik

Otaka, Akihiro

Oulundsen, III, George

Palkert, Tom

Parker, Tim

\*Parsons, Glenn

Patel, Shashi

Patoka, Martin

Peers, Neil

\*Peeters Weem, Jan P.

Pepeljugoski, Petar

Perkins, Drew D.

Pimpinella, Rick

Posthuma, Carl R.

Rabinovich, Rick

Remein, Duane

Rybinski, Valerie

Saeki, Naoto

Sastry, Ramesh

Savi, Olindo

Schindler, Fred

Schoenmaker, Peter

Seely, Ted

Sendelbach, Lee

Seno, Shoichiro

Shigematsu, Masayuki

Shorthill, Larry

Stanford, Clay

Steenman, Henk

Suzuki, Ken-ichi

Swanson, Steve

Szczepanek, Andre

\*Takahashi, Akira

Takeda, Noriyuki

Takizawa, Motoyuki

Tanaka, Keiji

Tatsuta, Tsutomu

Thiagarajan,

Sashisekaran

Thompson, Geoffrey

Tomaszewski, Peter

Toyoda, Hidehiro

Traverso, Matt

Trowbridge, Stephen J.

Tsuji, Shinji

Turner, Brad

Uematsu, Kiyoshi

Vaden, Sterling A.

van Doorn, Schelto

Vetteth, Anoop

Wang, Chenxi

Woodruff, Bill

Woodward, Ted K.

Yamashita, Hajime

Yang, Yinglin (Frank)

Yokomoto, Tetsuya

Yoon, Bin Yeong

Zimmerman, George

\*in peril of losing membership

# Potential Members (voters) p.1

♦Abbott, Justin

Abraham, Menachem

Ahmed, Taufique

Belhadj, Med

Bossard, Martin

Bresser, Ad

Brown, Matt

Brownlee, Phillip

Chen, James

Chou, Joseph

♦Chow, Jacky

Clairardin, Xavier

◆Cole, Christopher R.

Connaughton, Michael

Conroy, Keith

**♦**Cook, Charles I.

Cornejo, Edward

Cullinan, Diarmuid

Cunningham, David

Feng, Hao

Feng, Wang

Fischer, David

Folkens, Norbert

♦Hamano, Hiroshi

Hazarika, Asif

Hsu, Dar-Zu

Hughes, Mike

♦lkeda, Hiroki

♦Ishibe, Kazuhiko

♦Joo, Bheom-Soon

Karam, Mansour

•Kipp, Scott G.

♦Kobayashi, Shoukei

♦Lenkisch, Andreas

Malpass, Trey

Martin, Arlon

McDonald, William

McDonough, John

Merel, Roger

Morita, Itsuro

Murata, Hiroshi

Nabili, Babak (Bobby)

Nadeau, Gerard

Ogushi, Sadaichiro

Parruck, Bidyut

# Potential Members (voters) p.2

Piede, David

Reshef, Tamir

♦Rimboim, Pavlick

Ring, William S.

Ryan, Bill

Salisbury, Neil

Sambasivan, Sam

♦Sanitá, Gianluca

Schrans, Thomas

Sedio, Stephen

♦Sefidvash, Khorvash

Seto, Koichiro

Shiraishi, Ken

Smith, Martin

Soe, Myat Myitzu

♦Suzuki, Naoki

Takazawa, Hiei

Thomas, Stephen

Thornton, Bob

Tolley, Bruce

Tsukahara, Tomo

Tsumura, Eddie

Van Deusen, Herb

Vareljian, Albert

Wada, Hirotaka

Weil, Jason

♦Wertz, Jason

♦Young, George

♦Zhong, Lizhi

Zivny, Pavel

◆Requested to become member (Monday)

Requested to become member (Thursday)

# Highlights of the IEEE-SA Standards Board Bylaws on Patents in Standards

- Participants have a duty to tell the IEEE if they know (based on personal awareness) of potentially Essential Patent Claims they or their employer own
- Participants are encouraged to tell the IEEE if they know of potentially Essential Patent Claims owned by others
  - This encouragement is particularly strong as the third party may not be a participant in the standards process
- Working Group required to request assurance
- Early assurance is encouraged
- Terms of assurance shall be either:
  - Reasonable and nondiscriminatory, with or without monetary compensation; or,
  - A statement of non-assertion of patent rights
- Assurances
  - Shall be provided on the IEEE-SA Standards Board approved LOA form
  - May optionally include not-to-exceed rates, terms, and conditions
  - Shall not be circumvented through sale or transfer of patents
  - Shall be brought to the attention of any future assignees or transferees
  - Shall apply to Affiliates unless explicitly excluded
  - Are irrevocable once submitted and accepted
  - Shall be supplemented if Submitter becomes aware of other potential Essential Patent Claims
- A "Blanket Letter of Assurance" may be provided at the option of the patent holder
- A patent holder has no duty to perform a patent search
- Full policy available at http://standards.ieee.org/guides/bylaws/sect6-7.html#6



#### IEEE-SA Standards Board Bylaws on Patents in Standards

#### 6.2 Policy

IEEE standards may be drafted in terms that include the use of Essential Patent Claims. If the IEEE receives notice that a [Proposed] IEEE Standard may require the use of a potential Essential Patent Claim, the IEEE shall request licensing assurance, on the IEEE Standards Board approved Letter of Assurance form, from the patent holder or patent applicant. The IEEE shall request this assurance without coercion.

The Submitter of the Letter of Assurance may, after Reasonable and Good Faith Inquiry, indicate it is not aware of any Patent Claims that the Submitter may own, control, or have the ability to license that might be or become Essential Patent Claims. If the patent holder or patent applicant provides an assurance, it should do so as soon as reasonably feasible in the standards development process. This assurance shall be provided prior to the Standards Board's approval of the standard. This assurance shall be provided prior to a reaffirmation if the IEEE receives notice of a potential Essential Patent Claim after the standard's approval or a prior reaffirmation. An asserted potential Essential Patent Claim for which an assurance cannot be obtained (e.g., a Letter of Assurance is not provided or the Letter of Assurance indicates that assurance is not being provided) shall be referred to the Patent Committee.

#### A Letter of Assurance shall be either:

- a) A general disclaimer to the effect that the Submitter without conditions will not enforce any present or future Essential Patent Claims against any person or entity making, using, selling, offering to sell, importing, distributing, or implementing a compliant implementation of the standard; or
- b) A statement that a license for a compliant implementation of the standard will be made available to an unrestricted number of applicants on a worldwide basis without compensation or under reasonable rates, with reasonable terms and conditions that are demonstrably free of any unfair discrimination. At its sole option, the Submitter may provide with its assurance any of the following: (i) a not-to-exceed license fee or rate commitment, (ii) a sample license agreement, or (iii) one or more material licensing terms.



**Slide #2** 1 May 2007

#### IEEE-SA Standards Board Bylaws on Patents in Standards

Copies of an Accepted LOA may be provided to the working group, but shall not be discussed, at any standards working group meeting.

The Submitter and all Affiliates (other than those Affiliates excluded in a Letter of Assurance) shall not assign or otherwise transfer any rights in any Essential Patent Claims that are the subject of such Letter of Assurance that they hold, control, or have the ability to license with the intent of circumventing or negating any of the representations and commitments made in such Letter of Assurance.

The Submitter of a Letter of Assurance shall agree (a) to provide notice of a Letter of Assurance either through a Statement of Encumbrance or by binding any assignee or transferee to the terms of such Letter of Assurance; and (b) to require its assignee or transferee to (i) agree to similarly provide such notice and (ii) to bind its assignees or transferees to agree to provide such notice as described in (a) and (b).

This assurance shall apply to the Submitter and its Affiliates except those Affiliates the Submitter specifically excludes on the relevant Letter of Assurance.

If, after providing a Letter of Assurance to the IEEE, the Submitter becomes aware of additional Patent Claim(s) not already covered by an existing Letter of Assurance that are owned, controlled, or licensable by the Submitter that may be or become Essential Patent Claim(s) for the same IEEE Standard but are not the subject of an existing Letter of Assurance, then such Submitter shall submit a Letter of Assurance stating its position regarding enforcement or licensing of such Patent Claims. For the purposes of this commitment, the Submitter is deemed to be aware if any of the following individuals who are from, employed by, or otherwise represent the Submitter have personal knowledge of additional potential Essential Patent Claims, owned or controlled by the Submitter, related to a [Proposed] IEEE Standard and not already the subject of a previously submitted Letter of Assurance: (a) past or present participants in the development of the [Proposed] IEEE Standard, or (b) the individual executing the previously submitted Letter of Assurance.



#### IEEE-SA Standards Board Bylaws on Patents in Standards

The assurance is irrevocable once submitted and accepted and shall apply, at a minimum, from the date of the standard's approval to the date of the standard's withdrawal.

The IEEE is not responsible for identifying Essential Patent Claims for which a license may be required, for conducting inquiries into the legal validity or scope of those Patent Claims, or for determining whether any licensing terms or conditions are reasonable or non-discriminatory.

Nothing in this policy shall be interpreted as giving rise to a duty to conduct a patent search. No license is implied by the submission of a Letter of Assurance.

In order for IEEE's patent policy to function efficiently, individuals participating in the standards development process: (a) shall inform the IEEE (or cause the IEEE to be informed) of the holder of any potential Essential Patent Claims of which they are personally aware and that are not already the subject of an existing Letter of Assurance, owned or controlled by the participant or the entity the participant is from, employed by, or otherwise represents; and (b) should inform the IEEE (or cause the IEEE to be informed) of any other holders of such potential Essential Patent Claims that are not already the subject of an existing Letter of Assurance.



### Other Guidelines for IEEE WG Meetings

- All IEEE-SA standards meetings shall be conducted in compliance with all applicable laws, including antitrust and competition laws.
- Don't discuss the interpretation, validity, or essentiality of patents/patent claims.
- Don't discuss specific license rates, terms, or conditions.
  - Relative costs, including licensing costs of essential patent claims, of different technical approaches may be discussed in standards development meetings.
    - Technical considerations remain primary focus
- Don't discuss fixing product prices, allocation of customers, or dividing sales markets.
- Don't discuss the status or substance of ongoing or threatened litigation.
- Don't be silent if inappropriate topics are discussed... do formally object.

If you have questions, contact the IEEE-SA Standards Board Patent Committee Administrator at patcom@ieee.org or visit http://standards.ieee.org/board/pat/index.html

See IEEE-SA Standards Board Operations Manual, clause 5.3.10 and "Promoting Competition and Innovation: What You Need to Know about the IEEE Standards Association's Antitrust and Competition Policy" for more details.

This slide set is available at http://standards.ieee.org/board/pat/pat-slideset.ppt



### The WG is advised

- The IEEE's patent policy is consistent with the ANSI patent policy and is described in Clause 6 of the IEEE-SA Standards Board Bylaws;
- Early identification of patent claims which may be essential for the use of standards under development is encouraged;
- There may be Essential Patent Claims of which the IEEE is not aware. Additionally, neither the IEEE, the WG, nor the WG chair can ensure the accuracy or completeness of any assurance or whether any such assurance is, in fact, of a Patent Claim that is essential for the use of the standard under development. Early disclosure of patents which may be essential for the use of standards under development is encouraged;
- Does anyone at this time, wish to identify patent claim(s)/patent application claim(s) and/or the holder of patent claim(s)/patent application claim(s) that the participant believes may be essential for the use in our standards or projects;
- Secretary to record the five slides were displayed and the details of any identified applications/patents/claims.

### Reports and awards

- Treasurer's report
  - See separate report
- Publication awards
  - IEEE Std 802.3/Cor2-2007
    - David Law, TF Chair and editor

# September Standards Board (p. 1)

- Standards board
  - NesCom recommendations approved
    - All LMSC PARs approved
  - RevCom recommendations approved
    - All LMSC projects approved
  - Audcom recommendations approved
    - LMSC P&P accepted for 2007, 2008
  - Appeals ad hoc work complete
    - Clarifies appeals process
    - Improved participant documentation
    - Changes to the SA Operations Manual will be required (BOG)

# September Standards Board (p. 2)

- Standards board (continued)
  - NESC/NEC/NFPA
    - Long discussion resulting in SASB support of BOG position
    - Important to IEEE-SA though not directly relevant to LMSC
  - Oversight of dominance cases ongoing for DASC, 802.20 and SISO
  - SCCs will receive additional scrutiny
    - Sunset, combine has happened and will continue
    - Improved oversight

# September Standards Board (p. 3)

- ProCom discussion items
  - myProject review for risk management coverage
  - Stabilized standards ad hoc complete, though proposed governing document changes still need work
  - Beginning work on proposed changes to reaffirmation process
  - Appeals ad hoc work forwarded to SASB
  - Mandating concentration banking approved for ballot
  - Need to improve affiliation FAQ to cover Chair responsibilities
- AudCom discussion items
  - LMSC P&P P&P accepted through 2008
  - Work restarted on baseline WG P&P

# September Standards Board (p. 4)

#### NesCom discussion items

- Number of PAR deferrals has decreased
- The PAR form 7.3 (safety, health, environment or security) ad hoc recommended removing the question and placing the responsibility with MEC reviewer to trigger legal review
- Electronic PAR signature to be implemeted
- Continuous processing will remain (except Aug)

#### RevCom discussion items

- Big agenda highlighted some problems with automation tools
- Visibility of comments work forwarded to ProCom
- RevCom requested the SASB adjust priorities for fixing myBallot problems, especially comments submitted outside myBallot
- Support in principle a change to the reaffirmation process (review and comment, then vote)

# September Standards Board (p. 5)

- PatCom discussion items
  - Clarifying text recommended on applicability of IEEE LOAs in other standards
  - LOAs will not be accepted for a study group, appropriate changes will be proposed to policy for this case
  - Pre-PAR process definition required to work further
  - Additional tuning of the LOA form
  - Review of alternate patent slide set

# LMSC EC Report (p.1)

- Get IEEE 802 program continues to have forecast financial deficit
- The IMAT attendance software progress, still in implementation (e.g., post processing)
- Staff liaison update
  - Concentration banking to be mandated
- LMSC treasury
  - F&B expenses are a significant concern (~\$150 of your registration fee)
  - Operating reserve in appropriate range

# LMSC EC Report (p.2)

- JTC1 SC6 report
  - China submitted 55 comments on the proposed agreement
  - France proposes Class A liaision
  - US submitted Approve comments
  - All 802.3 unfinished projects deleted because they are so out of date
- The LMSC P&P
  - Interpretations EC or Chair discussion unanimous that Chair rules on ambiguities
  - Work progressing on split of P&P
- Wireless workshop is a pilot for possible additional workshops for other IEEE-SA activities

# LMSC EC Report (p.3)

- Should 802.20 be entity Sponsor ballot
  - Probably requires mandate from SASB
- 802.1/802.11 joint tech plenary Wed. 4-6 pm
- IMT-2000 IEEE-SA press release generated significant EC reaction, rules revision should clarify
- NNA venues we have some possibilities for plenary meetings
  - March 2009 to be decided this week
  - Multiple offers from NNA companies to host (Singapore, Korea, China)
  - Guide for hosts will be posted (March 2011)
- ITU-R
  - IMT now includes IMT-2000 and IMT advanced

# LMSC EC Report (p.4)

- Tutorial schedule
  - Mon. 6:30 Data Center Needs for I/O
     Consolidation
  - Mon. 8:00 The Next Generation of Ethernet
  - Tue. 6:30 IEEE 802 Emergency Services CFI
  - Tue. 7:30 RFID PHY/MAC Issues & Recommendations
  - Tue. 9:00 WPAN/WLAN/WWAN Multi-Radio Co-existence

# LMSC Chair's Meetings

Will be posted to bulletin boards

### **Project Authorization Requests**

- P802.1Qaz, Enhanced Transmission Selection
- P802.3ba, 40 Gb/s and 100 Gb/s Operation
- P802.15.4e, Amendment to the MAC sub-layer
- P802.15.6, WPANs used in or around a body

12 November 2007

# **Continuing Agenda**

- Liaison Reports
- 802.3 State of the Standard (Mr. Law)
- 802.3 Operating Rules (Mr. Law)
- Task Force & Study Group Reports
  - Maintenance (Mr. Law)
    - 802.3ax / P802.1AX
    - 802.3ay / P802.3
  - 802.3ar (Mr. Grow)
  - 802.3at (Mr. McCormack)
  - 802.3av (Mr. Kramer)
  - 802.3az (Mr. Bennett)
  - Higher Speed SG (Mr. D'Ambrosia)