



IEEE 1904 Access Networks Working Group

Opening report

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- Please, state
 - Your name
 - Your affiliation

IEEE SA Standards Board Operations manual

5.3.3.1 Disclosure of affiliation

Each participant's affiliation shall be disclosed at any working group or project meeting. The chair or the chair's delegate shall inform the meeting of the requirement for disclosure of affiliation (see 5.2.1.5 of the *IEEE-SA Standards Board Bylaws*). This shall be via a sign-in (e.g., sign-in sheet, electronic sign-in, verbal disclosure, or electronic communication) that provides for disclosure of employer and any other affiliation, a reminder of the definition of affiliation, and possible penalties for non-compliance.

...

The minutes of each working group or project meeting shall record a list of attendees and the disclosed affiliation of each attendee.

Executive Secretary Report

- ❑ Posted at
http://www.ieee1904.org/meeting_archive/2020/02/anwg_2003_exec_report.pdf

- ❑ Membership Updates
- ❑ Establishment of Quorum

1. Administrative matters

- P&P – draft review and approval
- Is OpMan refresh needed?
- Timeline for Re-election of chair and WG officers

2. Proposed/potential new work

- 1904.3 PAR review and approval

3. Current/ongoing projects

- 1904.2 TF comments resolution

Motion #1

- ❑ **Approve the agenda for the March 2020 meeting as presented in `anwg_2003_agenda.pdf`**

- Moved:
- Second:

(Procedural, required > 50%)



IEEE Guidelines

- Patent Policy and Call for Patents
- Participant behavior in IEEE-SA activities

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:
 - IEEE's patent policy 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 IEEE is not aware. Additionally, neither 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 14 and 15 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.

Participants have a duty to inform the IEEE

- 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
- Participants should inform the IEEE (or cause the IEEE to be informed) of the identity of any other holders of potential Essential Patent Claims

**Early identification of holders of potential
Essential Patent Claims is encouraged**

Ways to inform IEEE

- Cause an LOA to be submitted to the IEEE-SA (patcom@ieee.org); 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
- **Speak up now and respond to this 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, please respond at this time by providing relevant information to the WG Chair

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 of different technical approaches that include relative costs of patent licensing terms may be discussed in standards development meetings.
 - Technical considerations remain the 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.

For more details, see *IEEE-SA Standards Board Operations Manual*, clause 5.3.10 and *Antitrust and Competition Policy: What You Need to Know* at <http://standards.ieee.org/develop/policies/antitrust.pdf>

Patent-related information

The patent policy and the procedures used to execute that policy are documented in the:

- *IEEE-SA Standards Board Bylaws*
(<http://standards.ieee.org/develop/policies/bylaws/sect6-7.html#6>)
- *IEEE-SA Standards Board Operations Manual*
(<http://standards.ieee.org/develop/policies/opman/sect6.html#6.3>)

Material about the patent policy is available at
<http://standards.ieee.org/about/sasb/patcom/materials.html>

**If you have questions, contact the IEEE-SA
Standards Board Patent Committee
Administrator at patcom@ieee.org**

Participant behavior in IEEE-SA activities is guided by the IEEE Codes of Ethics & Conduct

- All participants in IEEE-SA activities are expected to adhere to the core principles underlying the:
 - [IEEE Code of Ethics](#)
 - [IEEE Code of Conduct](#)
- The core principles of the IEEE Codes of Ethics & Conduct are to:
 - *Uphold the highest standards of integrity, responsible behavior, and ethical and professional conduct*
 - *Treat people fairly and with respect, to not engage in harassment, discrimination, or retaliation, and to protect people's privacy.*
 - *Avoid injuring others, their property, reputation, or employment by false or malicious action*
- The most recent versions of these Codes are available at <http://www.ieee.org/about/corporate/governance>

Participants in the IEEE-SA “*individual process*” shall act independently of others, including employers

- The [IEEE-SA Standards Board Bylaws](#) require that “*participants in the IEEE standards development individual process shall act based on their qualifications and experience*”
- This means participants:
 - **Shall act & vote** based on their personal & independent opinions derived from their expertise, knowledge, and qualifications
 - **Shall not act or vote** based on any obligation to or any direction from any other person or organization, including an employer or client, regardless of any external commitments, agreements, contracts, or orders
 - **Shall not direct** the actions or votes of other participants or retaliate against other participants for fulfilling their responsibility to act & vote based on their personal & independently developed opinions
- By participating in standards activities using the “*individual process*”, you are deemed to accept these requirements; if you are unable to satisfy these requirements then you shall immediately cease any participation

IEEE-SA standards activities shall allow the fair & equitable consideration of all viewpoints

- The [IEEE-SA Standards Board Bylaws](#) (clause 5.2.1.3) specifies that *“the standards development process shall not be dominated by any single interest category, individual, or organization”*
 - This means no participant may exercise *“authority, leadership, or influence by reason of superior leverage, strength, or representation to the exclusion of fair and equitable consideration of other viewpoints”* or *“to hinder the progress of the standards development activity”*
- This rule applies equally to those participating in a standards development project and to that project’s leadership group
- Any person who reasonably suspects that dominance is occurring in a standards development project is encouraged to bring the issue to the attention of the Standards Committee or the project’s IEEE-SA Program Manager

- No audio or video recording
- No photography
- No job recruiting
- No product pitches
- No corporate pitches
- No prices
 - This includes costs, ASPs, etc. no matter what the currency
- No restrictive notices

- Attendance of the press should be announced

Links to Guiding Documents

- ❑ **IEEE Standards Association Operations Manual**
<https://standards.ieee.org/about/policies/sa-opman/index.html>
- ❑ **IEEE-SA Standards Board Bylaws**
<https://standards.ieee.org/about/policies/bylaws/index.html>
- ❑ **IEEE-SA Standards Board Operations Manual**
<https://standards.ieee.org/about/policies/opman/index.html>
- ❑ **Antitrust and Competition Policy**
<https://standards.ieee.org/content/dam/ieee-standards/standards/web/documents/other/antitrust.pdf>
- ❑ **IEEE Code of Conduct**
https://www.ieee.org/content/dam/ieee-org/ieee/web/org/about/ieee_code_of_conduct.pdf
- ❑ **IEEE Code of Ethics**
<https://www.ieee.org/about/corporate/governance/p7-8.html>

Motion #2

- ❑ Approve minutes of February 2020 meeting as recorded in **anwg_2002_minutes_unapproved.pdf**.
- ❑ Post the approved minutes on the WG website as **anwg_2002_minutes_approved.pdf**

– Moved:

– Seconded:

(Procedural, required > 50%)

□ Posted at

http://www.ieee1904.org/meeting_archive/2020/02/anwg_2002_treasurer_report.pdf

- ❑ Located at <http://www.ieee1904.org/>
 - Archived technical contributions and reflector messages are public
- ❑ ANWG Password-protected area
 - Standard drafts are password-protected (IEEE SA rules)
 - All online submission forms are password-protected to avoid spam.
 - TF2: http://www.ieee1904.org/private/2/tf2_presentproc.shtml
 - RMTF: http://www.ieee1904.org/private/revision/rmtf_maint_request.shtml
 - The same username/password for all task forces under 1904 WG
 - Username: * * * *
 - Password: * * * *

❑ 1904 WG Reflector

- Used for general discussions/announcements. **Everyone MUST subscribe!!!**
- Archive is public: http://www.ieee1904.org/wg_pub_archive.shtml
- Subscription instructions: http://www.ieee1904.org/wg_reflector.shtml

❑ 1904.2 TF Reflector

- Used for 1904.2 (Universal Management Tunnel) technical discussions
- Archive is public: <http://www.ieee1904.org/2/email/index.html>
- Subscription instructions: http://www.ieee1904.org/2/tf2_reflector.shtml

❑ RMTF Reflector

- Used for Revision & Maintenance technical discussions
- Archive is public: <http://www.ieee1904.org/3/email/index.html>
- Subscription instructions: http://www.ieee1904.org/revision/rmtf_reflector.shtml

- ❑ **New proposed P&P:**

http://www.ieee1904.org/meeting_archive/2020/03/anwg_2003_PnP_draft_v5_0_clean.pdf

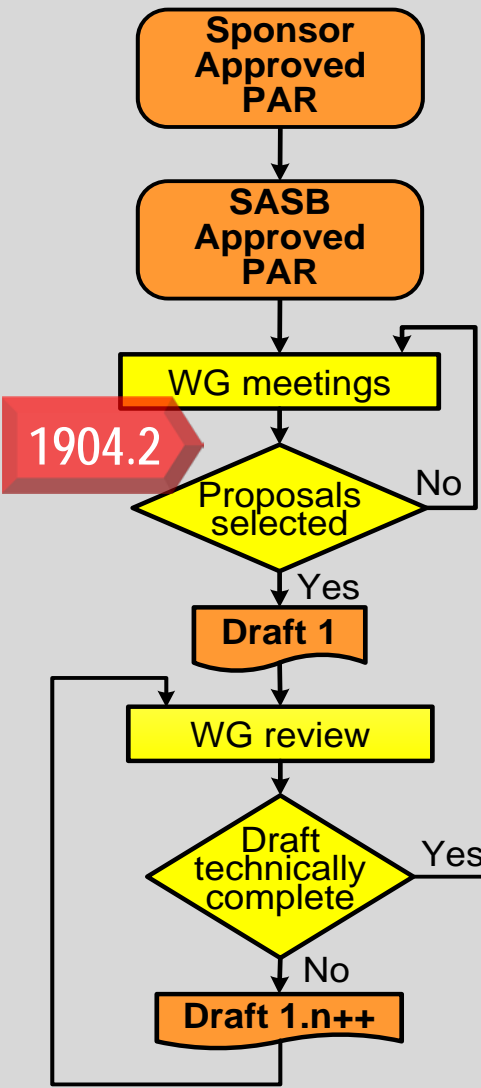
- ❑ **Changes vs. currently-approved P&P:**

http://www.ieee1904.org/meeting_archive/2020/03/anwg_2003_PnP_draft_v5_0_diff_approved.pdf

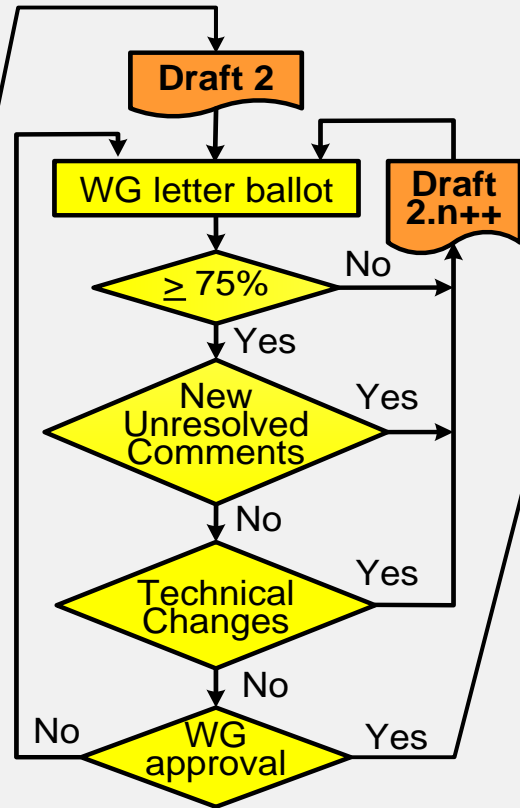
- ❑ **Changes vs. IEEE-provided baseline:**

http://www.ieee1904.org/meeting_archive/2020/03/anwg_2003_PnP_draft_v5_0_diff_baseline.pdf

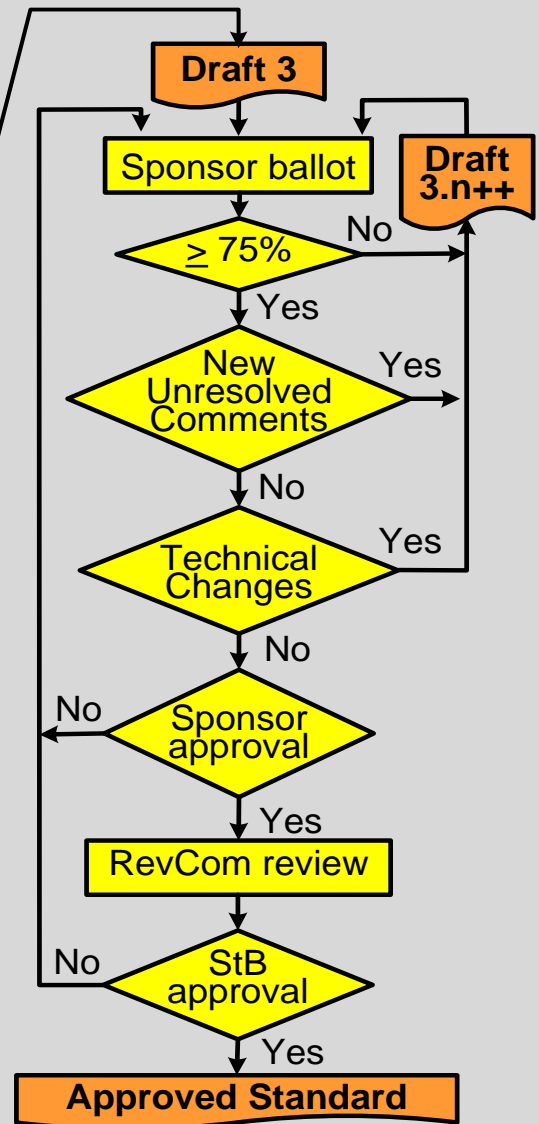
Current Project(s) Status



Working Group Review



Working Group Ballot



Sponsor Ballot 22



Low Latency Xhaul (LLX) over DOCSIS® and Other Transports

Jennifer Andreoli-Fang, CableLabs



IEEE 1904 Access Networks WG Policies and Procedures Revision

Marek Hajduczenia, Charter Communications
Kevin Noll, Tibit Communications

TBD



IEEE P1904.3 PAR Draft

- Standard for Service Interoperability in 25Gb/s and 50Gb/s Ethernet Passive Optical Networks

This standard describes the system-level requirements needed to provide service-level, multi-vendor interoperability of Ethernet Passive Optical Network (EPON) equipment. The specifications complement the existing IEEE 802.3^(TM) and IEEE 802.1^(TM) standards, which enable the interoperability at the Physical Layer and Data Link Layer. Specifically included in this specification are:

- 25G-EPON and 50G-EPON system-level interoperability specifications covering equipment functionality, traffic engineering, and service-level quality of service/class of service (QoS/CoS) mechanisms;
- Management specifications covering equipment management, service management, and power utilization.

The purpose of this standard is to build upon the IEEE 802.3ca (25G-EPON and 50G-EPON) Physical Layer and Data Link Layer standards and create a system-level and network-level standard, thus allowing full "plug-and-play" interoperability of the transport, service, and control planes in a multi-vendor environment.

There are no open, international, system-level specifications describing how to achieve multi-vendor interoperability for the 25G-EPON and 50G-EPON technologies.

A detailed system-level standard for 25G-EPON and 50G-EPON technologies, developed in an open fashion by the IEEE, will eliminate the need for service providers and national bodies to create unique interoperability specifications that needlessly fragment the market. This will serve a number of important purposes:

- Devices will follow a common specification for the world-wide market, resulting in larger volumes and reduced costs;
- Operators will not face the challenge of developing system-level specifications and interoperability testing procedures before they can deploy EPON;
- Vendors will not need to implement multiple options to comply with multiple proprietary/national specifications. Reduced device complexity will further reduce costs;
- Competition among equipment and component suppliers will increase, thus driving further innovation and cost reductions.

The stakeholders include telecom system and component vendors, telecommunications carriers, and multiple system operators (MSOs)

- ❑ Approve PAR P1904.3 as recorded in `anwg_2003_PAR1904_3_approved.pdf` and request the chair to seek PAR approval from the Sponsor and the NesCom.
- ❑ The chair has a license to implement any changes as needed to resolve comments from the Sponsor and the NesCom.

Moved:

Second:

($\geq 75\%$)

1904 WG voting members only

Y: N: A:



1904.2 Comment Resolution

Marek Hajduczenia, TF2 Editor

- ❑ Produce draft D0.5 by incorporating all resolved comments, as recorded in `anwg_2003_comments_approved.pdf`, into the draft D0.4.
- ❑ The Editor has a license to resolve conflicts and apply editorial changes as needed.

Moved:

Second:

(Technical, $\geq 75\%$)

1904 WG voting members only

Y: N: A:

2020 Meeting Calendar



January						
S	M	T	W	T	F	S
			1	2	3	4
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12	13	14	15	16	17	18
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February						
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March						
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April						
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31						

June						
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September						
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November						
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29	30					

December						
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27	28	29	30	31		

ANWG window	IEEE 802.3	BBF	CableLabs	IETF	ITU-T Q2/15	Conferences
2/19-2/20	2/25	3/2-3/5	?? – Winter Conf.		3/3, 3/24	3/8-3/12 - OFC
3/31-4/2	3/16-3/20	6/15-6/18	?? – Summer Conf.		4/21-4/23	4/18-4/22 – NAB Show
6/23-6/25	5/18-5/22	8/31-9/3			5/12	
8/25-8/27	7/13-7/16	12/7-12/10			6/9	9/21-9/23 - ECOC
10/20-10/22	9/21-9/25				7/7-7/9	10/13-10/16- SCTE Expo
12/15-12/17	11/9-11/12				8/4	

Holidays	
China	2/1-2/10,
Israel	
Japan	
US	2/17, 4/10, 5/25, 7/3, 9/7, 11/26-11/27, 12/24-12/31

- ❑ March 25, 4PM Pacific – **Teleconference**
- ❑ June – **TBD**
- ❑ August – **TBD**
- ❑ October – **TBD**
- ❑ December– **TBD**



Thank You