IEEE 802.3ax Link Aggregation
IEEE 802.3ay Revision

Agenda and General Information

March 14th, 2007
Orlando, FL
David Law
3Com
Agenda

- Appoint Recording Secretary
- Introductions
- Approve Agenda
- Administration
- Review task
  - Review IEEE 802.3ax Maintenance #9 (Revision) draft PAR
  - Review IEEE 802.1AX Link Aggregation draft PAR
    - ITU Liaison

Move to accept the agenda
M: Lapak  S: Barrass
Y:       N:
Instructions for the WG Chair

• At Each Meeting, the Working Group Chair shall:
  • Show slides #1 and #2 of this presentation
  • Advise the WG membership 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 disclosure of patents which may be essential for the use of standards under development is encouraged;
    – Disclosures made of such patents may not be exhaustive of all patents that may be essential for the use of standards under development, and that neither the IEEE, the WG, nor the WG Chairman ensure the accuracy or completeness of any disclosure or whether any disclosure is of a patent that, in fact, may be essential for the use of standards under development.
  • Instruct the WG Secretary to record in the minutes of the relevant WG meeting:
    – That the foregoing advice was provided and the two slides were shown;
    – That an opportunity was provided for WG members to identify or disclose patents that the WG member believes may be essential for the use of that standard;
    – Any responses that were given, specifically the patents and patent applications that were identified (if any) and by whom.

(Not necessary to be shown)   Approved by IEEE-SA Standards Board – March 2003 (Revised February 2006)
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. The patent holder or applicant should provide this assurance as soon as reasonably feasible in the standards development process. This assurance shall be provided no later than the approval of the standard (or reaffirmation when a patent or patent application becomes known after initial approval of the standard). This assurance shall be 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 portions 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 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.

Slide #1   Approved by IEEE-SA Standards Board – March 2003 (Revised February 2006)
Inappropriate Topics for IEEE WG Meetings

• Don’t discuss the validity/essentiality of patents/patent claims

• Don’t discuss the cost of specific patent use

• 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-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

Slide #2  Approved by IEEE-SA Standards Board – March 2003 (Revised February 2006)
IEEE Std 802.1AX
New Standard (IEEE 802.3ax)

IEEE Std 802.3
Revision (IEEE 802.3ay)

IEEE Std 802.3-2005
Published 12/05
5 Sections

IEEE Std 802.3
Amendments

IEEE Std 802.3-2005/Cor 1-2006
Corrigenda 1
Published 06/06

IEEE Std 802.3an-2006
10GBASE-T
Published 09/06

IEEE Std 802.3aq-2006
10GBASE-LRM
Published 10/06

IEEE Std 802.3as-2006
Frame expansion
Published 11/06

IEEE Std 802.3-2005/Cor 2
10GBASE-T
Corrigenda 2
Target 06/07

IEEE P802.3AREV
Consolidated edition

IEEE P802.3REV
Target approval
03/08

IEEE P802.3are
Congestion management
Target approval ??

IEEE P802.3AV
Sponsor Ballot draft

IEEE P802.1AX
Link Aggregation
SB Ballot draft
Nov 2007

IEEE P802.1AX
Link Aggregation
Transfer
to IEEE 802.1

Note: Target publication date is target standards board approval plus three months.
IEEE Std 802.3 revision
Timeline

- Revision request selection: 17th Jan 2007
- NesCom submittal#: 27th Jan 2007
- Draft D0.9 drafts precirculated: 5th Mar 2007
- 802.3 PAR approval: 15th Mar 2007
- 802.3 WG ballot preapprove: 15th Mar 2007
- EC PAR approval: 16th Mar 2007
- PAR approval#: 22nd Mar 2007
- Sponsor Ballot: Sep 2007
- RevCom submittal#: Jan 2008
- Standards board approval#: Mar 2008

# Externally determined dates
Review of PAR Comments

• IEEE P802.1AX (IEEE 802.3ax)
  – No comments from other Working Groups
  – No comments from IEEE 802.3 participants

• IEEE P802.3REV (IEEE 802.3ay)
  – No comments from other Working Groups
  – 3 comments from IEEE 802.3 participants
IEEE P802.3ay PAR comments

Piers Dawe #1:

As discussed; you might like to consider if this sentence:

Speed specific Media Independent Interfaces (MIIs) provide an architectural and optional implementation interface to selected physical layer (PHY) interfaces.

should be modified so that you are not connecting an interface to an interface.

Also there's the old annoyance that "physical layer" and PHY differ by the RS.

e.g. change last word and swap two around:

Speed specific Media Independent Interfaces (MIIs) provide an architectural and optional implementation interface to selected physical layer entities (PHY).

ACCEPT
Howard Frazier:

I agree with Piers' point about this sentence:

Speed specific Media Independent Interfaces (MIIs) provide an architectural and optional implementation interface to selected physical layer (PHY) interfaces.

The last instance of the word "interfaces", at the end of the sentence, should be either replaced with "entities", or "physical layer" should be pluralized as "physical layers".

Also, Glen, Wael and I are concerned that the scope does not embrace EFM. Perhaps this could be addressed by the following change to the last sentence:

Other specified capabilities include: PHYs, control protocols and management protocols for access and metropolitan area network applications, and the provision of power over selected twisted pair PHY types.
Piers Dawe #2:

As to covering EFM, if we were bold, instead of having the first sentence:

This standard defines Ethernet local area networks.

we could say:

This standard defines Ethernet local area, access and metropolitan area networks.

I never understood what "control protocols and management protocols" meant. I'm not convinced we do any such, or if we do, whether their use is restricted to access and metropolitan area network applications. We provide a transport mechanism for control and management protocols with the OAM clause; is there more?

Also note "metropolitan" should be "metropolitan".

ACCEPT

Change to ‘This standard defines Ethernet local area, access and metropolitan area networks.’.
Review of Drafts

- IEEE P802.1AX (IEEE 802.3ax)
  - No comments

- IEEE P802.3REV (IEEE 802.3ay)
  - Move Annex 43B to be Annex 57B
    - This impacts the IEEE P802.1AX draft
  - Include the IEEE P802.3-2005/Cor 2 text
  - Remove place holder for Clause 55
    - Was in the Clause 54 file