Welcome to IEEE 802 Newcomer Orientation

www.ieee802.org

IEEE 802 Plenary Session
Last updated, 3 July 2017
Contents

• Introduction to IEEE 802
• Introduction to IEEE standards process
• Getting more information
Introduction to IEEE 802
Who we are

- IEEE Project 802 LAN/MAN Standards Committee (aka IEEE 802 or LMSC)
- Develop LAN and MAN standards
- Mainly for link and physical layers of the network stack
- In operation since March 1980
IEEE Standards Organization

IEEE 802 is here: a standards committee formed by the Computer Society
Individual Method

- IEEE has two types of standards groups
  - Individual method or Entity method
- IEEE 802’s projects use the Individual method
- Voter’s are individuals, not entities (e.g. companies)
Some terms

- **PAR** – project authorization request – the document that authorizes work on a project.
- **WG** - Working group – responsible for developing standards in an area
- **TAG** – Technical Advisory Group – experts on a topic area that crosses working groups.
- **Task group or task force** – a part of a working group which focuses on a particular project.
All those dots….decoder ring

- 802.1  Bridging and Architecture – generally the top of the link layer
- 802.3  Ethernet
- 802.11 Wireless LAN (WLAN)
- 802.15 Wireless Specialty Network (WSN)
- 802.16 Broadband Wireless Access (BWA)
- 802.18 Radio Regulatory TAG
- 802.19 Coexistence
- 802.21 Media Independent Handover
- 802.22 Wireless Regional Area Networks (WRAN)
- 802.24 Vertical Applications TAG
IEEE 802 Organization

EXECUTIVE COMMITTEE (EC)

Working Group/TAG Chairs

<table>
<thead>
<tr>
<th>Working Group/Tag</th>
<th>Chair/Convenor</th>
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<tbody>
<tr>
<td>802.1 High Level Interface</td>
<td>Glenn Parsons</td>
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<td>802.3 Ethernet</td>
<td>David Law</td>
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<tr>
<td>802.11 WLAN</td>
<td>Adrian Stephens</td>
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<td>802.15 WSN</td>
<td>Bob Heile</td>
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<td>802.16 BWA</td>
<td>Roger Marks</td>
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<td>802.18 TAG Radio Regulatory</td>
<td>Rich Kennedy</td>
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<tr>
<td>802.19 Coexistence Coexistence</td>
<td>Steve Shellhammer</td>
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<tr>
<td>802.21 Media indep. handover</td>
<td>Subir Das</td>
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<td>802.22 WRAN</td>
<td>Apurva Mody</td>
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<tr>
<td>802.24 Vertical Applications</td>
<td>Tim Godfrey</td>
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Hibernating WG Chair (non voting)

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<tbody>
<tr>
<td>802.20 MBWA</td>
<td>Radhakrishna Canchi</td>
</tr>
<tr>
<td>802.22 WRAN</td>
<td>Apurva Mody</td>
</tr>
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Appointed Officers

1st VICE CHAIR
Pat Thaler

2nd VICE CHAIR
James P.K. Gilb

EXECUTIVE SEC
Jon Rosdahl

RECORDING SEC
John D’Ambrosia

TREASURER
Clint Chaplin

MEMBER EMERITUS
Geoff Thompson

DISBANDED
802.2 LLC
802.6 DQDB
802.9 ISLAN
802.14 CATV
802.4 Token Bus
802.7 Broadband TAG
802.10 Security
802.17 Resilient Packet Ring
802.23 Emergency Services
802.5 Token Ring
802.8 Fiber Optic TAG
802.12 Demand Priority

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## General structure of the week

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<tr>
<th></th>
<th>Sun</th>
<th>Mon</th>
<th>Tue</th>
<th>Wed</th>
<th>Thu</th>
<th>Fri</th>
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</table>
| A M | Some task force/group meetings | Opening EC 802 newcomer orientation  
WG opening plenaries (most)  
Task force/group meetings | Task force/group meetings | Task force/group meetings | Some WG closing plenaries | Some WG closing plenaries |
| P M | Remaining WG opening plenaries  
Task force/group meetings |                                      |                                        |                                        | Some WG closing plenaries | Closing EC |
|     | Tutorials     | TF/TG mtgs                                | Social                                   | Some WG closing plenaries |                                |                                |

Check WG agendas for details – there is some variation between groups
Introduction to IEEE standards process
Principles of the process

• Due process — procedures are publicly available and followed consistently
• Consensus — requiring agreement of a majority or supermajority – for technical decisions here ≥75%
• Openness — ensuring materially interested and affected parties can participate
• Balance — representation from all interested parties without overwhelming influence from any one party
• Right of appeal — process to ensure due process
More terms

• CFI – Call for interest – a brief meeting to outline a topic and determine if there is interest in investigating possible project

• Study Group – a group formed to investigate a project and produce a PAR

• Criteria for Standards Development (CSD) – In IEEE 802 the basis for determining whether to forward a PAR.

• Five Criteria – a subset of the CSD
IEEE 802 standards
development life cycle – part 1

Call for Interest (CFI)

Adequate interest?

Study Group investigates forming a project; produces PAR and CSD

PAR & CSD ready?

Working Group and EC review

NesCom & Standards Board review

Standards Board approval

Start work in Working Group

If EC approves, forward PAR to NesCom

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IEEE 802 criteria for standards development (CSD)

- Project Process
  - Managed objects
  - Coexistence (for a wireless project)
- Five Criteria
  - Broad Market Potential
  - Compatibility
  - Distinct Identity
  - Technical Feasibility
  - Economic Feasibility
IEEE 802 standards
development life cycle – part 2

1. Review proposals
2. Create and refine draft
3. Working Group ballot
4. Material selected?
5. Draft complete?
6. Review ballot comments, modify draft as needed
7. No changes and no new disapproves, ≥75% approve and Working Group approves forwarding to sponsor ballot?
8. Recirculate changes and disapprove comments
9. Changes or new disapproves
IEEE 802 standards development life cycle – part 3

1. Request EC approval to forward to sponsor ballot

   EC approval?

2. Sponsor ballot

3. Review ballot comments, modify draft as needed

   Changes or new disapproves

   No changes and no new disapproves, ≥75% approve

   Request EC approval to forward to RevCom

4. RevCom approval

5. Standards Board approval

6. Prepare for publication

   Published standard
And then there is maintaining the standard

- Keep the standard current by producing amendments and corrigenda (corrections)
- Renew the life of the standard with revision
- When the standard is out of date, withdraw it.
Voting and membership

• Voters have responsibility to vote on letter ballots
• Three levels of review/voting occur in IEEE 802 standards development:
  – Task force or task group review or ballot
    • Requirements vary – consult Working group.
  – Working group ballot
    • Requirements on next page
  – Sponsor ballot
    • Open to all interested parties
      – Via IEEE SA-membership
    • 60-day public review runs concurrently with sponsor balloting
Acquiring Working Group voting membership

- Participating at a meeting = at least 75% presence.
- For a new Working Group, persons participating in the initial meeting become members.
- For an existing Working Group, after attending 2 of last 4 plenary sessions or 1 plenary and 1 interim, membership starts at the next plenary attended.
  - Depending on Working Group, may require submitting an indication of intent.
Retaining Working Group voting membership

• Participate in 2 of the last 4 plenary sessions.
  – An interim may substitute for one of the 2 plenary sessions.

• Return working Group letter ballots
  – Membership may be lost for failing to respond or responding abstain for reason other than “lack of technical expertise” to 2 of the last 3 ballots.
Affiliation

- IEEE-SA Standards Board By-Laws, Section 5.2.1.5
- What is affiliation?
  - You are "affiliated" with any individual or entity that has been, or will be, financially or materially supporting your participation in a particular IEEE standards activity.
  - E.g, an individual or organization supporting your participation and/or an employer
- Disclosure of affiliation is required.
  - Every member and participant shall disclose his or her affiliation.
  - Not excused from compliance with this policy by a conflicting obligation (whether contractual or otherwise) that prohibits disclosure of affiliation.
Ground rules

- Respect … give it, get it
- NO product pitches
- NO corporate pitches
- NO prices
- NO restrictive notices – presentations must be openly available
- Silence your cell phone ringers
IEEE Patent policy see the slide set at: https://standards.ieee.org/about/sasb/patcom/materials.html

IEEE 802 participation see the slide at: https://mentor.ieee.org/802-ec/dcn/17/ec-17-0093-05-0PNP-ieee-802-participation-slide-ppt.ppt
Getting more information
Resources

• IEEE 802 home page:
  • http://www.ieee802.org

• IEEE 802 chairs, etc.
  • http://www.ieee802.org/wgchairs.shtml

• Links to IEEE and IEEE 802 procedural documents:
  • http://www.ieee802.org/devdocs.shtml

• Links to IEEE 802 WG and TAG pages:
  • http://www.ieee802.org/dots.shtml

• Links to these slides and IEEE 802 orientation
  • http://ieee802.org/orientation.shtml