IEEE 802.3 Working Group
Opening Plenary
13th July 2009

David Law
Chair, IEEE 802.3 Working Group
David.Law@3Com.com

Agenda, voter lists:
http://www.ieee802.org/3/minutes/jul09/index.html
IEEE 802.3 Officers

IEEE 802.3 Chair:  David Law (david_law@3com.com)
IEEE 802.3 Vice Chair: Wael Diab (wdiab@broadcom.com)
IEEE 802.3 Exec. Secretary: Steve Carlson (scarlson@ieee.org)
IEEE 802.3 Secretary:  Adam Healey (adam.healey@lsi.com)
IEEE 802.3 Treasurer: Brad Booth (bbooth@ieee.org)

IEEE P802.3at DTE Power Enhancements: Mike McCormack (mike_mccormack@ti.com)
IEEE P802.3av 10 Gb/s EPON: Glen Kramer (glen.kramer@teknovus.com)
IEEE P802.3az Energy Efficient Ethernet: Mike Bennett (mjbennett@lbl.gov)
IEEE P802.3ba 40 Gb/s and 100 Gb/s Ethernet: John D’Ambrosia (jdambrosia@ieee.org)

IEEE 802.3 Maintenance: Wael Diab (wdiab@broadcom.com)
  IEEE 802.3 Maintenance request
  IEEE P802.3-2008/Cor 1 (IEEE 802.3bb) Pause Reaction Delay Corrigendum
  IEEE P802.3bc Ethernet Organizationally Specific TLVs

IEEE P802.3bd MAC Control Frame for Priority-based Flow Control
  This project is being undertaken by the IEEE 802.1 DCB Task Group

IEEE P802.3.1 (IEEE 802.3be) Ethernet MIB: Howard Frazier (hfrazier@broadcom.com)

IEEE 802.3 Ethernet Support for the IEEE P802.1AS Time Synchronization Protocol Study Group:
  Steve Carlson (scarlson@ieee.org)
Administrative agenda

- Introductions and General announcements
  - Committee decorum
  - Logistics
- Revise/Approve agenda
  - www.ieee802.org/3/minutes/jul09
- General WG Business
  - Approve November 2008 minutes
  - Activities since last plenary meeting
  - Attendance procedures
  - Membership lists
  - Patent policy / Call for Patents
  - Treasurer’s Report
WG Decorum

- Press (i.e., anyone reporting publicly on this meeting) are to announce their presence (2008 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
Agenda and minutes

• Approve agenda
• Approve Minutes
  – March minutes
    • Any corrections, modifications, additions?
IEEE 802.3 Standards

• IEEE Std 802.3™-2008 (26 Dec 2008)*

• Superseded standards
  – IEEE Std 802.3™-2005 (12 Dec 2005)
    • IEEE Std 802.3™-2005/Cor 1-2006 (26 Jun 2006)
    • IEEE Std 802.3an™-2006 (1 Sep 2006)
    • IEEE Std 802.3aq™-2006 (16 Oct 2006)
    • IEEE Std 802.3as™-2006 (13 Nov 2006)
    • IEEE Std 802.3ap™-2007 (22 May 2007)
    • IEEE Std 802.3™-2005/Cor 2-2007 (17 Aug 2007)

* 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
Interim meetings held since March

- Quebec City, QC, Canada 29th April - 7th May 2009
  - IEEE P802.3at, DTE Power Enhancements Task Force
  - IEEE P802.3av, 10G EPON Task Force
  - IEEE P802.3az, Energy Efficient Ethernet Task Force
  - IEEE P802.3ba, 40Gb/s and 100Gb/s Ethernet Task Force
  - IEEE 802.3, Maintenance Task Force
  - IEEE 802.3, Ethernet Support for the IEEE P802.1AS Time Synchronization Protocol Study Group
  - IEEE 802.3.1, Ethernet MIBs Task Force
- Musselburgh, East Lothian, Scotland, 1st June 2009
  - IEEE 802.3bc, Ethernet Organisationally Specific TLVs Task Force
- Shanghai, P.R.C, 8th June – 9th June 2009
  - IEEE P802.3av, 10G EPON Task Force
- Berkeley, CA, USA, 11th June 2009
  - IEEE P802.3az, Energy Efficient Ethernet Task Force
IEEE 802.3 ballots since March

- Working Group Ballots:
  - IEEE P802.3ba D2.0, Initial ballot
  - IEEE P802.3ba D2.1, 1st recirculation ballot
  - IEEE P802.3-2008/Cor 1 (IEEE 802.3bb) D1.1, Initial ballot
  - IEEE P802.3-2008/Cor 1 (IEEE 802.3bb) D1.2, 1st recirculation ballot
  - IEEE P802.3bc D2.1, 1st recirculation ballot
  - IEEE P802.3bc D2.2, 2nd recirculation ballot

- Sponsor Ballots:
  - IEEE P802.3at D4.1, 1st recirculation ballot
  - IEEE P802.3at D4.2, 2nd recirculation ballot
  - IEEE P802.3av D3.2, 1st recirculation ballot
  - IEEE P802.3av D3.3, 2nd recirculation ballot
  - IEEE P802.3av D3.4, 3rd recirculation ballot
  - IEEE P802.3bc D3.0, Initial ballot

- Sponsor Ballots group formations
  - IEEE P802.3bb
WG documents for July business

- IEEE P802.3at DTE Power Enhancements
  - IEEE P802.3at/D4.2 (2\textsuperscript{nd} Sponsor recirculation ballot) and ballot comments
- IEEE P802.3av 10Gb/s EPON
  - IEEE P802.3av/D3.4 (3\textsuperscript{rd} Sponsor recirculation ballot)
- IEEE P802.3az Energy–efficient Ethernet
  - IEEE P802.3az/D1.5 (WG preview)
- IEEE P802.3ba 40Gb/s and 100Gb/s Ethernet
  - IEEE P802.3ba/D2.1 (1\textsuperscript{st} Working Group recirculation ballot) and ballot comments
- IEEE P802.3-2008/Cor 1 (IEEE 802.3bb) Pause Reaction Delay Corrigendum
  - IEEE P802.3-2008/Cor 1 (IEEE 802.3bb)/D1.2 (1\textsuperscript{st} Working Group recirculation ballot) and ballot comments
- IEEE P802.3bc Ethernet Organizationally Specific TLVs
  - IEEE P802.3bc/D3.0 (Initial Sponsor ballot) and ballot comments
Membership and Attendance

- Membership requirements (gaining and retaining)
  - 75% attendance at 2 of last 4 plenary sessions (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
  - Consistent declaration of affiliation
Meeting attendance procedures

IEEE 802.3 Working Group Plenary
San Francisco, CA
July 2009
Meeting attendance

• The IEEE-SA Meeting Attendance Tool will be the basis of the official attendance record for this meeting

• To use the tool, you must have an IEEE Web Account
Points of emphasis

• You may log in using your IEEE Web Account user ID or the primary e-mail address specified in your IEEE Web Account
  – Your password is your IEEE Web Account password

• You need to login only once per meeting
  – You are certifying that you are attending a "substantial" portion of that meeting
Contact information

• A participant’s web account information will be the official record for contact information
  – This information may be updated at any time by the participant
  – It is not subject to errors during transcription of a written record
  – Your name will appear in the record as it is entered in your IEEE Web Account
  – The primary e-mail address specified in your IEEE Web Account will be our primary means to contact you
  – Updates are reflected in the Working Group database following each session

• To obtain and maintain voting membership, you must maintain correct contact information in the official record
For this session...

- The URL to access the IEEE Meeting Attendance Tool for this meeting is...
  - http://murphy.events.ieee.org/imat/
  - There is no session access code

- The server is locally hosted and cannot be reached from outside of the local network
  - You MUST disconnect your VPN software

- If you create a bookmark for this link, ensure that the bookmark reflects this URL exactly as shown
  - DO NOT bookmark any pages to which this link re-directs you
IEEE-SA Meeting Attendance Tool
Introduction

• There are four steps to using this system

• Prior to or during the session
  1. Get a free Web Account if you don’t already have one (keep your contact data in this area up to date)
  2. Register your Interest Areas in myProject if you haven’t done so already (it’s up to you to keep this updated as needed)

• Each day during the session
  3. Log in to the meeting attendance tool (contact an IEEE 802.3 Working Group officer for the URL to access this system)
  4. Log your attendance and affiliation
Step 1a – Get a free IEEE Web Account

- If you already have an IEEE Web Account, you may skip to the next step, otherwise…
- Go to [http://development.standards.ieee.org](http://development.standards.ieee.org) and click on the link to get an IEEE Web Account
Step 1b – Opting out of IEEE mailings

• You can modify your options in the Web Accounts at http://www.ieee.org then click on "Log into My Account" on the right navigation bar

• Once you log in there will be links on the left side of the screen

• Click on “Communication Preferences”
Step 1b – Opting out of IEEE mailings

• To edit the preferences, click on “Edit”

• This opens the options for you to change the preferred contact method…
  – Do not call
  – Do not send postal mail
  – Do not fax
  – Do not send email
  – Do not send 3rd party mail
  – Do not include in membership directory
  – Do not include in annual IEEE elections

• Save your changes before you exit the form
Step 2 – Register your Interest Areas

If you have already selected your Interest Areas in myProject, you may skip this step, otherwise…

Go to [http://development.standards.ieee.org](http://development.standards.ieee.org) and enter your username (Web Account ID) and password to get into myProject

Select “Manage Activity Profile” and drill down to select the Working Group and/or Project(s) in which you have an interest

For each of these you will need to specify your affiliation

<table>
<thead>
<tr>
<th>Interest Area</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>IEEE Computer Society</td>
<td>C</td>
</tr>
<tr>
<td>Design Automation</td>
<td>C/DA</td>
</tr>
<tr>
<td>Foundation for Intelligent Physical Agents</td>
<td>C/FIPA</td>
</tr>
<tr>
<td>Information Assurance</td>
<td>C/IA</td>
</tr>
<tr>
<td>Local and Metropolitan Area Networks</td>
<td>C/LM</td>
</tr>
<tr>
<td>Higher Layer LAN Protocols Working Group</td>
<td>C/LM/WG802.1</td>
</tr>
<tr>
<td>Logical Link Working Group</td>
<td>C/LM/WG802.2</td>
</tr>
<tr>
<td>Ethernet Working Group</td>
<td>C/LM/WG802.3</td>
</tr>
</tbody>
</table>
Step 3a – Select session

- Make sure you have an IEEE Web Account per step 1
- Make sure you’ve designated your myProject Interest Areas per step 2
- You may be asked to enter a “session access code”

Contact an IEEE 802.3 Working Group officer for the URL to access this system
Step 3b - Log in to the tool

Enter either your IEEE Web Account user ID –OR– primary e-mail address

Enter your IEEE Web Account password
Common errors

• You receive the message “An IEEE Web Account was found but the password is not correct. Please try again”
  – You may have forgotten your password
    • Reset your Web Account password: http://www.ieee.org

• You receive the message “IEEE Web Account was not found. Please try again”
  – You may have forgotten your user ID or primary e-mail address
    • Contact Christina Sahr (c.sahr@ieee.org)
  – You may not have an IEEE Web Account
    • Create a Web Account: http://www.ieee.org
Step 4a – Select Working Group

Ensure that you select the correct working group (WG802.3)
Step 4b – Log your attendance

1. Click the meeting day

2. Click the YELLOW bar to log attendance for this meeting

INACTIVE MEETINGS
- You have not (yet) logged attendance
- You have logged attendance

ACTIVE MEETINGS
- You may log attendance
- You have logged attendance
Step 4c – Declare your affiliation

The first time you log attendance for a meeting, you will be asked to declare your affiliation.

You must declare your affiliation in order to receive attendance credit.
802.3 Membership

- IEEE 802.3 voters

- IEEE 802.3 voter in peril

- IEEE 802.3 potential voters
Instructions for the WG Chair

The IEEE-SA strongly recommends that at each WG meeting the chair or a designee:

- Show slides #1 through #4 of this presentation
- Advise the WG attendees that:
  - 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 strongly 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.

- Instruct the WG Secretary to record in the minutes of the relevant WG meeting:
  - That the foregoing information was provided and that slides 1 through 4 (and this slide 0, if applicable) were shown;
  - That the chair or designee provided an opportunity for participants to identify patent claim(s)/patent application claim(s) and/or the holder of patent claim(s)/patent application claim(s) of which the participant is personally aware and that may be essential for the use of that standard
  - Any responses that were given, specifically the patent claim(s)/patent application claim(s) and/or the holder of the patent claim(s)/patent application claim(s) that were identified (if any) and by whom.

- The WG Chair shall ensure that a request is made to any identified holders of potential essential patent claim(s) to complete and submit a Letter of Assurance.
- It is recommended that the WG chair review the guidance in IEEE-SA Standards Board Operations Manual 6.3.5 and in FAQs 12 and 12a on inclusion of potential Essential Patent Claims by incorporation or by reference.

Note: WG includes Working Groups, Task Groups, and other standards-developing committees with a PAR approved by the IEEE-SA Standards Board.

(Optional to be shown)
Participants, Patents, and Duty to Inform

All participants in this meeting have certain obligations under the IEEE-SA Patent Policy. Participants:

- “Shall inform the IEEE (or cause the IEEE to be informed)” of the identity of each “holder of any potential Essential Patent Claims of which they are personally aware” if the claims are owned or controlled by the participant or the entity the participant is from, employed by, or otherwise represents.
  - “Personal awareness” means that the participant “is personally aware that the holder may have a potential Essential Patent Claim,” even if the participant is not personally aware of the specific patents or patent claims.
- “Should inform the IEEE (or cause the IEEE to be informed)” of the identity of “any other holders of such potential Essential Patent Claims” (that is, third parties that are not affiliated with the participant, with the participant’s employer, or with anyone else that the participant is from or otherwise represents).
- The above does not apply if the patent claim is already the subject of an Accepted Letter of Assurance that applies to the proposed standard(s) under consideration by this group.

Quoted text excerpted from IEEE-SA Standards Board Bylaws subclause 6.2

- Early identification of holders of potential Essential Patent Claims is strongly encouraged.
- No duty to perform a patent search.
Patent Related Links

All participants should be familiar with their obligations under the IEEE-SA Policies & Procedures for standards development.

Patent Policy is stated in these sources:
- IEEE-SA Standards Boards Bylaws
  http://standards.ieee.org/guides/bylaws/sect6-7.html#6

Material about the patent policy is available at
http://standards.ieee.org/board/pat/pat-material.html

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

This slide set is available at http://standards.ieee.org/board/pat/pat-slideset.ppt
Call for Potentially Essential Patents

- If anyone in this meeting is personally aware of the holder of any patent claims that are potentially essential to implementation of the proposed standard(s) under consideration by this group and that are not already the subject of an Accepted Letter of Assurance:
  - Either speak up now or
  - Provide the chair of this group with the identity of the holder(s) of any and all such claims as soon as possible or
  - Cause an LOA to be submitted
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 or engage in the fixing of product prices, allocation of customers, or division of 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.

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.
IEEE 802.3 Working Group
Treasurer’s Report

Brad Booth
Treasurer, IEEE 802.3 Working Group
bbooth@amcc.com
Standards Board highlights (p.1)

- March and June Standards board
  - NesCom recommendations approved
    - All LMSC PARs approved
      - IEEE P802.3bd PAR approval during May continuous processing cycle
    - First PAR submitted dealing with Smart Grid Technology was approved at the March meeting
      - IEEE P2030 Guide for Smart Grid Interoperability of Energy Technology and Information Technology Operation with the Electric Power System (EPS), and End-Use Applications and Loads
      - Working Group has three Task Forces
        » Power Engineering Technology
        » Information Technology (Chair – Bob Grow)
        » Communications Technology (Vice chair Bob Heile)
Standards Board highlights (p.2)

• RevCom recommendations approved
  – LMSC Projects approved except IEEE 802.16
    • Scope in PAR and draft did not match
    • Approved during May early consideration cycle

• AudCom
  – LMSC P&P approved

• PatCom
  – FAQ on ballot comments on lack of LoAs
  – Discussion of external references
Standards Board highlights (p.3)

• ProCom items
  – Obligations and code of Ethics
    • Development of acknowledgment ongoing ProCom (cont)
  – Copyright
    • Changes in ballot, FAQ work continuing
  – Study Group Guidelines Ad Hoc
    • Guidelines approved
  – Reaffirmation Ad Hoc
    • Ongoing review in to reaffirmation process

• Patent pools
  – Via licensing announced formation of patent pool for Power over Ethernet
LMSC EC Report (p.1)

- Availability of standards to purchase
  - System problem with large IEEE 802.16 standard
- LMSC treasury
  - Deficit from Vancouver on reduced attendance
    - More attendees are pre-registering
- IEEE 802.21 change of scope
  - Proposed activities beyond Medial Independent Handover
    - Emergency services in 802 Networks
    - Battery power conservation on mutli-radio environment
    - TV White space capability negotiation
  - One suggestions is to change to Medial Independent Services
    - Further discussions this week
  - Relationship with IEEE 802.1
LMSC EC Report (p.2)

• IEEE 802.22 Chair election
• EC Workshop
  – EC meetings during the week are always difficult
  – Sunday and Monday
  – Topics
    • Scope IEEE 802
    • Sales availability
    • IEEE 802.21 scope
• Co-located rules meeting
  – 2PM to 5PM Saturday
LMSC EC Report (p.3)

- IEEE P802.3az press release
  - EC voted to support IEEE-SA press release
- Electronic voting at meetings
- ePoll
  - Expanding myBallot to support WG ballot
- LMSC Governance
  - AudCom accepted LMSC P&P
  - Working Group P&P
EC Chairs meetings for this week

• Tue 3:30 – 4 PM       Smart Grid Brainstorm
• Wed 2:00 – 4 PM       802 Task Force

Co-located IEEE meeting

• Thu 6:30 – 10:30 PM    IEEE Registration Authority Committee
Tutorials

• New schedule
  – Three slots Monday evening
  – Normally none Tuesday evening
    • Time (still) available for meetings
• Monday 6:00PM to 7:30PM
  – Standards in Engineering Education
• Monday 7:30PM to 9:00PM
  – Energy Efficiency and Regulation
Project Authorization Requests

- IEEE P802.1Qbc, Provider Bridging -- Remote Customer Service Interface PAR and 5C
- IEEE P802.1Qbe, Multiple Backbone Service Instance Identifier (I-SID) Registration Protocol (MIRP) PAR and 5C
- IEEE P802.1Qbf, PBB-TE Infrastructure Protection PAR and 5C
- IEEE P802.21.1 New standard for Support for Emergency Services PAR and 5C

Comment need to be in by 5PM Tuesday
Continuing Agenda ...