

IEEE 802.3ax Link Aggregation IEEE 802.3ay Revision

Agenda and General Information

May 28th, 2007
Geneva, Switzerland
David Law
3Com

Agenda

- Appoint Recording Secretary
- Introductions
- Approve Agenda
- Administration
- IEEE 802.3ay (IEEE P802.3REV) Maintenance #9 (Revision)
 - Review Working Group ballot results
 - Comment resolution
 - Next steps
- IEEE 802.3ax (IEEE P802.1AX) Link Aggregation
 - Review Working Group ballot results
 - Discuss next steps
 - Comment resolution

Task force URLs

- IEEE 802.3 Maintenance

<http://www.ieee802.org/3/maint/index.html>

- IEEE 802.3ax and IEEE 802.3ay web site

<http://www.ieee802.org/3/axay/index.html>

- Working Group ballot comments

- IEEE P802.3ax (IEEE P802.1AX) D1.0

http://www.ieee802.org/3/axay/comments/D1.0/802.3ax_D1p0.pdf

- IEEE P802.3ay (IEEE P802.3Rev) D1.0

http://www.ieee802.org/3/axay/comments/D1.0/802.3ay_D1p0.pdf

Instructions for the WG Chair

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

- **Show slides #1 through #5 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 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 the five slides 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) that the participant believes 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.
 - It is recommended that the WG chair review the guidance in the *Standards Companion* on inclusion of potential Essential Patent Claims by normative reference.

Note: **WG** includes Working Groups, Task Groups, and other standards-developing committees.

(Optional to be shown)

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.

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

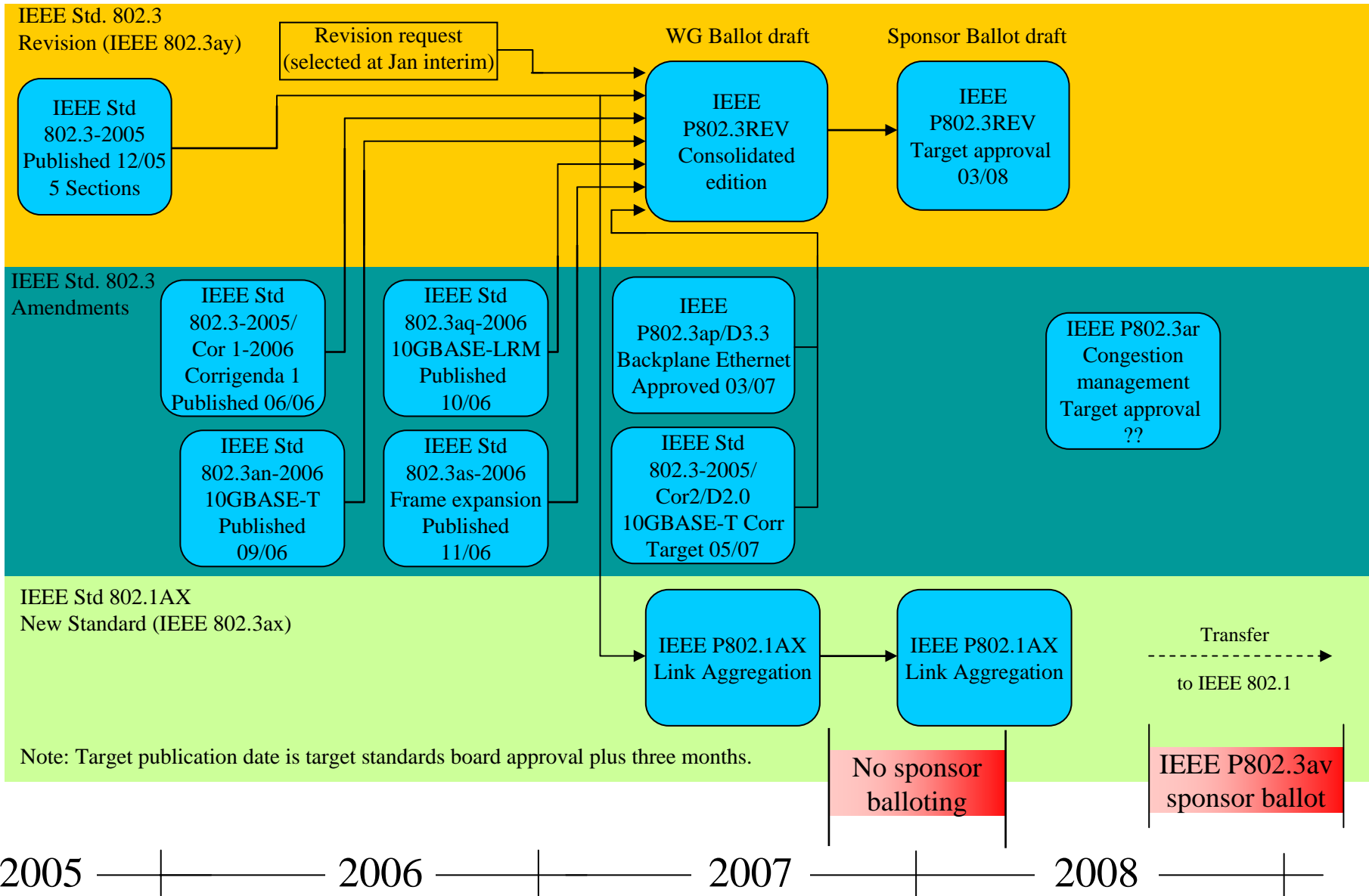
- **All IEEE-SA standards meetings shall be conducted in compliance with all applicable laws, including antitrust and competition laws.**
- **Don't discuss the interpretation, validity, or essentiality of patents/patent claims.**
- **Don't discuss specific license rates, terms, or conditions.**
 - Relative 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>

IEEE Std 802.3 revision plan



IEEE Std 802.3 revision Timeline

- Timeline

Revision request selection	17 th	Jan	2007
NesCom submittal [#]	27 th	Jan	2007
Draft D0.9 drafts precirculated	5 th	Mar	2007
802.3 PAR approval	15 th	Mar	2007
802.3 WG ballot preapprove	15 th	Mar	2007
EC PAR approval	16 th	Mar	2007
PAR approval [#]	22 nd	Mar	2007
Working Group ballot	23 rd	Mar	2007
Working Group ballot comment resolution	28 th	May	2007
Sponsor Ballot		Sep	2007
RevCom submittal [#]		Jan	2008
Standards board approval [#]		Mar	2008

[#] Externally determined dates

IEEE 802.3ay (IEEE P802.3REV) Working Group ballot results

Ballot opened 9th April 2007, closed 14th May 2007

Comments received: 180

	#	%		Status
		Actual	Require	
Abstain	20	23	< 30	PASS
Disapprove with comment	5	-	-	-
Disapprove without comment	0	-	-	-
Approve	62	93	≥ 75	PASS
Ballots returned	87	51	≥ 50	PASS
Voters	169	-	-	-

IEEE 802.3ay - detailed ballot results

Request	Voters	Approve	Disapprove	Abstain	Returned	Approve (%)	Abstain (%)	Returned (%)
Base	169	62	5	23	87	93	23	51
1169	169	67	0	23	87	100	23	51
1171	169	67	0	23	87	100	23	51
1172	169	67	0	23	87	100	23	51
1173	169	67	0	23	87	100	23	51
1174	169	67	0	23	87	100	23	51
1177	169	67	0	23	87	100	23	51
1178	169	66	1	23	87	98	23	51
1179	169	67	0	23	87	100	23	51
1180	169	67	0	23	87	100	23	51
1181	169	67	0	23	87	100	23	51
1182	169	67	0	23	87	100	23	51
1183	169	67	0	23	87	100	23	51
1184	169	67	0	23	87	100	23	51
1185	169	67	0	23	87	100	23	51
1186	169	67	0	23	87	100	23	51
1187	169	67	0	23	87	100	23	51
1188	169	67	0	23	87	100	23	51
1189	169	67	0	23	87	100	23	51
1190	169	67	0	23	87	100	23	51
1191	169	67	0	23	87	100	23	51
1194	169	67	0	23	87	100	23	51

IEEE 802.3ay (IEEE P802.3REV) Working Group ballot comment summary

- Total of 180 comments

E (Editorial)	107
ER (Editorial required)	8
T (Technical)	56
TR (Technical required)	9

- Now comment resolution ...

IEEE 802.3ax (IEEE P802.1AX) Working Group ballot results

Ballot opened 6th April 2007, closed 11th May 2007

Extension opened 14th May 2007, closed 16th May 2007

Comments received: 41

	#	%		Status
		Actual	Require	
Abstain	31	32	< 30	FAIL
Disapprove with comment	2	-	-	-
Disapprove without comment	0	-	-	-
Approve	65	97	≥ 75	PASS
Ballots returned	98	58	≥ 50	PASS
Voters	169	-	-	-

IEEE 802.3ax (IEEE P802.1AX) Working Group ballot comment summary

- Total of 41 comments

E (Editorial)	21
ER (Editorial required)	3
T (Technical)	13
TR (Technical required)	4

IEEE 802.3ax (IEEE P802.1AX)

- IEEE 802.3ax ballot failed
 - Do not meet abstention ratio
 - Ballot extension failed to make any difference
- Future Action
 - Comment resolution and update draft
 - No point not doing this
- Proceed to re-ballot ?