Agenda and General Information

**Joint Session -
IEEE P802.3cw Task Force
IEEE P802.3df Task Force
IEEE P802.3dj Task Force**

**IEEE 802 July 2023 Plenary
Berling, Germany**

**John D'Ambrosia,
Chair, IEEE P802.3cw Task Force
Chair, IEEE P802.3df Task Force
Chair, IEEE P802.3dj Task Force
Futurewei, U.S. Subsidiary of Huawei**

Non-payment of registration fees

Every attendee (Face-to-Face or Remote) at any IEEE 802 meeting during the July 2023 IEEE 802 Plenary meeting series must register and pay a fee to participate

If the individual is in arrears:

[1] The individual is not permitted to register for any future IEEE 802 Plenary or IEEE 802 Subgroup Interim (if registration is required).

[2] As a result of [1], the individual is not permitted to attend any portion of a technical meeting that is part of an IEEE 802 plenary session. They are also not permitted to attend any portion of a technical meeting that is part of an IEEE 802 Subgroup Interim if that IEEE 802 Subgroup Interim required registration.

Joint Task Force Meetings

▣ **Per Motion #8 approved @ IEEE 802.3 Closing, Mar 2023 (**see minutes @ https://www.ieee802.org/3/minutes/mar23/0323_minutes_draft.pdf**)**
  – **Move that the IEEE 802.3 Working Group grant approval for the P802.3cw Task Force to meet with P802.3df / P802.3dj Task Forces to take motions during any joint meeting between these task forces only**

▣ **Joint Task Force meetings will be announced**

Joint IEEE P802.3cw / .3df / .3dj Task Force Session

- **Agenda**
  - **Approve Agenda**
  - **Approve Minutes (see next page)**
  - **Decorum**
  - **Attendance**
  - **Task Forces Project Information**
  - **Goals For Session**
  - **Ground Rules**
  - **Voting / Voting Rights**
  - **Review IEEE SA Policies (http://ieee802.org/3/policies.html / included) ***
    - **IEEE SA Patent Policy**
    - **IEEE SA Participation Policy**
    - **IEEE SA Copyright Policy**
  - **Liaisons Overview**
  - **802.3dj Baseline Status**
  - **Ad hocs – Summary**
  - **IEEE P802.3df Comment Consideration (including supporting presentations)**
    - **Tenative Schedule: 11 Jul 1pm to 6pm (802.3dj presentations will continue at completion of 802.3df comment consideration)**
  - **IEEE P802.3dj Presentations (including discussion, strawpolls, and motions) – See Pages 22-26**
    - **Tentative Schedule: 10 Jul 1pm to 6pm; 11 Jul 8am to 12pm; 12 Jul 8am to 6pm, 13 Jul 8am to 12pm**
    - **Any presentations not heard this week will be given 18 – 20 July Electronic Meeting**
  - **Future Meetings**
    - **Task Force**
    - **Ad hocs**
  - **Closing Business**

* Note – additional slides covering procedures and IEEE-SA Policies are in Backup

Minutes to be Approved

- **IEEE P802.3cw /.3df / .3dj May 2023 Interim**
  - https://www.ieee802.org/3/dj/public/23_05/minutes_3cwdfdj_2305_a_unapproved.pdf

- **IEEE P802.3df 23 – 25 May Electronic Interim**
  - https://www.ieee802.org/3/df/public/23_0523/minutes_3df_230523_a_unapproved.pdf

- **IEEE P802.3cw June 2023 Electronic Series**
  - https://www.ieee802.org/3/cw/public/23_06/minutes_3cw_2306_unapproved.pdf

- **IEEE P802.3dj Electrical Ad hoc Electronic Meeting – 22 June 2023**
  - https://www.ieee802.org/3/dj/public/adhoc/electrical/23_0622/minutes_3dj_elec_230622.pdf

- **IEEE P802.3dj Joint Logic / Optics Ad hoc Electronic Meeting – 29 June 2023**
  - https://www.ieee802.org/3/dj/public/adhoc/optics/0623_OPTX/minutes_3dj_optx_230629_unapproved.pdf

Meeting Decorum

- **An officer is permitted to make an audio or slideshow recording of this meeting exclusively for the purpose of generating minutes which shall not be copied or distributed. IEEE 802.3 meetings do not use this option. Recording of the proceedings by any other participant or observer, in part or in whole, via any means, is prohibited. (Feb 2023 IEEE-SA Standards Board Ops Manual 5.3.3.2)**
- **Press (i.e., anyone reporting publicly on this meeting) are to announce their presence (Feb 2023 IEEE-SA Standards Board Ops Manual 5.3.3.3)**
- **Cell phone ringers off**
- **Please observe proper decorum in meetings**
- **Please mute your self when not speaking**
- **Please do not turn on video**

Attendance

- **All attendees must register their attendance via IMAT**

  - **IMAT –**
    - **Tutorial - http://ieee802.org/3/minutes/attendance_procedures.pdf**
    - **Access details**
      - **URL: http://imat.ieee.org/**
      - **802.3 Password – to be given out by chair at meeting**

- **Please be sure to sign-in with your name / affiliation information**
- **Zoom attendance will be used to identify remote attendance as well.**

IEEE P802.3cw Task Force Project information

- ▣ **Task Force Organization**
  - **John D'Ambrosia, Chair, IEEE P802.3cw Task Force**
  - **Editorial Team**
    - ➤ **Tom Issenhuth – Chief Editor, 400 GbE Optical PHY Clause**
    - ➤ **Leon Bruckman - 400 GbE PCS/PMA Clauses**

  - **Task force web and reflector information**
    - ➤ **Reflector: http://www.ieee802.org/3/ct/reflector.html**
    - ➤ **Home page: http://www.ieee802.org/3/cw/index.html**

  - **Project Documentation –**
    - ➤ **PAR : http://www.ieee802.org/3/cw/proj_doc/P802d3cw_PAR.pdf**
    - ➤ **CSD: https://mentor.ieee.org/802-ec/dcn/19/ec-19-0219-00-ACSD-p802-3cw.pdf**
    - ➤ **Objectives: http://www.ieee802.org/3/cw/proj_doc/3cw_Objectives_190911.pdf**
    - ➤ **Timeline: https://www.ieee802.org/3/cw/proj_doc/timeline_3cw_220321.pdf**

  - **Ad Hoc page: http://www.ieee802.org/3/ct/public/adhoc/index.html**

IEEE P802.3df Task Force Project information

- **Organization**
  - **John D'Ambrosia, Chair, IEEE P802.3dj Task Force**
  - **Mark Nowell, Vice-Chair, IEEE P802.3dj Task Force; Chair, Optics Track**
  - **Kent Lusted, Secretary, IEEE P802.3dj Task Force; Chair, Electrical Track**
  - **Matt Brown, IEEE P802.3dj Chief Editor**
  - **Mark Gustlin, Chair, Architecture and Logic Track**

- **Task force web and reflector information:**
  - **Home page: https://www.ieee802.org/3/df/index.html**
  - **Reflector Info - https://www.ieee802.org/3/df/reflector.html**
    - **TF Reflector: stds-802-3-b400g@listserv@ieee.org**
    - **Logic Reflector: stds-802-3-b400g-logic@listserv@ieee.org**
    - **Optical Reflector: stds-802-3-b400g-optx@listserv@ieee.org**
    - **Electrical Reflector: stds-802-3-b400g-elec@listserv@ieee.org**

- **Project Documentation –**
  - **PAR : https://www.ieee802.org/3/df/proj_doc/P802.3df_031222.pdf**
  - **CSD: https://mentor.ieee.org/802-ec/dcn/21/ec-21-0306-01-ACSD-p802-3df.pdf**
  - **Objectives: https://www.ieee802.org/3/df/proj_doc/objectives_P802d3df_221117.pdf**
  - **Adopted Timeline: https://www.ieee802.org/3/df/proj_doc/timeline_3df_221004.pdf**

- **P802.3df TF meeting information may be found on:**
  - **Public page: https://www.ieee802.org/3/df/public/index.html**
  - **802.3 Calendar: https://www.ieee802.org/3/calendar.html**

IEEE P802.3dj Task Force Project information

- **Organization**
  - **John D'Ambrosia, Chair, IEEE P802.3dj Task Force**
  - **Mark Nowell, Vice-Chair, IEEE P802.3dj Task Force; Chair, Optics Track**
  - **Kent Lusted, Secretary, Chair, Electrical Track**
  - **Matt Brown, IEEE P802.3dj Chief Editor**
  - **Mark Gustlin, Chair, Architecture and Logic Track**

- **Task force web and reflector information:**
  - **Home page: https://www.ieee802.org/3/df/index.html**
  - **Reflector Info - https://www.ieee802.org/3/df/reflector.html**
    - **TF Reflector: stds-802-3-b400g@listserv@ieee.org**
    - **Logic Reflector: stds-802-3-b400g-logic@listserv@ieee.org**
    - **Optical Reflector: stds-802-3-b400g-optx@listserv@ieee.org**
    - **Electrical Reflector: stds-802-3-b400g-elec@listserv@ieee.org**

- **Project Documentation –**
  - **PAR : https://www.ieee802.org/3/dj/projdoc/P802d3dj_PAR.pdf**
  - **CSD: https://mentor.ieee.org/802-ec/dcn/22/ec-22-0256-00-ACSD-p802-3dj.pdf**
  - **Objectives: https://www.ieee802.org/3/dj/projdoc/objectives_P802d3dj_221117.pdf**
  - **Adopted Timeline: https://www.ieee802.org/3/dj/projdoc/timeline_3dj_230116.pdf**

- **P802.3df TF meeting information may be found on:**
  - **Public page: https://www.ieee802.org/3/df/public/index.html**
  - **802.3 Calendar: https://www.ieee802.org/3/calendar.html**
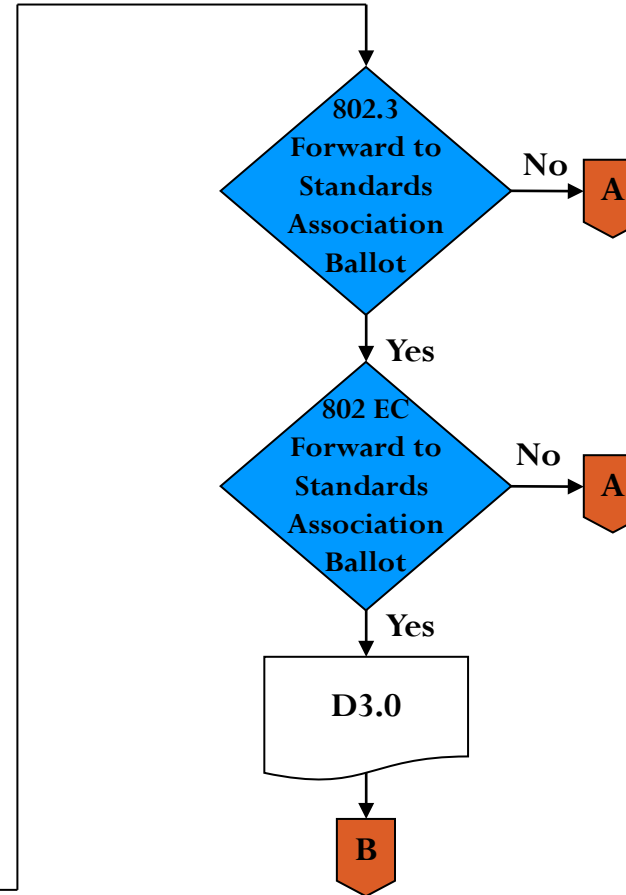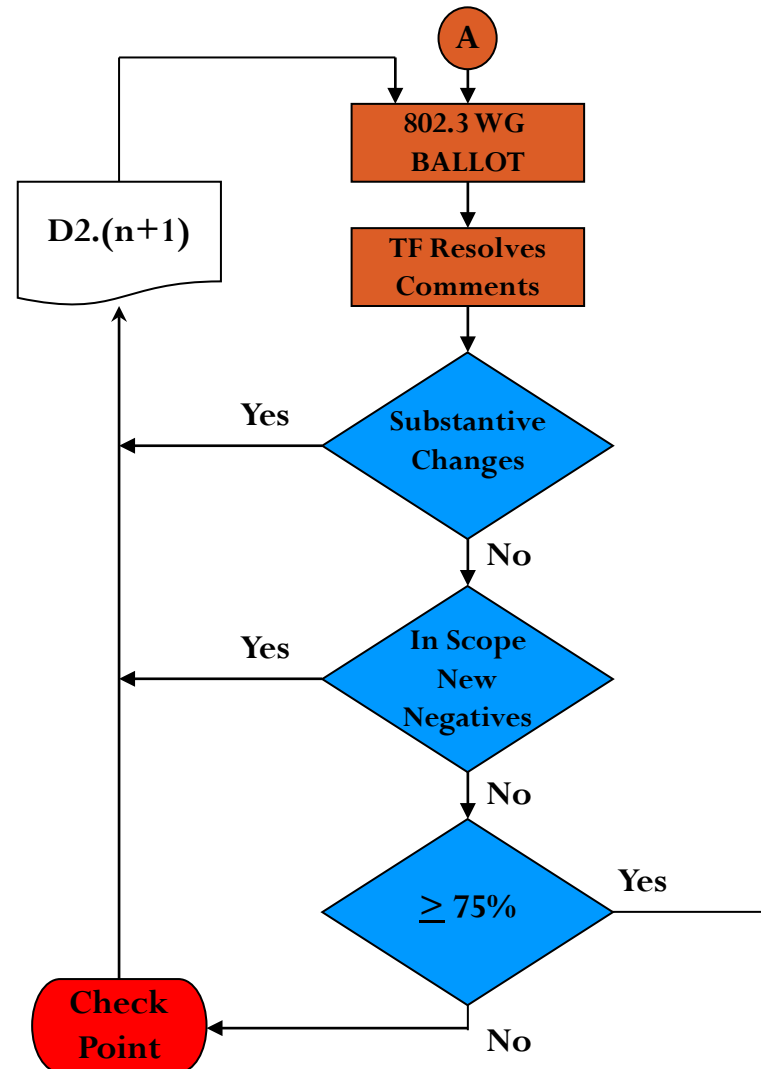
Goals for the Session

- **IEEE P802.3cw**
  - **Consider proposed liaison to OIF**

- **IEEE P802.3df**
  - **Chief Editor's Report**
  - **Address comments submitted during 1st WG Recirculation Ballot**
    - **Hear technical presentation**
  - **Request approval to proceed to IEEE SA Ballot**

- **IEEE P802.3dj**
  - **Hear technical presentations and proposed baselines**
  - **Consider liaison from OIF**

Ground Rules

- **Based upon IEEE 802.3 Rules**
  - **Foundation based upon Robert's Rules of Order**
  - **Anyone in the room may speak**
  - **Anyone in the room may vote on straw polls, but we have to follow 802.3 Voting rules**
- **RESPECT… give it, get it**
- **NO product pitches**
- **NO corporate pitches**
- **NO prices!!!**
  - **This includes costs, ASPs, etc. no matter what the currency**
- **NO restrictive notices**

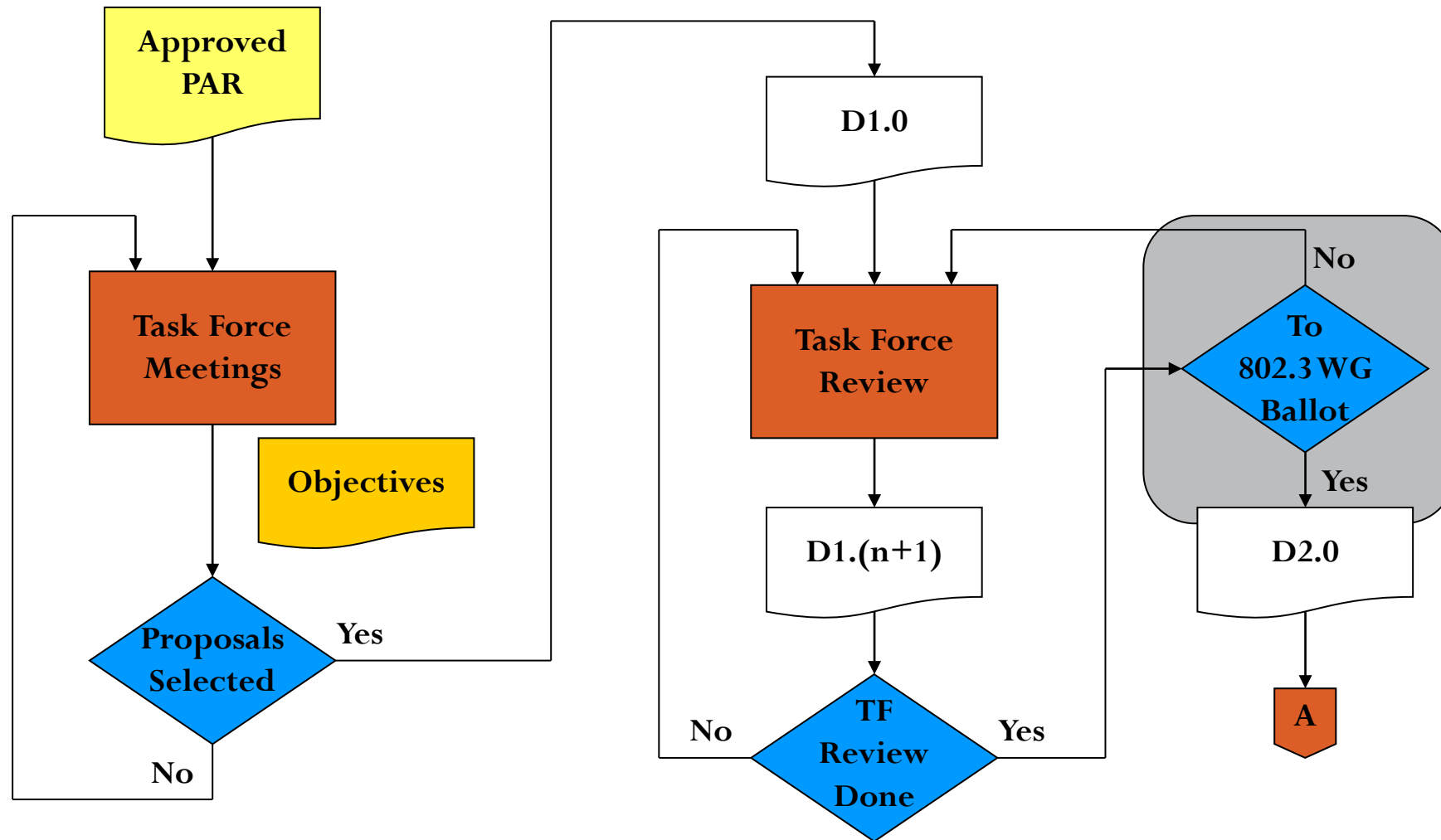**802.3cw 802.3 df - We are here**

Notes: At "Check Point", either the activity is ended, or there may be various options that would allow reconsideration of the approval.

See 802.3 Operating Rules 2.6 and listed references for complete description

Overview of IEEE 802.3 Standards Process (2/5) – Task Force Comment Phase (802.3dj)

Voting

- Mar 2023 IEEE 802.3 Task Force Meeting has been classified by 802.3 WG Chair as "mixed mode"
  - See https://www.ieee802.org/3/email_dialog/msg01401.html

- Reference: Excerpt from Section 3.4.2, IEEE 802.3 Operations Manual
  - http://www.ieee802.org/3/rules/P802_3_rules.pdf

  There are two type of votes in the TF; votes on motions and votes in straw polls.

  In face-to-face meetings where a TF is operating with membership rules for voting (see 3.3) only the TF members may make and vote on motions. In face-to-face meetings where membership rules are not in force all TF participants may make and vote on motions, subject only to the provision that they believe that they are qualified to vote on the matter before the TF. **Electronic meetings that will consider motions shall be approved by the WG Chair prior to the meeting announcement. In such meetings only IEEE 802.3 Working Group members may make and vote on motions. If a motion is not approved by unanimous consent it shall be taken as a roll call vote**

  In all cases, regardless of any membership rules that may or may not be in force, all participants who feel qualified may participate in a straw poll

  Note – Chair reserves the right to take informative straw polls by 802.3 WG voting membership

- IEEE 802.3 Requirements for Working Group voting membership – https://www.ieee802.org/3/rules/member.html

Review of IEEE SA Policies

- **Email reminders**
  - **IEEE P802.3cw – https://www.ieee802.org/3/ct/email/msg01056.html**
  - **IEEE P802.3df / .3dj - https://www.ieee802.org/3/B400G/email/msg00831.html**

  sent to Task Force Reflector reminding all to review and be familiar with following policies:
  - **Patent Policy**
  - **Copyright Policy**
  - **Participation**
- **See Backup for slides**

Liaisons Overview (As of 06 July 2023)

- **Incoming:**

  - [IEEE P802.3df] From OIF to IEEE 802.3: 800LR

  - https://www.ieee802.org/3/minutes/jul23/incoming/OIF_liaison_letter_IEEE_800LR_16May23_Redacted.pdf

- **Outgoing:**

  - [IEEE P802.3cw] To OIF – Request for information related to EVM

    - Proposed Liaison - https://www.ieee802.org/3/cw/public/23_07/dambrosia_3cw_01_2307_Redacted.pdf

Summary Progress @ End of May 2023 Interim Meeting – Logic (>=200G/lane)

Ethernet Rate	AUI PCS/FEC/PMA?	Backplane PCS/FEC/PMA?	CU Cable PCS/FEC/PMA?	SMF 500m/2km PCS/FEC/PMA?	SMF 10km 4 Wavelength PCS/FEC/PMA?	SMF 10km 1 Wavelength PCS/FEC/PMA?	SMF 40km PCS/FEC/PMA?
200 Gb/s				With many open issues			
400 Gb/s				With many open issues			
800 Gb/s				With many open issues	With many open issues	Two competing proposals	
1.6 Tb/s							

Adopted baselines   Proposed Baselines

Summary Progress @ End of May 2023 Interim Meeting - PMDs

Ethernet Rate	Assumed Signaling Rate	AUI	Backplane	Cu Cable	SMF 500m	SMF 2km	SMF 10km	SMF 40km
200 Gb/s	200 Gb/s	200GAUI-1 C2C C2M	200GBASE-KR1	200GBASE-CR1	200GBASE-DR1	200GBASE-FR1		
400 Gb/s	200 Gb/s	400GAUI-2 C2C C2M	400GBASE-KR2	400GBASE-CR2	400GBASE-DR2	400GBASE-DR2-2		
800 Gb/s	200 Gb/s	800GAUI-4 C2C C2M	800GBASE-KR4	800GBASE-CR4	800GBASE-DR4	1. 800GBASE-DR4-2 2. 800GBASE-FR4	800GBASE-LR4	
800 Gb/s	800 Gb/s						Over single SMF in each direction Coherent	Over single SMF in each direction Coherent
1.6 Tb/s	100 Gb/s	1.6TAUI-16 C2C C2M						
1.6 Tb/s	200 Gb/s	1.6TAUI-8 C2C C2M	1.6TBASE-KR8	1.6TBASE-CR8	1.6TBASE-DR8	1.6TBASE-DR8-2		

Adopted baselines   **Proposed Baselines**

IEEE P802.3df Ad Hocs

Announcement - **https://www.ieee802.org/3/B400G/email/msg00257.html**

1. **Architecture and Logic Ad hoc – Mark Gustlin, Ad Hoc Chair**

    Charter: The Architecture and Logic Ad Hoc is chartered to address the following:

    1) Develop terminology and definitions for terms related to architecture, including but not limited to FEC Architecture, FEC Scheme, End-to-end FEC, Segmented FEC, Concatenated FEC. Draft definitions to be presented to Task Force at May 2022 session.

    2) Act as forum to discuss architectural requirements and consider proposals related to PCS, FEC, and PMA logic sublayers.

2. **Electrical Ad Hoc – Kent Lusted, Ad Hoc Chair**

    Charter: The Electrical Ad Hoc is chartered to address the following:

    1) Act as forum to discuss and consider technical proposals and contributions:

        a. Related to electrical interfaces and electrical PMD sublayers

        b. Related to logic PCS, FEC, and PMA sublayers that may impact electrical interfaces and electrical PMD sublayers

        c. Electrical interfaces and electrical PMD nomenclature

    2) Provide inputs based on electrical interfaces and electrical PMD sublayers into any relevant ad hocs

3. **Optics Ad Hoc – Mark Nowell, Ad Hoc Chair**

    Charter: The Optical Ad Hoc is chartered to address the following:

    1) Act as forum to discuss and consider technical proposals and contributions:

        a. Related to optical PMD sublayers

        b. Related to logic PCS, FEC, and PMA sublayers that may impact optical PMD sublayers

        c. Optical PMD nomenclature

    2) Provide inputs based on optical PMDs into any relevant ad hocs

Ad hoc Summary

- **802.3dj Ad Hoc Meetings**
  - **Joint Logic / Optics Ad hoc (15th, 29th June)**
    - **https://www.ieee802.org/3/dj/public/adhoc/optics/0623_OPTX/index.html**

  - **Electrical Ad hoc (22nd June)**
    - **https://www.ieee802.org/3/dj/public/adhoc/electrical/index.html**
    - **Update – https://www.ieee802.org/3/dj/public/23_07/lusted_3dj_01_2307.pdf**

July 2023 Session (1 of 5)

Mon	10-Jul-23		4	
Time	Presenter	Affiliation	Title	File Name
1:00 PM	John D'Ambrosia	Futurewei, U.S. Subsidiary of Huawei	Agenda and General Information	agenda_3dfdj_2307
1:30 PM	Matt Brown	Alphawave	IEEE P802.3df Chief Editor's Report	brown_3df_01_2307
1:45 PM	Motion - 802.3df Bucket Motion			
2:00 PM	Xiang He	Huawei	4x RS Codeword Interleaving Proposal for 200 GbE and 400 GbE (update July 2023)	he_3dj_02_2307
2:30 PM	Eugene Opsanick	Broadcom	Stateless 64B/66B PCS Coding for all 200G/Lane Breakout Interfaces	opsanick_3dj_01_2307
2:50 PM	Kent Lusted	Intel	IEEE P802.3dj Electrical Ad Hoc Update	lusted_3dj_01_2307
3:05 PM	Break			
3:25 PM	Rich Mellitz	Samtec	Next Steps for COM (Channel Operating Margin)	mellitz_3dj_01_2307
3:55 PM	Howard Heck	Intel	Update to IEEE P802.3dj 200Gbps/lane AUI C2M channels	akinwale_3dj_01_2307
4:25 PM	Kent Lusted	Intel	200 Gbps/lane AUI C2M Channel Selection Criteria Update	lusted_3dj_05_2307
4:55 PM	Tobey Li	MediaTek	Updates on Baseline Proposal for 200Gbps/Lane High-Loss AUIs	lit_3dj_01_2307
5:25 PM	Discussion & Strawpolls			
6:00 PM	Recess for Day			

July 2023 Session (2 of 5)

All times and order listed are subject to change.
See meeting webpage for latest presentation version

Tues	11-Jul-23			
Time	Presenter	Affiliation	Title	File Name
8:00 AM	John D'Ambrosia	Futurewei, U.S. Subsidiary of Huawei	Chair's Opening Comments	
8:10 AM	Mike Li	Intel	212.5 Gbps PAM4 COM Link Simulations and Analyses for CR and KR Channels	lim_3dj_03_2307
8:30 AM	Chris Diminico	PHY-SI/SenTekse/MC Communications	802.3dj- CR Considerations for Insertion Loss Budget Baseline	diminico_3dj_01_2307
9:00 AM	Nathan Tracy	TE Connectivity	A possible path to more flexible architectures and longer reach passive copper cables	tracy_3dj_01_2307
9:30 AM	Kent Lusted	Intel	Cl 73 AN Baseline Proposal	lusted_3dj_06_2307
10:00 AM	Break			
10:20 AM	Kechao Huang	Huawei	Consideration on Framing Sequence for Type 2 Inner FEC	huang_3dj_01_2307
10:50 AM	Xiang He	Huawei	A consensus baseline proposal for inner FEC processing rate for Type-2 PHYs	he_3dj_01_2307
11:20 AM	Xiang He	Huawei	Inner Codeword Self-sync Proposal	he_3dj_03_2307
12:00 PM	Lunch			
1:00 PM	IEEE P802.3df D2.1 Comment Consideration			
3:00 PM	Break			
3:20 PM	IEEE P802.3df D2.1 Comment Consideration			
6:00 PM	Recess for Day			

Wed	12-Jul-23			
	Presenter	Affiliation	Title	File Name
8:00 AM	John D'Ambrosia	Futurewei, U.S. Subsidiary of Huawei	Chair's Opening Comments	
8:05 AM	John D'Ambrosia	Futurewei, U.S. Subsidiary of Huawei	The State of Link Budgeting	dambrosia_3dj_01_2307
8:25 AM	Ali Ghiasi	Ghiasi Quantum / Marvell	The merits of Common AUI Application	ghiasi_3dj_02_2307
8:55 AM	Adee Ran	Cisco	Error budgets for AUIs within a PHY	ran_3dj_01_2307
9:25 AM	Gary Nicholl	Cisco	Thoughts on AUI BER budgeting when considering electrical and optical interfaces	nicholl_3dj_01_2307
9:55 AM	Break			
10:15 AM	Kent Lusted	Intel	200G/lane AUI BER Targets inside Type 1 and Type 2 PHYs	lusted_3dj_04_2307
10:45 AM	Discussion & Strawpolls			
11:30 AM	Ali Ghiasi	Ghiasi Quantum / Marvell	Extending Link Training to Optics	ghiasi_3dj_01_2307
12:00 PM	Lunch			
1:00 PM	Guangcan Mi	Huawei	Impacts of FEC architectures on optical baselines and manufacturing	mi_3dj_01_2307
1:25 PM	Brian Welch	Cisco	Continuing Work on Inner_FEC Bypass: Path Forward	welch_3dj_04_2307
1:45 PM	Brian Welch	CIsco	800GBASE-FR4 with Inner_FEC bypass	welch_3dj_03_2307
2:15 PM	Maxim Kuschnerov	Huawei	TDECQ metric based on FFE+MLSE	stojanovic_3dj_01_2307
2:40 PM	Brian Welch	Cisco	Baseline proposals for 200G/L PMD specifications for single wavelength 500m and 2km standards	welch_3dj_01_2307
3:00 PM	Break			
3:20 PM	John Johnson	Broadcom	Baseline CDq Values for 800GBASE-FR4	johnson_3dj_01_2307
3:45 PM	Brian Welch	Cisco	Consensus Building on 800GBASE-FR4	welch_3dj_02_2307
4:10 PM	Xiang Liu	Huawei	Baseline CDQ Values for 800GBASE-LR4	liu_3dj_01_2307
4:40 PM	Roberto Rodes	Coherent	Towards an 800G-LR4 IMDD Specification Consensus - July 2023 update	rodes_3dj_01_2307
4:55 PM	Discussion & Strawpolls			
6:00 PM	Recess for Day			

All times and order listed are subject to change.
See meeting webpage for latest presentation version

Thurs	13-Jul-23	IEEE P802.3dj		
	Presenter	Affiliation	Title	File Name
8:00 AM	John D'Ambrosia	Futurewei, U.S. Subsidiary of Huawei	Chair's Opening Comments	
8:05 AM	Kishore Kota	Marvell	Towards 800GBASE-LR1/ER1 PHY Baseline Decisions	kota_3dj_02_2307
8:35 AM	Kishore Kota	Marvell	Logic Baseline proposal for 800G single-wavelength coherent PHY with concatenated FEC	kota_3dj_01_2307
9:05 AM	Eric Maniloff	Ciena	Baseline proposals for 10 & 40 km 800 Gb/s single wavelength optical specifications	maniloff_3dj_01_2307
9:30 AM	Gary Nicholl	Cisco	Updated logic baseline proposal for an 800GbE coherent PHY based on oFEC/C-band	nicholl_3dj_02_2307
10:00 AM	Break			
10:20 AM	Peter Stassar	Huawei	Proposals for coherent PMDs in P802.3dj	stassar_3dj_01_2307
10:40 AM	Discussion, Strawpolls, Motions			
11:30 AM	Closing Business			
12:00 PM	Adjourn			

The following presentations will be heard this week if time permits.
Otherwise, these presentations will be heard @ announced electronic meeting for 18 – 20 July.

Liav Ben-Artsi	Marvell	Budgeting a Bump to Bump Loss for Interoperability	benartsi_3dj_01_2307
Mike Li	Intel	Reference Die/Device Model and Parameters for 802.3df COM Baseline	lim_3dj_01_2307
Kent Lusted	Intel	Electrical Interface and Electrical PHY Baseline Status	lusted_3dj_02_2307
Mike Li	Intel	Reference Package Model and Parameters Towards COM Baseline	lim_3dj_02_2307
Adee Ran	Cisco	Proposal for package model and parameters for large devices	ran_3dj_03_2307
Liav Ben-Artsi	Marvell	A path forward following lack of complete consensus on COM package models	benartsi_3dj_02_2307
Kent Lusted	Intel	BER/SER/DER_0 Relationships	lusted_3dj_03_2307
Adee Ran	Cisco	Defining separate specifications and nomenclature for electrical interfaces ("AUIs") within an xGMII	ran_3dj_02_2307

Future Meetings

IEEE P802.3cw: https://www.ieee802.org/3/cw/public/index.html
IEEE P802.3df: https://www.ieee802.org/3/df/public/index.html
IEEE P802.3dj: https://www.ieee802.org/3/dj/public/index.html

- Joint IEEE P802.3df / .3dj TF Electronic Interim
  - 11 – 13 July ,2023

- IEEE P802.3cw Comment Consideration (2nd WG Recirculation)
  - To Be Announced

- IEEE P802.3df Comment Consideration (2nd WG Recirculation), if necessary
  - To Be Announced

- Joint IEEE P802.3cw / .3df / .3dj TF Sept 2023 Interim
  - Week of Sept 11 – 14, 2023
  - Campinas, Brazil

- Joint IEEE P802.3cw / .3df / .3dj TF Nov 2023 Plenary
  - Week of Nov 13 – 16, 2023
  - Hawaiian Village
  - Oahu, Hawaii, USA

- Any additional meetings will be announced, as appropriate.

Future Ad hoc Meetings

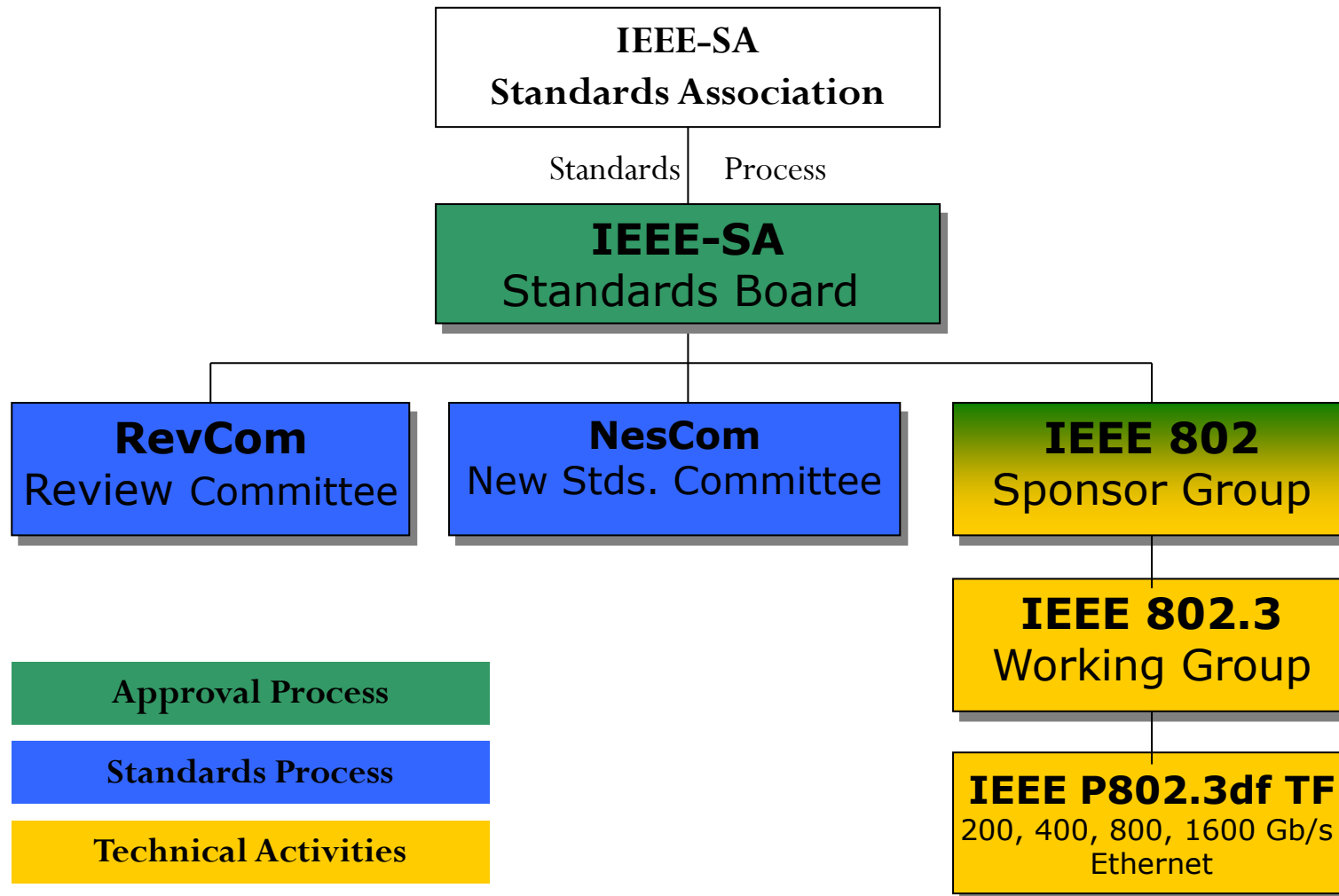- **To Be Announced**

THANK YOU!

BACKUP

The Role of the Chair / Vice Chair

- **Per the IEEE 802.3 Ethernet WG Operations Manual (http://www.ieee802.org/3/rules/P802_3_rules.pdf)**

    - **Per 3.4 - Operation of the Task Force**

        - **The operation of the TF has to be balanced between democratic procedures that reflect the desires of the TF members and the TF Chair's responsibility to produce a draft standard, recommended practice, or guideline in a reasonable amount of time for review and approval by the WG. Robert's Rules of Order shall be used in combination with these operating rules to achieve this balance.**

    - **The full responsibilities of the chair are specified in 3.4.3 Task Force Chair's Responsibilities.**

    - **The Role of the Vice Chair is specified in 3.2 –**

        - **There may be a TF Vice-Chair. A TF Vice-Chair carries out the TF Chair's duties if the TF Chair is temporarily unable to do so or chooses to delegate specific duties.**

- **Reminders –**

    - **We are a contribution driven organization.   It should not be assumed by anyone that work will just get done without contributions to drive it. Areas not moving forward will be brought to the attention of the Task Force for consideration on how to address.**

    - **Individual standards activities within the WG are, at the discretion of the WG, carried out by Task Forces (TF) operating under, and reporting to, the WG.**
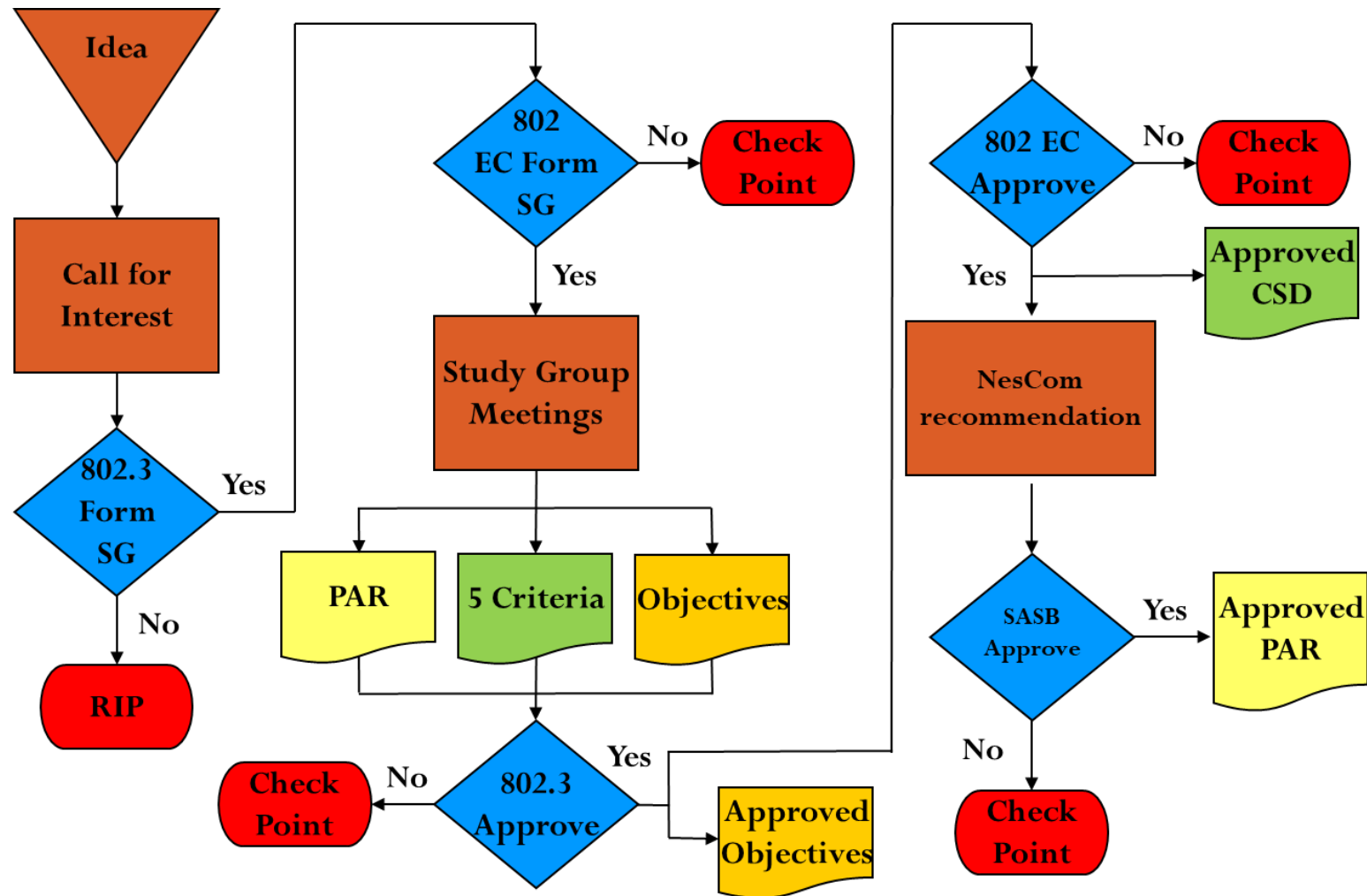
IEEE Structure

```
              ┌─────────────────────────┐
              │         IEEE-SA          │
              │   Standards Association  │
              └─────────────────────────┘
                   Standards │ Process
              ┌─────────────────────────┐
              │         IEEE-SA          │
              │     Standards Board      │
              └─────────────────────────┘
```

RevCom	NesCom	IEEE 802
Review Committee	New Stds. Committee	Sponsor Group

```
                                    ┌──────────────────┐
                                    │     IEEE 802.3    │
                                    │   Working Group   │
                                    └──────────────────┘

                                    ┌──────────────────┐
                                    │  IEEE P802.3df TF │
                                    │ 200, 400, 800, 1600 Gb/s │
                                    │      Ethernet     │
                                    └──────────────────┘
```

Legend:

| Approval Process |
| Standards Process |
| Technical Activities |

Important Bylaws, Rules, and References
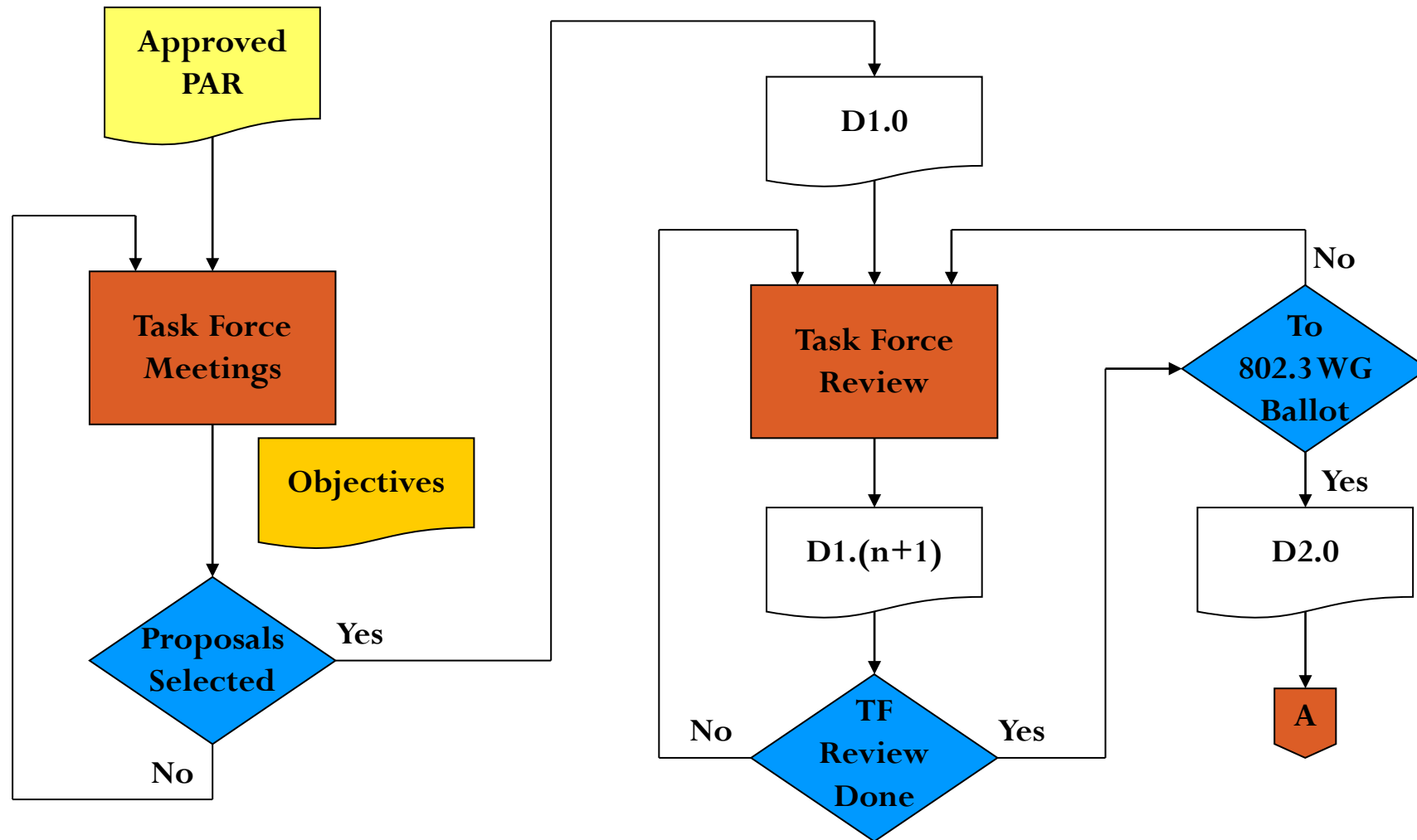
- **IEEE-SA Operations Manual**
  http://standards.ieee.org/develop/policies/sa_opman/
- **IEEE-SA Standards Board Bylaws**
  http://standards.ieee.org/develop/policies/bylaws/
- **IEEE-SA Standards Board Operations Manual**
  http://standards.ieee.org/develop/policies/opman/
- **IEEE 802 LAN/MAN Standards Committee (LMSC) Policies and Procedures**
  https://ieee.app.box.com/v/PandP-LMSC
- **IEEE 802 LAN/MAN Standards Committee (LMSC) Operations Manual**
  http://www.ieee802.org/devdocs.shtml
- **IEEE 802 LAN/MAN Standards Committee (LMSC) Working Group (WG) Policies and Procedures**
  http://www.ieee802.org/devdocs.shtml
- **IEEE 802.3 Working Group Operating Rules**
  http://ieee802.org/3/rules/P802_3_rules.pdf

- **"Promoting Competition and Innovation: What You Need to Know about the IEEE Standards Association's Antitrust and Competition Policy"**
  http://standards.ieee.org/develop/policies/antitrust.pdf

Overview of IEEE 802.3 Standards Process (1/5)- Study Group Phase
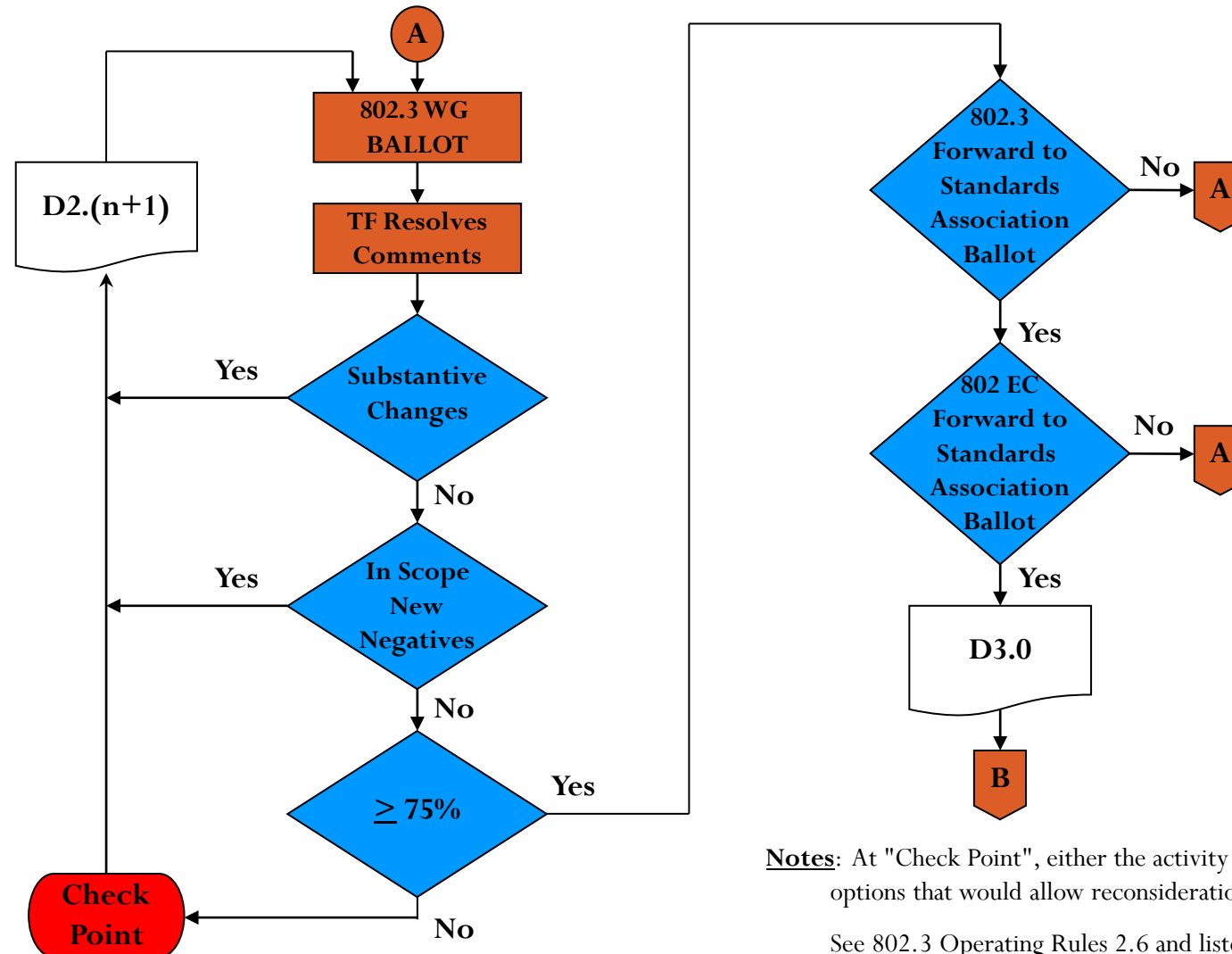

Note: At "Check Point", either the activity is ended, or there may be various options that would allow reconsideration of the approval.

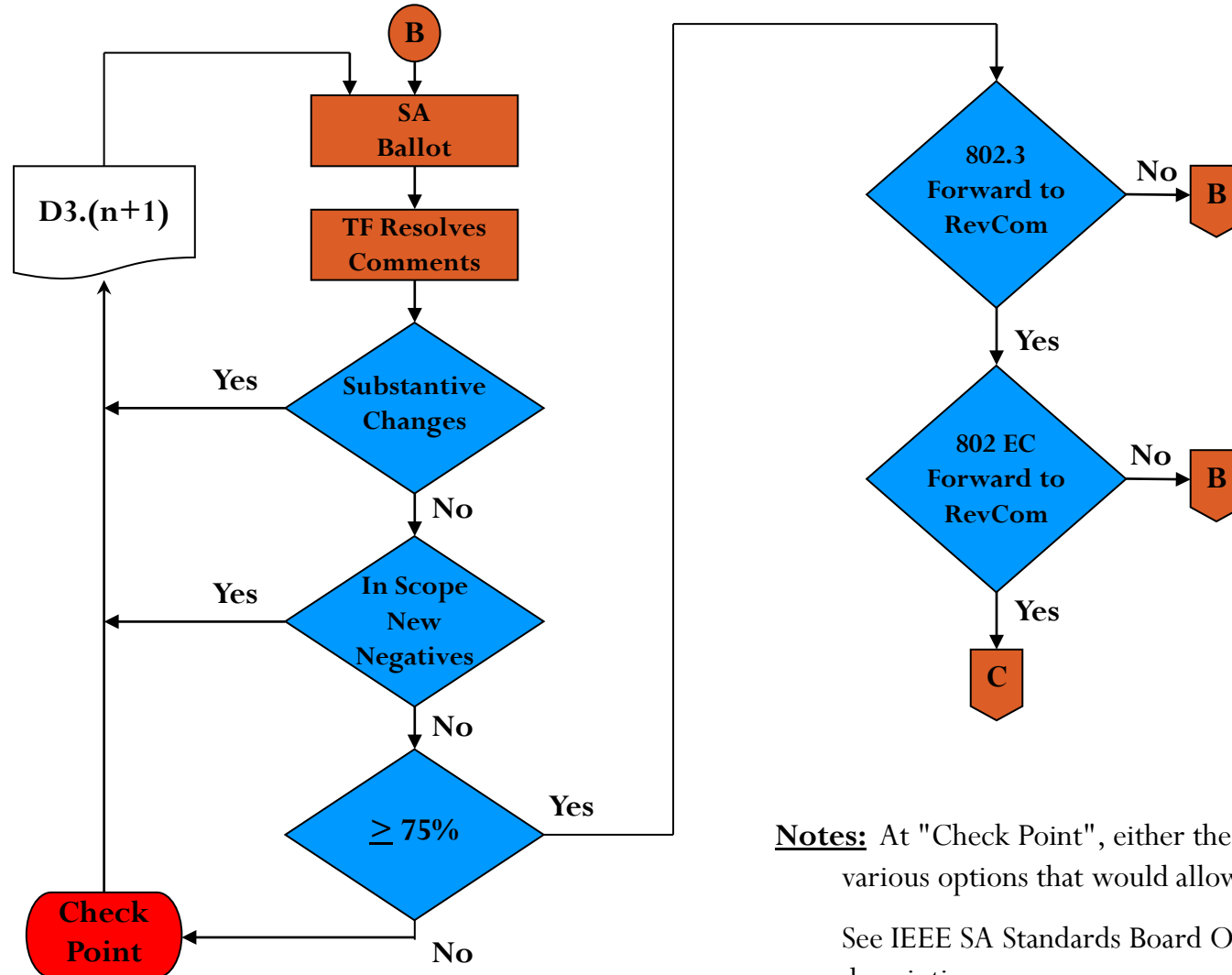# Overview of IEEE 802.3 Standards Process (2/5) – Task Force Comment Phase

Overview of IEEE 802.3 Standards Process (3/5) – Working Group Ballot Phase

Notes: At "Check Point", either the activity is ended, or there may be various options that would allow reconsideration of the approval.

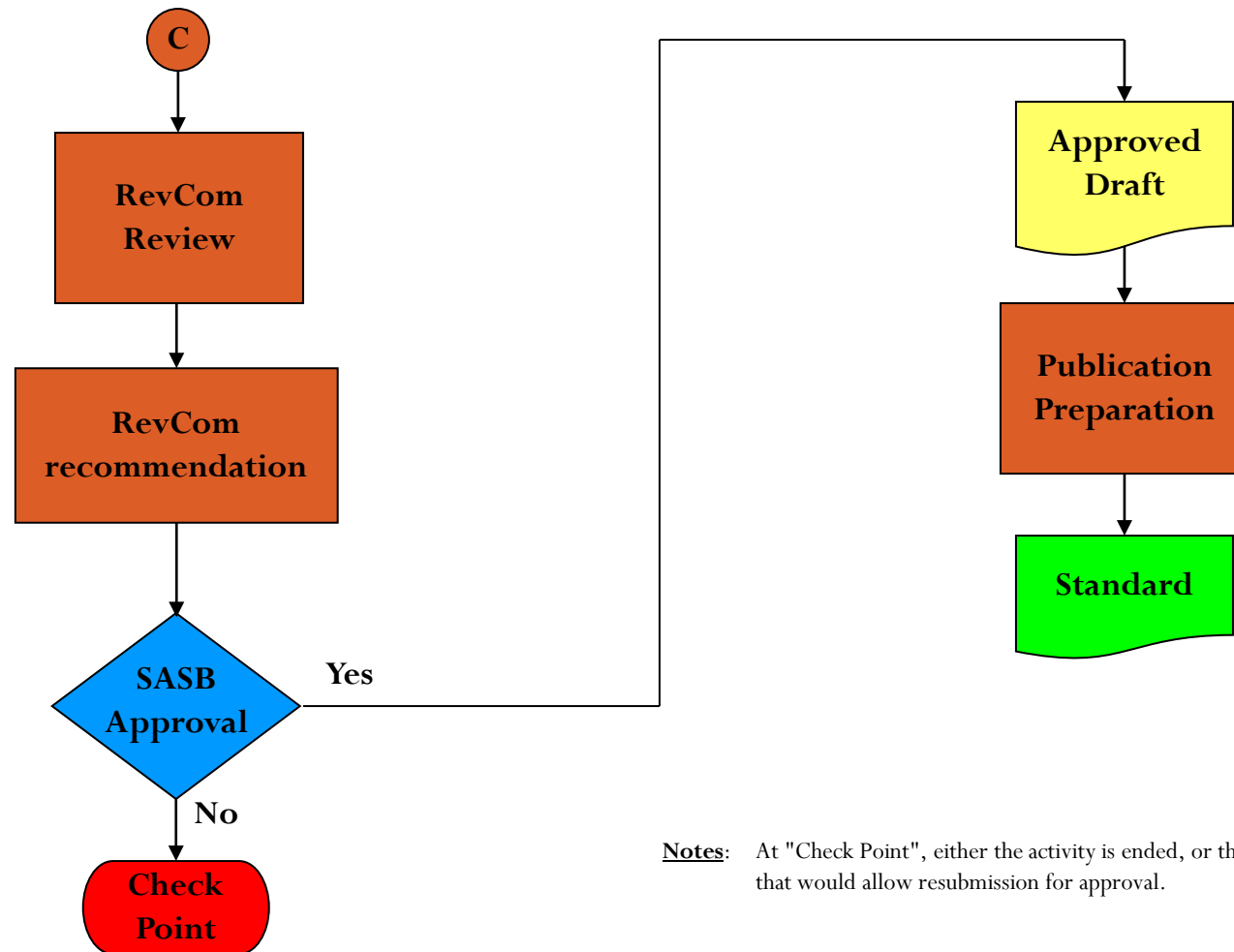See 802.3 Operating Rules 2.6 and listed references for complete description

Overview of IEEE 802.3 Standards Process (4/5)- Standards Association (SA) Ballot Phase

Notes: At "Check Point", either the activity is ended, or there may be various options that would allow reconsideration of the approval.

See IEEE SA Standards Board Operation Manual 5.4 for complete description.

Overview of IEEE 802.3 Standards Process (5/5) – Final Approvals / Standard Release

Notes: At "Check Point", either the activity is ended, or there may be various options that would allow resubmission for approval.

IEEE SA POLICIES

IEEE SA PATENT POLICY

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 <u>shall</u> 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 <u>should</u> 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**

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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 Working Group 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. Formally object to the discussion immediately.

- 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**

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IEEE SA COPYRIGHT POLICY

Instructions for Chairs of standards development activities

- **At the beginning of each standards development meeting the chair or a designee is to:**

  - Show the following slides (or provide them beforehand)
  - Advise the standards development group participants that:
  - IEEE SA's copyright policy is described in Clause 7 of the IEEE SA Standards Board Bylaws and Clause 6.1 of the IEEE SA Standards Board Operations Manual;
  - Any material submitted during standards development, whether verbal, recorded, or in written form, is a Contribution and shall comply with the IEEE SA Copyright Policy;
  - Instruct the Secretary to record in the minutes of the relevant meeting:
  - That the foregoing information was provided and that the copyright slides were shown (or provided beforehand).

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IEEE SA Copyright Policy

- **By participating in this activity, you agree to comply with the IEEE Code of Ethics, all applicable laws, and all IEEE policies and procedures including, but not limited to, the IEEE SA Copyright Policy.**

    - Previously Published material (copyright assertion indicated) shall not be presented/submitted to the Working Group nor incorporated into a Working Group draft unless permission is granted.
    - Prior to presentation or submission, you shall notify the Working Group Chair of previously Published material and should assist the Chair in obtaining copyright permission acceptable to IEEE SA.
    - For material that is not previously Published, IEEE is automatically granted a license to use any material that is presented or submitted.

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IEEE SA Copyright Policy

- The IEEE SA Copyright Policy is described in the IEEE SA Standards Board Bylaws and IEEE SA Standards Board Operations Manual

- IEEE SA Copyright Policy, see
  Clause 7 of the IEEE SA Standards Board Bylaws
  https://standards.ieee.org/about/policies/bylaws/sect6-7.html#7
  Clause 6.1 of the IEEE SA Standards Board Operations Manual
  https://standards.ieee.org/about/policies/opman/sect6.html

- IEEE SA Copyright Permission
  - https://standards.ieee.org/content/dam/ieee-standards/standards/web/documents/other/permissionltrs.zip

- IEEE SA Copyright FAQs
  - http://standards.ieee.org/faqs/copyrights

- IEEE SA Best Practices for IEEE Standards Development
  - http://standards.ieee.org/content/dam/ieee-standards/standards/web/documents/other/best_practices_for_ieee_standards_development_051215.pdf

- Distribution of Draft Standards (see 6.1.3 of the SASB Operations Manual)
  - https://standards.ieee.org/about/policies/opman/sect6.html

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IEEE SA PARTICIPATION SLIDES

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