IEEE 802.3 Working Group Opening Plenary 15 March 2004

Robert M. Grow
Chair, IEEE 802.3 Working Group
Principal Architect, Intel Corporation
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Introductions & Agenda

- 802.3 Web Site www.ieee802.org/3
- Officers
 - 802.3 Chair: Bob Grow (bob.grow@ieee.org)
 - 802.3 Vice Chair: David Law (david_law@3com.com)
 - 802.3 Secretary: Steve Carlson (scarlson@esta.org)
 - 802.3ah EFM: Howard Frazier (millardo@dominetsystems.com)
 - 802.3an 10GBASE-T: Brad Booth (bradley.booth@intel.com)
 - Backplane Ethernet SG: Adam Healey (ahealey@agere.com)
 - 10GMMF SG: Bruce Tolley (btolley@cisco.com)
- Attendee introductions
- Approve agenda

Published Standards

- IEEE Std 802.3[™]-2002*
- IEEE Std 802.3ae[™]-2002*
- IEEE Std 802.3af[™]-2003*
- IEEE Std 802.3aj[™]-2003
- IEEE Std 802.3ak[™]-2004
- IEEE Std 1802.3™-2001*
- Available through Get IEEE 802TM http://standards.ieee.org/getieee802/802.3.html

Book Distribution

- Web based book distribution
 - Look for the announcement for 802.3aj and 802.3ak
 - Eligible people must respond and provide mailing information

Current WG Documents

- P802.3ah/D3.1, EFM (10 Feb 2004),
 Sponsor recirculation ballot
- Interpretations and Maintenance requests posted
- 802.3 minutes posted
 - Approval of November minutes

Attendance

- Membership requirements (acquiring or retaining 802.3 voter status)
 - 75% attendance at 2 of last 4 plenary meetings (an interim may be substituted for one plenary)
 - Request to become member during 802.3 potential voter agenda item
 - Maintain valid contact information (on stds-802-3 reflector)
 - Participate in 2 of last 3 WG ballots
- Attendance books
 - Sign in each day, only for that day, only for yourself, and not for any other Working Group (no parallel sign-ins)
 - Two books
 - Members and observers (signed in during last year)
 - New attendees & update contact information
- Review membership lists potential voters

Abaye, Ali

Adriaennsens, Luc

Alderrou, Don

Aronson, Simcha

Artman, Doug

Babanezhad, Joseph N

Barnea, Eyal

Barrass, Hugh

Baumer, Howard

Beaudoin, Denis

Beck, Michaël

Beili, Edward

Below, Randy J.

Bemmel, Vincent

Bennett, Mike

Bhatt, Vipul

Bohbot, Michel

Booth, Brad

Bradshaw, Peter

Braga, Al

Brand, Richard

Brown, Benjamin

Brown, Kevin

Busse, Robert

Cain, Jeff

Carlo, James T.

Carlson, Steve

Chen, Xiaopeng

Cheong, Kok-Wui

Chow, Jacky

Claessen, Guss

Claseman, George

Cobb, Terry

Cohen, Larry

Cook, Charles I

Cravens, George

Daines, Kevin

Dallesasse, John

Dawe, Piers

De Andrea, John

Debbasch, Bernard O.

Di Minico, Chris

Diab, Wael

Dineen, Thomas

Dove, Dan

Easley, J. Craig

Eckert, Edward J.

Egan, John

Eisler, George

Ewen, John F.

Fanfoni, Sabina

Flatman, Alan

Frazier, Howard

Fujimoto, Yukihiro

Gaglianello, Robert D

Gaither, Justin

George, John

Gerhardt, Floyd

Goldis, Moty

Graham, Rich

Grow, Robert M.

Gummalla, Ajay

Gustafsson, Jonas

Gyurek, Russ

Hansen, Chris

Haran, Onn

Healey, Adam

Heckroth, Jim

Horvat, Michael

Jackson, Steve

Jiang, Wenbin

Jones, William W.

Jonsson, Ulf

Jørgensen, Thomas K.

Kaku, Shinkyo

Kasturia, Sanjay

Kenny, John J.

Khermosh, Lior

Kim, Chan

Kim, Jin H.

Kimpe, Marc

King, Neal

Koenen, David J.

Kolesar, Paul

Kramer, Glen

Lackner, Hans

Langston, Daun

Law, David

Lawrence, Eric

LIM, Seyoun

Lynskey, Eric R.

MacLeod, Brian

Maislos, Ariel

Marris, Arthur

Martin, David W.

Mathey, Thomas

McCormack, Michael S

McGugan, Chris

Mei, Richard Y.

Messenger, John

Miao, Tremont

Miyoshi, Hidekazu

Muller, Shimon

Murakami, Ken

15 March 2003

Murphy, Thomas

Naidu, Hari

Nguyen, Trung

Nishimura, Shinji

Nojima, Kazuhiro

Nordin, Ron

Noseworthy, Bob

Obara, Satoshi

Oberstar, John

O'Mahony, Barry

O'Rourke, Aidan

Parsons, Glenn

Pesavento, Gerry

Popescu, Petre

Posthuma, Carl R.

Quackenbush, William

Rabinovich, Rick

Radcliffe, Jerry K.

Rado, Ted

Raman, Naresh

Remein, Duane

Rezvani, Behrooz

Roth, Zeev

Sala, Dolors

Sambasivan, Sam

Saracino, Concita

Savara, Raj

Savi, Olindo

Seto, Koichiro

Sheppard, Ben

Shih, Cheng-Chung

Shohet, Zion

Shridhar, Avadhani

Simon, Scott

Soffer, Ran

Song, Jaeyeon

Sorbara, Massimo

Squire, Matthew B.

Stuart, Richard

Swanson, Steve

Tai-Lai, Tung

Tate, Mike

Thaler, Pat

Thatcher, R. Jonathan

Thompson, Geoffrey

Thorne, David

Tolley, Bruce

Toyoda, Hidehiro

Tsuji, Shinji

Tzannes, Marcos

Vaden, Sterling A.

van Doorn, Schelto

Vanderlaan, Paul Z.

Veerayah, Kumaran

Vergnaud, Gérard

Warren, Jeff

Wei, Dong

Weissberger, Alan

Winterton, Darin

Yoo, Tae-Whan

Yoshihara, Osamu

Yu, Hong

Zagalsky, Nelson

Zimmerman, George

Zivny, Pavel

Members in Peril

Arnold, Brian

Atias, Ilan

Bartur, Meir

Cam, Richard

Cullin, Chris

Darshan, Yair

Dwelley, David

Haas, Steven

Haddock, Stephen

Hirth, Ryan

Huynh, Thong

Jacobsen, Krista S

Jetzt, John

Jones, Chad

Karam, Roger

Le Goff, Yannick

Lee, Ying

Muir, Robert

Nadeau, Gerard

Naganuma, Ken

Nazari, Nersi

Oksman, Vladimir

Pannell, Don

Pietilainen, Antti

Reintjes, Maurice

Rennie, Lawrence

Rogers, Shawn

Ross, Floyd

Say-Otun, Sabit

Schindler, Fred

Sendelbach, Lee

Tatum, Jim

Thirion, Walter

Williamson, Erica

Zona, Bob

Potential Members (voters) p.1

AbuGhazaleh, Shadi

Armijo, Bert

Asbo, Magnus

Behtash, Saman

Chopra, Rahul

Chou, Joseph

Crepin, J. Francois

Dreyer, Steve

Dupuis, Joseph E.

Ellwanger, Eric

Fitzgerald, Paul

Freedman, Martin G

Garcia, Adalfo A.

Hammond, Bernie

Hazarika, Asif

Hurwitz, Walter K.

Jaeger, John

Juras, Walter

Kang, Tae Kyu

Kawaguchi, Kazuho

Keh, Raymond

Kim, Ajung

Kottapalli, Sreenivas

Lee, Hoon

Liu, Howard

Mahmood, Rehan

Muth, Jim

Nishi, Hiroaki

Onishi, Kazumi

Pease, Chris

Pivonka, Ed

Powell, Scott R.

Rao, Sailesh K.

Rodensky, Michael

Rybinski, Valerie

Sampson, Rod

Schneiderheinze,

Burkart

Schramm, Thomas

Seery, Mark

Shida, Yasunari

Shioiri, Satomi

Siemon, John

Spagna, Fulvio

Stanley, Patrick H.

Potential Members (voters) p.2

Sugawara, Mitsutoshi

Szostak, Tad

Telang, Vivek

Tellado, Jose

Venugopal, Padmabala

Wingard, Michael L.

Wirtz, Michael

Yoon, Chong Ho

Yousefi, Nariman

Yousuf, Farooq

Interim TF & SG meetings held

Vancouver, BC, Canada, 12-15 Jan 2004

803.3 project ballots since Nov.

- Sponsor Ballots:
 - P802.3ah/D3.0 Initial Sponsor ballot
 - P802.3ah/D3.1 1st Sponsor recirculation
 - P802.3ak/D5.3 3rd Sponsor recirculation
- Working Group Ballots:
 - P802.3ah/D2.2 WG recirculation

December Standards Board

- Changes to Bylaws & Operations Manual
 - Interpretations, patents, appeals, committees, ballot groups, etc.
- Revision requirements still topic of discussion
- Approved standards
 - 802.1D revision
 - 802.3ak
 - 802.16 Conformance, 802.16.2 revision
- Withdrawn
 - 802.1B, 802.1E
 - -802.10

LMSC EC Report p.1

- Indemnification policy has been updated
- Meeting held with BOG to discuss
- Voting rules
 - At meeting: Y/Y+N
 - Via email: Y/members
 - Evaluating how this might impact LMSC operational procedures
- Elections
 - 802.3 on Thursday Candidates
 - EC elections and confirmations on Friday

LMSC EC Report p.2

- Funded services no progress
- LMSC P&P changes
 - Roll call votes
 - Procedure 1

LMSC Chair's Meetings

Tues

- 9:00-11:00 802 Reorganization
- 2:00-3:00 802 Task Force
- 3:00-4:00 CAG/Existing WG
- -4:00-5:00 802 and China

Tutorials

- Monday Evening
 - 6:00 Wireless Performance Metrics
 - -7:30 Power Line Carrier
 - -9:00 EMS P&P
- Tuesday Evening
 - -6:00 10 GbE on MMF
 - -7:30 Spread Spectrum Retrospective
 - 9:00 Appl. of mmWave PHY in WPAN

IEEE-SA Standards Board Bylaws on Patents in Standards

6. Patents

IEEE standards may include the known use of essential patents and patent applications provided the IEEE receives assurance from the patent holder or applicant with respect to patents whose infringement is, or in the case of patent applications, potential future infringement the applicant asserts will be, unavoidable in a compliant implementation of either mandatory or optional portions of the standard [essential patents]. This assurance shall be provided without coercion and prior to approval of the standard (or reaffirmation when a patent or patent application 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 either mandatory or optional potions of the proposed IEEE standard against any person or entity complying with the standard; or
- b) A statement that a license for such implementation will be made available without compensation or under reasonable rates, with reasonable terms and conditions that are demonstrably free of any unfair discrimination.

This assurance shall apply, at a minimum, from the date of the standard's approval to the date of the standard's withdrawal and is irrevocable during that period.



Inappropriate Topics for IEEE WG Meetings

- Don't discuss licensing terms or conditions
- Don't discuss product pricing, territorial restrictions or market share
- Don't discuss ongoing litigation or threatened litigation
- Don't be silent if inappropriate topics are discussed... do formally object.

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



Project Authorization Requests

- IEEE 802.3
 - 802.3ap "Backplane Ethernet" (http://www.ieee802.org/3/bladesg/index.html)
 - 802.3aq "10G over FDDI Grade MMF"
 (http://www.ieee802.org/3/10GMMFSG/index.html)
 - Targeted for NesCom March early consideration
- 802.1ag Connectivity Fault Management (http://www.ieee802.org/1/files/public/docs20 04/ConnectivityFaultPAR-v1.2a.doc)

Project Authorization Requests

• 802.11

Wireless Access for the Vehicular Environment: (provisionally 802.11 Task Group p) Fast Roaming: (provisionally 802.11 Task Group r) ESS Mesh Networking: (provisionally 802.11 Task Group s)

802.11 Standard Maintenance - Task Group m (change the existing PAR from a maintenance PAR to a revision PAR)

All can be found at: http://www.ieee802.org/11/PARs

Project Authorization Requests

- 802.15.3b addresses MAC corrections and clarifications for the 15.3 MAC
- 802.15.4a addresses an alternate PHY for 15.4 with the goal of adding improved ranging capability, improved link margin (robustness and range), and mobility
- 802.15.4b is a revision PAR to 15.4 which addresses a number of issues, including adding the newly approved 860 MHz bands in Europe to the existing PHY, overall simplifications, as well as corrections and enhancements based on a year's worth of market implementation experience.
- 802.15.5 is a PAR to develop a Recommended Practice for WPAN mesh networking.
 - All can be found at: http://ieee802.org/15/pending.html

IEEE 802.3 CFI

- Tues 7:30 Data Center Ethernet
- Jonathan Thatcher, independent, (jonathan.thatcher@ieee.org)

New applications of Ethernet-interconnected cluster and grid computing present requirements for improvement in performance, efficiency, and reliability. Over the last decade, performance improvement simply meant increasing Ethernet's bandwidth by a factor of 10 every four years -- a dramatic outpacing of Moore's Law. 10-Gigabit Ethernet crashed into that wall in 2003 and is only now beginning to enter the market in a serious way. The time is opportune to investigate means to advance Ethernet's performance beyond what is possible at either 1-Gig or 10-Gig through protocol efficiency enhancements. It is proposed that a Study Group be created to investigate means to reduce latency, decrease congestion and inevitable packet loss, and provide features that allow upper layers to more effectively utilize Ethernet networks and thus enable an IEEE 802.3 compliant means to build next generation systems.

Continuing Agenda

- Liaison Reports
- 802 State of the Standard (Mr. Law)
- 802.3 Operating Rules (Mr. Law)
- Task Force & Study Group Reports
 - Interpretations (Mr. Law)
 - 802.3REVam Maintenance (Mr. Law)
 - 802.3ah Ethernet in the First Mile (Mr. Frazier)
 - 802.3ak 10GBASE-CX4 (Mr. Dove)
 - 10GBASE-T SG (Mr. Booth)
 - Backplane Ethernet SG (Mr. Healey)
 - 10GMMF SG (Mr. Tolley)
- Plan for the Week (Mr. Law)