

IEEE Industry Applications Society  
Petroleum and Chemical Industry Committee  
Standards Subcommittee

# Working Group Officers' Workshop

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San Francisco, CA USA  
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# Agenda

- IEEE Standards Association
- Standards Development Lifecycle
  - Initiating the Project
  - Mobilizing the Working Group
  - Drafting the Standard
  - Sponsor Ballot
  - Gaining Final Approval
  - Maintaining the Standard

# IEEE Standards Association (IEEE-SA)



# Standards Development Process

Standards development process is guided by five principles:

- Due process - Having highly visible procedures for standards creation and following them.
  - Sponsor P&Ps on the PCIC website
- Openness - All interested parties can participate in the IEEE standards development process
- Consensus - A clearly defined percentage of those in a balloting group vote to approve a draft of the standard
- Balance - Balloting groups include all interested parties. No one party has an overwhelming influence in the balloting group.
- Right of appeal - Anyone may appeal a standards development decision at any point, before or after a standard has been approved.

# Standards Board Committees That You Will Work With

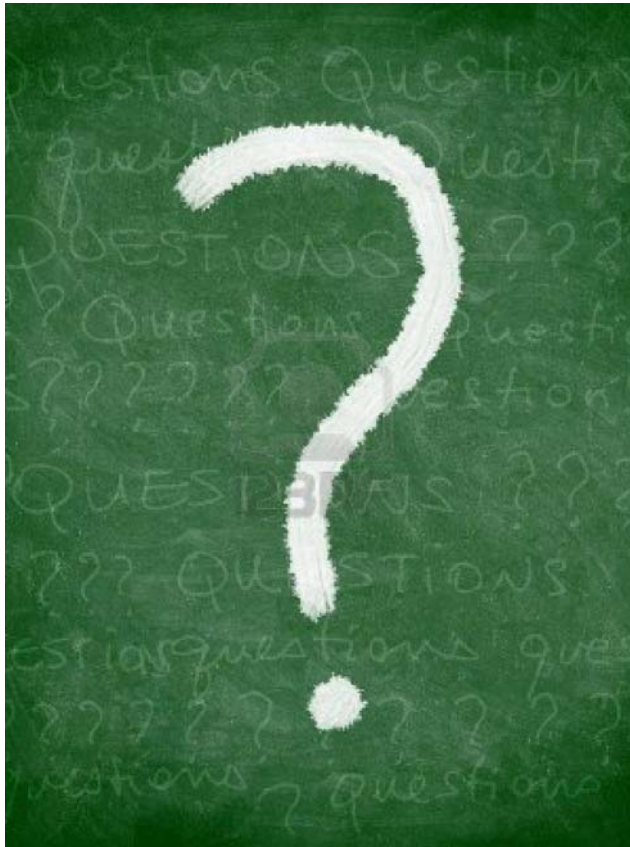
- **IEEE-SA Standards Board (SASB)** oversees the standards development process.
- **SASB Committees:**
  - **New Standards Committee (NesCom)** recommends approval of project authorization requests (PARs) to the SASB.
  - **Review Committee (RevCom)** recommends approval of standards to the SASB.
  - **Audit Committee (AudCom)** oversees the standards development activities. Reviews Sponsor and Working Group Policies and Procedures.
  - **Procedures Committee (ProCom)**
  - **Patents Committee (PatCom)**

## SASB Primary Governing Documents:

- SASB Bylaws: <http://standards.ieee.org/develop/policies/bylaws/index.html>
- SASB Operations Manual: <http://standards.ieee.org/develop/policies/opman/>

# Sponsor - IAS PCIC Standards Subcommittee

- Per Sponsor P&Ps (available on the PCIC website)
  - Standards SC membership includes the PCIC officers, WG officers, and appointed standards liaison representatives
  - Standards SC Officers are appointed by the PCIC Chair (2 yrs)
  - Other individuals may request membership in the Standards Subcommittee.
    - Requests must be addressed to the Standards SC Chair.
    - Become voting member after attending two meetings
    - Maintain voting rights through active participation



# Questions?

# Standards Development Lifecycle



# Stage 1— Initiating the Project

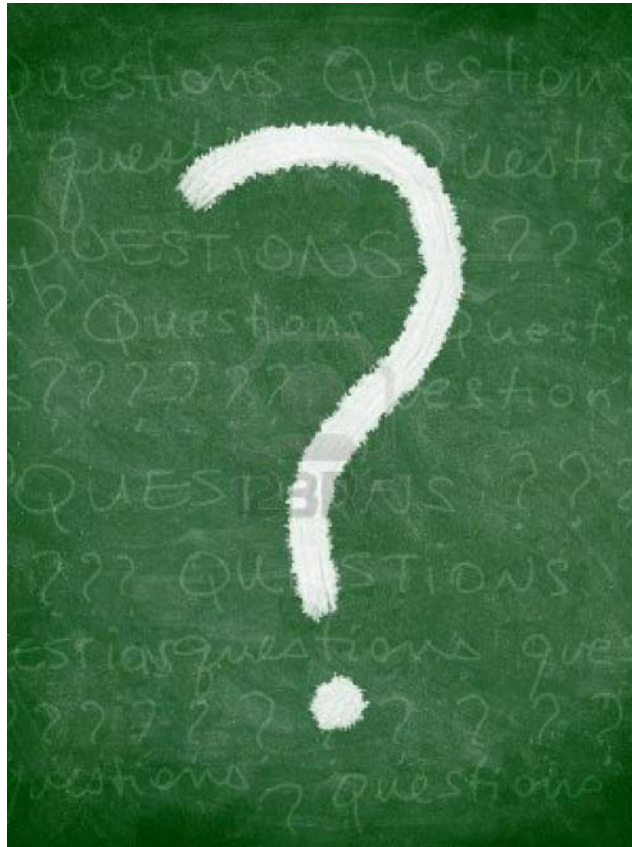


# Project Authorization Request (PAR)

- To initiate a project, a PAR must be submitted to NesCom
  - Short, structured, and highly detailed document that essentially states the reason for the project and what it intends to do
    - New PAR (for standard, amendment, or corrigendum)
    - Revision PAR
  - SA members can submit
- PAR is placed on an upcoming NesCom agenda, pending Sponsor approval

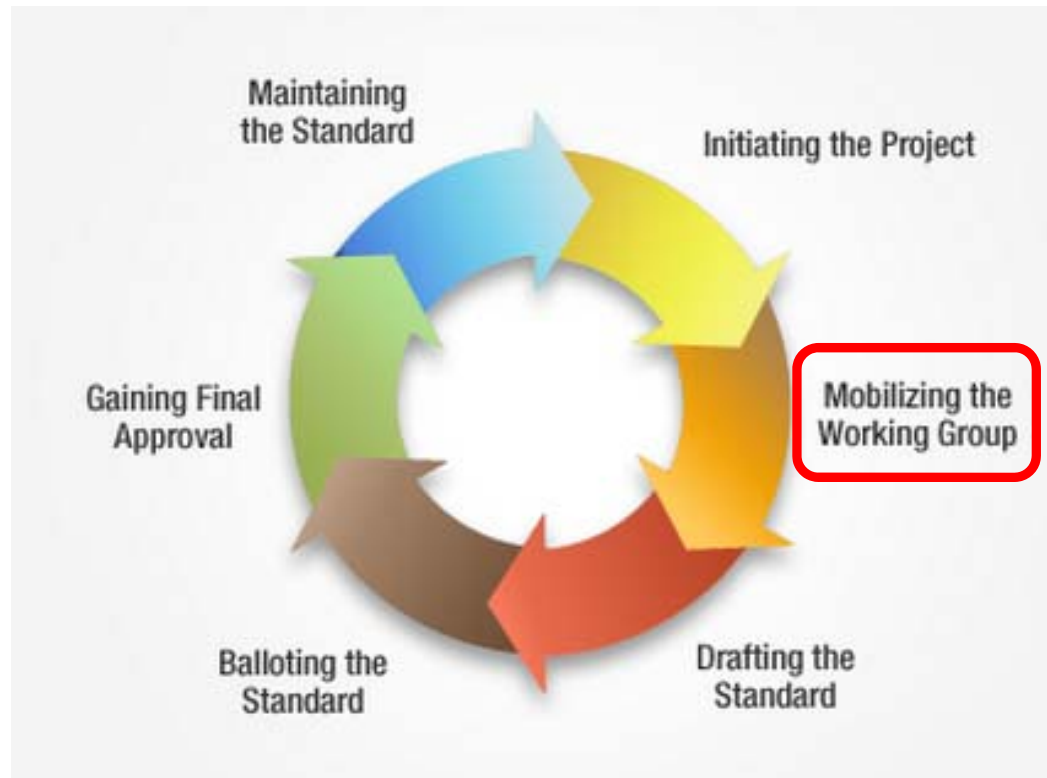
# Project Authorization Request (PAR)

- NesCom reviews the PAR and may submit comments or questions, which must be answered by the WG Chair
  - Failure to respond is an automatic deferral of the PAR to the following agenda
- The PAR is voted on by NesCom; recommends approval/disapproval to the SASB
- **SASB Meeting** takes place after the NesCom meeting
- Draft development officially begins after the PAR is approved by SASB
  - Start of 4-year timeframe to complete the project



# Questions?

# Stage 2— Mobilizing the Working Group



# Working Groups – P&Ps

- WGs operate in accordance with a written set of P&Ps
  - [Policies and Procedures for PCIC Standards Working Groups](#) approved 17 March 2014; reviewed by AudCom
    - Need a Chair and Secretary; Vice Chair recommended but not required
      - WG Officers must be IEEE and IEEE-SA members
    - Standards Subcommittee Chair submits nominations for officers to the PCIC Chair; officers appointed by the PCIC Chair.
    - WG membership list: WG officer or designee maintains a current and accurate membership list. Can be publically distributed. The membership list is limited to the following:
      - Title of the Working group and its designation
      - Scope of the Working group
      - Officers: Chair, [Vice-Chair], Secretary
      - Name and affiliation of all members

<http://standards.ieee.org/membership/>

# Working Groups

- Create and write standards
  - Individual-based participation is open to everyone
  - Participants do not have to be IEEE or IEEE-SA members
- Strive for broad representation of all interested parties
  - Call for Participation - To ensure representation from all impacted parties and/or balance among the parties affected by the standard
- Individuals working collaboratively to reach consensus in order to move the project to sponsor ballot and ultimately IEEE Standards Board approval
- WG meetings (in-person or via web/teleconference)
  - Secretary schedules meetings in coordination with the Chair and distributes meeting notices
  - Agenda distributed at least 14 calendar days before a meeting
  - Notification of the potential for action shall be included on any distributed agendas for meetings

# Sample WG Meeting Agenda

1. Call to Order
2. Roll Call or Introductions and Disclosure of Affiliation
  - Assess if quorum achieved
3. Call for Patents
  - a. Record the call and responses (or lack of) in meeting minutes
  - b. If informed, WG Chair shall request LOA from patent holder
4. Approval of the Agenda
5. Approval of Previous Meeting Minutes
6. Standards Development
7. Any other Business (AoB)
8. Next meeting
9. Adjournment

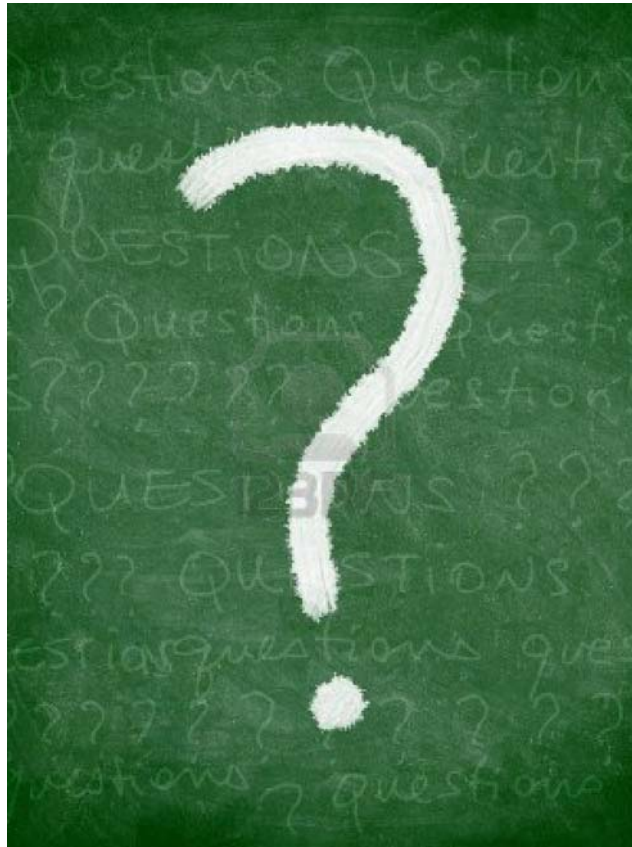


# Working Groups Meetings

- Disclosure of affiliation
  - <http://standards.ieee.org/faqs/affiliation.html#1>
  - Employer vs Affiliation
- Establish quorum before the start of WG business at a meeting
  - Unless otherwise approved by the Sponsor, a quorum shall be defined as one half of the working group voting members.
  - No quorum – technical discussions; could hold email ballot or take vote at the next meeting.
- Secretary records attendance
- WG Chair facilitates the group discussions and offers leadership and guidance to the Working Group.
- Results of the group’s deliberations are distributed through meeting minutes; draft minutes sent to members

# How to Become a WG Member

- For new WGs, membership is granted automatically and upon request
  - Sign-in sheet
- For existing WGs, membership is granted after two consecutive meetings and upon request
- Members are expected to attend meetings and participate as required by the WG P&Ps
  - Membership may be revoked if member misses two consecutive meetings or two electronic ballots
  - Loss of voting rights – notified in writing by Chair
  - Voting rights reinstated by attendance at two consecutive meetings and upon request for member status
  - Personal hardship – excused absence



# Questions?

# Stage 3— Drafting the Standard



# Draft Development

1. Develop an outline of the draft
2. Assign writing among WG members
  - Avoid writing document in meetings
  - Option to appoint a technical editor; gathers input and ensures technical consistency
3. Refer to the IEEE Standards Style Manual for document structure  
<https://development.standards.ieee.org/myproject/Public/mytools/draft/styleman.pdf>
  - IEEE-SA project editors are available to answer questions on style and formatting
4. Do not share the draft with anyone outside of the Working Group

# Stage 4— Balloting the Standard



# WG Vote - Approval to move the draft standard to Sponsor ballot

- Two-thirds vote required according to the WG P&Ps
- When draft is ready for sponsor ballot
  - Initiate the Invitation
  - Submit the draft for MEC  
(Mandatory Editorial Coordination)

# Mandatory Editorial Coordination

**The MEC is usually started when the ballot invitation opens because both MEC and Invitation typically complete within 30 days**

1. Draft is submitted to the IEEE-SA project editors for the MEC.

2. MEC review - What the editors check for:

[http://standards.ieee.org/develop/draft\\_cklst.pdf](http://standards.ieee.org/develop/draft_cklst.pdf)

Ensures that basic elements, e.g., draft labeling, copyright statements, permission letters, have been handled properly

[Permission letters available on Mentor](#)

3. Feedback in two sections

- a. Items/issues that need to be resolved before balloting begins
- b. Items/issues that shall be resolved before the final recirculation



# 1. Ballot Invitation

**Ballot Invitation** - Open for at least 15 days (typically 30 days)

- WG selects voter classifications relative to the scope of the standard (e.g., use, producer); classifications can be added or edited
- Balance - No voter classification group can be more than 1/3 of the total ballot group
  - Invitation may be extended or reopened to help achieve balance
- Sponsor ballot must begin within 6 months of the invitation close date
- Balloters must
  - Be IEEE-SA Individual Member or pay per-ballot fee
  - Select a relevant voter classification

## 2. Sponsor Ballot

**Sponsor Ballot** – open for a minimum of 30 days

- a. Notification to ballot group
- b. Balloters review and vote
  - Approve or Disapprove with or without comments
  - Abstain
- c. The goal in balloting is to gain the greatest consensus
  - A standard will pass if at least 75% of all ballots are returned and if 75% of the returned ballots are approve votes
  - If 30% of returned ballots are abstain votes, the ballot fails

# 3. Comment Resolution



- After a ballot closes, the Working Group needs to respond to the commenters
- This can be a daunting task for ballots that have a large number of comments
- Important to know:
  - The process
  - How to prepare
  - What to avoid

# IEEE-SASB Operations Manual

## Policies and Procedures

Comprehensive information about IEEE-SA governance, as well as links to relevant governing documents and boards and committees that support the standards development lifecycle.

### 5.4.3.3 Comments in the ballot

#### STANDARDS BOARD OPERATIONS MANUAL

1. Introduction
2. Related documents
3. Abbreviations and acronyms
4. IEEE-SA Standards Board and committee procedures
5. Standards development Standards Board Operations Manual

#### IEEE-SA STANDARDS BOARD OPERATIONS MANUAL

[Approved by the IEEE-SA Standards Board December 2013]

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3 Park Avenue, New York, NY 10016-5997, USA

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All rights reserved. Published 2013. Printed in the United States of America.

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The Sponsor shall consider **all comments that are received by the close of the ballot**. Comments received after the close of balloting will be provided to the Sponsor. The Sponsor shall acknowledge the receipt of these late comments to the initiator and take such action as the Sponsor deems appropriate.

The Sponsor shall make a reasonable attempt to resolve all **Do Not Approve votes that are accompanied by comments**. Comments that advocate changes in the proposed standard, whether technical or editorial, may be **accepted**, **revised**, or **rejected**.

Sponsors shall provide evidence of the consideration of each comment via approved IEEE Standards Association balloting tools.

# Purpose of Comment Resolution

- To increase the level of balloter support for a draft
- To improve the quality of a draft standard
- To engage with voters and gain from their viewpoint/experience

## Who Does It?

- Entire WG
- WG officers
- Ballot resolution committee (BRC), selected by Chair, representing various interests
  - Document the scope of the BRC in meeting minutes
  - Split up the work and assign roles to expedite process

# Resolution - Tips

- When downloading the comments spreadsheet from myProject
  - Do not delete any of the columns
  - Look for attachments uploaded by balloters
- Address all comments – be responsive to the technical issue wherever possible
  - Use the correct disposition status
  - Answer all the points in the comment
  - The resolution should relate to the comment directly
- Minimize procedural resolutions, except near the “end”
  - Address the technical issues instead of Rejecting for invalid or out of scope comments
- Use neutral language – address the issue, not the commenter

# Resolution – Disposition Status

## ■ Accepted

The committee agrees with the comment and implements the proposed change exactly as suggested.

- Do not use **Accepted** if the proposed change is not sufficiently detailed so that the BRC members understand the intended change.

# Resolution – Disposition Status

## ■ Revised

The BRC accepts the proposed change in principle but changes the draft based on a revision of the proposed change.

- The Resolution Detail field shall provide sufficient detail for balloters to understand why the proposed change was not incorporated into the draft.
- Also use **Revised** if the BRC chooses to make changes based on a comment without a proposed change



# Resolution – Disposition Status

## Rejected

The BRC disagrees with the comment; no change is made.

- The Resolution Detail field shall provide sufficient detail for ballot group members to understand the rationale for rejection.
- Can use Rejected for invalid comments
  - If comments and suggested changes are not in the proper format, i.e., provided in an attachment
  - It is unclear where the issue is in the draft or what the issue is
  - There is no proposed change
  - The comment does not identify a proposed change in sufficient detail that the BRC can readily identify changes that they would reasonably expect to satisfy the commenter

# Resolution – Disposition Status

## Rejected (continued)

- Don't use **Rejected** if the comment is addressed in another comment. Instead, repeat part of the resolution of that comment as appropriate.
- Don't use "Rejected - Fixed in Draft x.y" or "Rejected - Resolved in comment i-xxx" as a resolution because neither indicate what was changed to resolve the comment.

# What is In/Out of Scope During a Recirculation?

## IN

Comment is in scope if

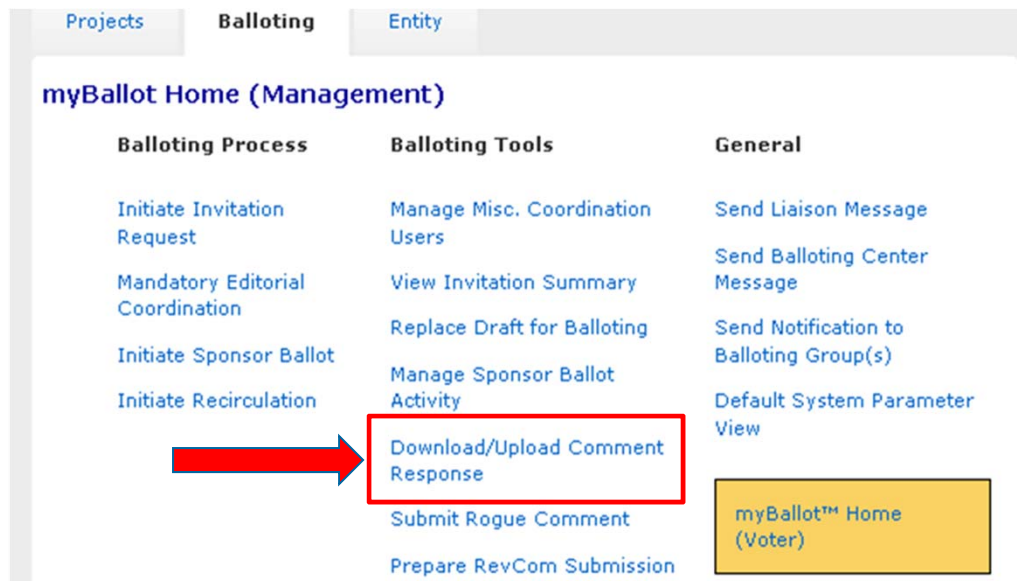
- It is in the first ballot
- It is in a recirculation, and relates to material in the balloted draft changed since the previous draft, or relates to material affected by that change
- Is in a recirculation, and relates to text that is the target of an unsatisfied “must be satisfied” comment from a “no” voter

## OUT

Restatement of a comment and/or proposed change that was resolved in a previous ballot

# How to Access the Comments

- Download comment resolution file in myProject



- Download the .zip file containing a .csv file of the comments and any files that may be attached to the comments
- Edit the .csv file using any spreadsheet editor and save the file in either .csv or .xls format

# Download Comment Resolution File

The screenshot shows the 'myBallot Home (Management)' interface with three tabs: 'Projects', 'Balloting', and 'Entity'. The 'Balloting' tab is active. The interface is divided into three columns: 'Balloting Process', 'Balloting Tools', and 'General'. A red arrow points to the 'Download/Upload Comment Response' link in the 'Balloting Tools' column.

Balloting Process	Balloting Tools	General
<a href="#">Initiate Invitation Request</a>	<a href="#">Manage Misc. Coordination Users</a>	<a href="#">Send Liaison Message</a>
<a href="#">Mandatory Editorial Coordination</a>	<a href="#">View Invitation Summary</a>	<a href="#">Send Balloting Center Message</a>
<a href="#">Initiate Sponsor Ballot</a>	<a href="#">Replace Draft for Balloting</a>	<a href="#">Send Notification to Balloting Group(s)</a>
<a href="#">Initiate Recirculation</a>	<a href="#">Manage Sponsor Ballot Activity</a>	<a href="#">Default System Parameter View</a>
	<a href="#">Download/Upload Comment Response</a>	
	<a href="#">Submit Rogue Comment</a>	
	<a href="#">Prepare RevCom Submission</a>	

[myBallot™ Home \(Voter\)](#)

# Download Comment Resolution File (cont.)

[myBallot Home \(Management\)](#) >> [Manage Sponsor Ballot Activity](#) >> [Voter Response Detail](#) >> [Download/Upload Comment Response](#)

**P802.15.7** Physical (PHY) and Medium Access Control (MAC) Layer Standard for Short-Range Wireless Optical Communication Using Visible Light

To prepare your ballot's comment resolution offline, first download the comment resolution package below which contains a CSV file of the comments and includes any files which were attached to the comments.

[Download Comment Resolution Zip File](#) 

Then use a spreadsheet application to edit the CSV file, adding values to the columns for "Resolution Status" and "Resolution Detail".

The "Resolution Status" column must contain one of the following values:

- Accepted
- Revised
- Rejected

Note: You will receive an upload error message if the "Resolution Status" column contains text other than that specified above.

The "Resolution Detail" may be any text describing the resolution.

After you have updated the spreadsheet and the ballot is in the comment resolution stage, you can upload the file in CSV or Excel (XLS) format from this page.

UPLOAD COMMENT RESOLUTION FILE:

# Do's and Don'ts— Editorial Comments

- Don't make, or promise to make, any post-ballot changes to the draft.
- If you do, RevCom will require a recirculation.
  - RevCom will review the last balloted draft
- Do reject an editorial comment and defer it to IEEE-Editorial for **review (not for change)**
  - You cannot make the promise that IEEE-Editorial will indeed make the change, just defer for review for change

## Example

- **Comment:** Resize Figure 1 to fit the page better
- **Don't:** Accepted. Resize the figure.
- **Do:** Rejected. Defer this change to IEEE editorial staff for consideration during final publication

# Do's and Don'ts— Comment Resolution Spreadsheet

- Don't have any empty disposition status or detail columns
  - All comments need to be shown consideration
  - If "accepted," the disposition detail can simply state "Change made."
- Do have sufficient detail explaining the reason for rejection or the revised change



# Do's and Don'ts— Outstanding Negatives

- Don't have an outstanding negative ballot with comment(s) and submit to RevCom without addressing the comment(s)
- Do email the balloter a reason for rejecting the comment and advise he/she that you are submitting to RevCom
- Do include this email when submitting to RevCom

# Do's and Don'ts— Cross references

- Don't cross reference
  - E.g., “Disagree – see resolution of comment 1234”
- Do cut and paste the comment resolution from the cited comment and then add “(same comment resolution as comment 1234)”

# Do's and Don'ts— External Documents

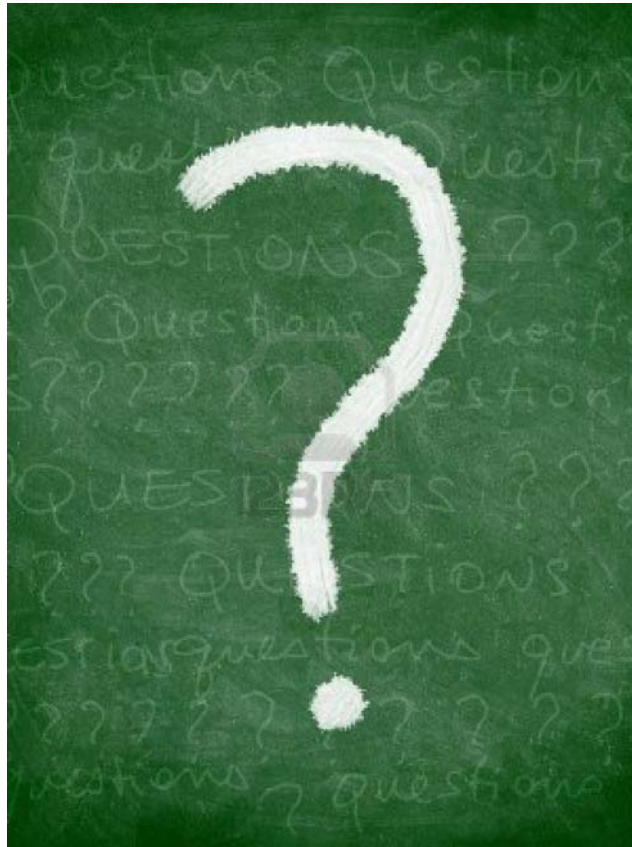
- Don't reference an external document
  - E.g., “Disagree – see 11-09/9876r1”
  - Not an appropriate response
- Do copy information from document 11-09/9876r1 and paste it in the resolution

# 4. Recirculation

## Recirculation Ballot – Open for at least 10 days

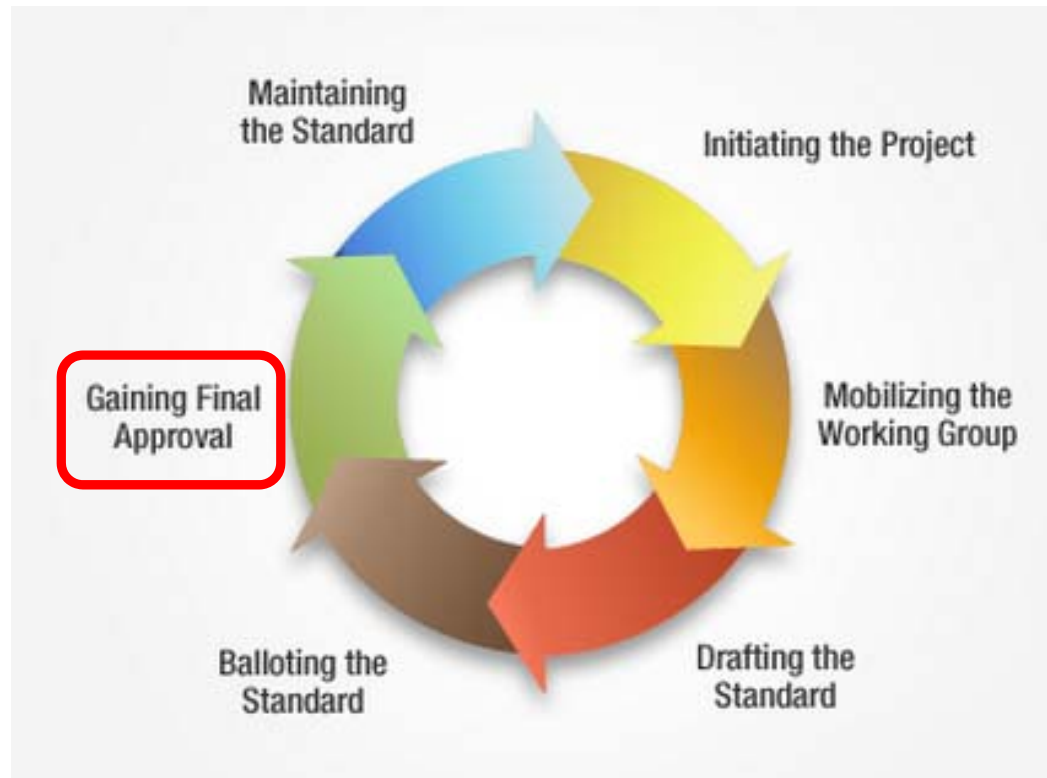
- As stated, recirculation is required if
  - The comment relates to material in the balloted draft that changed from the previous draft (not editorial), or relates to material affected by that change
  - The comment relates to text that is the target of an unsatisfied “must be satisfied” comment from a Disapprove voter
- Subsequent rounds of comment resolution may be needed; otherwise submit to RevCom

Note: Balloters can change their votes during a recirculation ballot.



# Questions?

# Stage 5— Gaining Final Approval



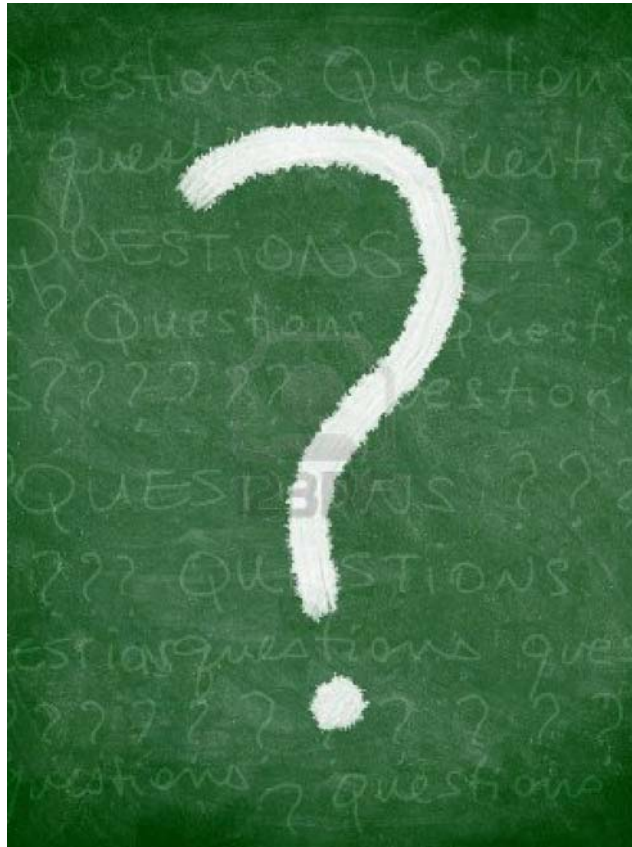
# Submission to RevCom

- Final approval of a standard is achieved by submitting the document and supporting material to RevCom (Review Committee), which issues a recommendation to the IEEE-SA Standards Board
- Once a project is submitted to RevCom, the Working Group Chair is responsible for responding to any comments/questions raised by the RevCom Members
  - Dialogue and responses are done via myProject
  - WG Chairs will receive automatic notification email from myProject that a comment has been made
    - **Don't** reply to the email
    - **Do** log into myProject and post a response

# Publication

1. After SASB approval, IEEE editor edits the document (grammar, style, formatting, etc.)
  - The editor cannot make any changes that affect the technical meaning of the standard
2. WG review - Chair or designee reviews the PDF page proofs of the edited standard and provides feedback
  - Review to ensure that no errors have crept into the document during the publishing process.
3. After the PDF has been finalized, the document can be published and disseminated as an IEEE standard!
  - IEEE Xplore
  - IEEE Standards Store
  - Distributors (e.g., Global Engineering)
4. Distributes final PDF to proper channels
5. Published - WG members receive complimentary copies of the standard





# Questions?

# Stage 6— Maintaining the Standard



# Maintenance

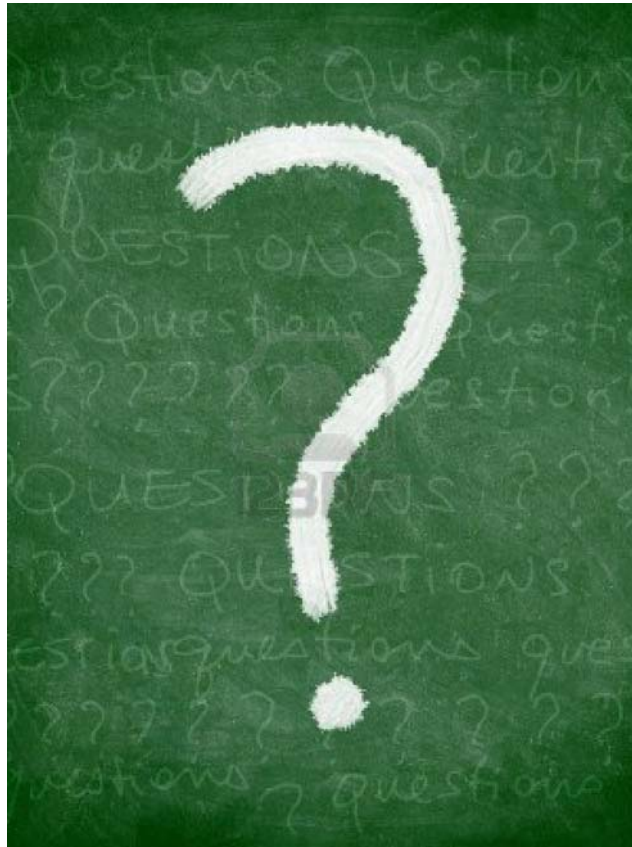
- Effective January 2012,
  - The reaffirmation process was eliminated
  - Maintenance timeline changed from 5 years to 10 years
- Standards are either active or inactive
- An IEEE standard may remain continuously active only if a ***revision process*** is completed and approved within 10 years from the date that the standard was approved or last revised.
  - It is not necessary that the document be changed, just that the opportunity existed to make appropriate changes and the requisite ballot group confirmed decisions to change or not change the document.
  - If no changes are made
    - the standard retains its designation (i.e., the year will not change).
    - the title page reflects that a maintenance action occurred but no changes were made.

# Maintenance

- Standards can become inactive through a Sponsor ballot to withdraw, or will be made inactive if they do not complete a revision process within 10 years.
  - **inactive-superseded:** These standards have been replaced with a revised version of the standard, or by a compilation of the original active standard and all its existing amendments, corrigenda, and errata.
  - **inactive-reserved:** These standards are removed from active status through an administrative process for standards that have not undergone a revision process within 10 years.
  - **inactive-withdrawn:** These standards have been removed from active status through a ballot where the standard is made inactive as a consensus decision of a balloting group.

# Maintenance

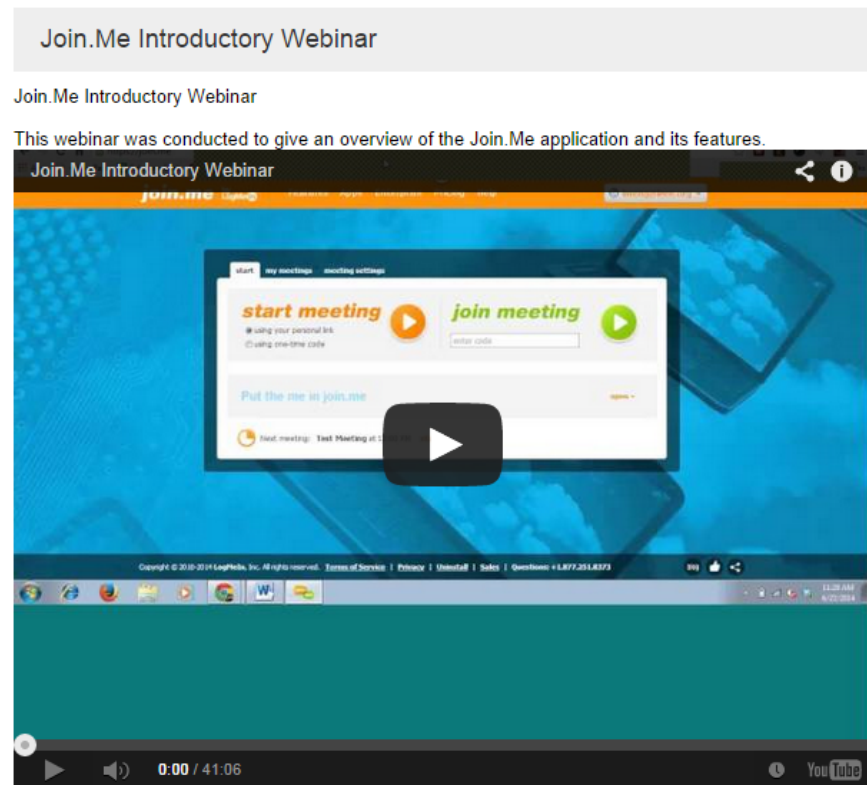
- An *Erratum* is prepared when an editorial error is found in an approved IEEE standard that represents a deviation from the standard as approved by the IEEE-SA Standards Board and that could result in misinterpretation of the standard.
- Withdrawal process has not changed
  - Standards that are no longer useful or contain significant obsolete or erroneous information should be recommended for **withdrawal** by the Sponsor.
  - WG can conduct a withdrawal ballot at any time.



# Questions?

# Addition to WG Collaboration Tools

- Join.me web conferencing services available for WGs
  - Request <http://iee-sa.centraldesktop.com/joinme/>



**Requests are made using the link above**

# Contact Information Page

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