

IPC COMMITTEE POLICIES

April 2022

Translation Statement

Because IPC standardization efforts are international, IPC will provide translations of this document as needed for regional markets. If a conflict occurs between the English language and translated versions of this document, the English version will take precedence.

IPC Committee Policies

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1 SCOPE

This document contains policies in addition to those in IPC's Standardization Procedures, for all IPC committee leaders and members. Those procedures, which have been approved by ANSI and undergo periodic revision and reaffirmation, can be found on the IPC website or by requesting a copy from an IPC staff liaison.

These policies **shall** apply to all committee leaders and members.

In this document, the term "committee" is used generically to mean committee, subcommittee or task group (not regional groups), except when a specific identification is required.

1.1 IPC Principles of Standardization

In May 1995 the IPC Technical Activities Executive Committee (TAEC) adopted Principles of Standardization as a guiding principle of IPC's standardization efforts.

Standards Should:

- Show relationship to Design for Manufacturability (DFM) and Design for the Environment (DFE)
- Minimize time-to-market
- Contain simple (simplified) language
- Just include specification information
- Focus on end-product performance
- Include a feedback system on use and problems for future improvement

Standards Should Not:

- Inhibit innovation
- Increase time-to-market
- Keep people out
- Increase cycle time
- Tell you how to make something
- Contain anything that cannot be defended with data

IPC standards and publications are designed to serve the public interest through eliminating misunderstandings between manufacturers and purchasers. This is accomplished by facilitating interchangeability and improvement of products and assisting the purchaser in selecting and obtaining with minimum delay the proper product for his/her need. Existence of such standards and publications shall not in any respect preclude any member or nonmember of IPC from manufacturing or selling products not conforming to such standards and publications, nor shall the existence of such standards and publications preclude their voluntary use by others who are not IPC members, whether the standard is to be used either domestically or internationally.

1.2 Committee Resources

The IPC Standards page on IPC's main website contains links to all resources mentioned in this document and other helpful tools.

In addition to this and other resources, each committee is assigned an IPC staff liaison, whose responsibility is to support the committee as it works toward its project goals.

1.2.1 Status of Standardization

The development status of IPC standards and other publications and those which have been published within the previous six months can be viewed on the IPC Status of Standardization web page.

The IPC Document Revision Table may be found on the IPC main website.

1.2.2 Chair Section: Chairman Training and Support

IPC offers training to all chairs, co-chairs, and vice-chairs through this document, sessions during IPC APEX EXPO™ and SummerCom, one-on-ones with staff liaisons and other resources and opportunities.

IPC staff liaisons will also track committee activity and work directly with each of their committees to address any areas of concern affecting the committee's goals.

1.2.3 IPC Funding for Standard Development Efforts

IPC may provide funding for a technical writer and/or a working session for three to five volunteers to develop an initial first draft for a new IPC standard. This will be done for up to two standards per year.

In addition, IPC may provide funding for programs associated with the development or advancement of a new IPC standard, such as round robin test programs (see 5.8) or the development of applicable test artwork (i.e., Gerber files).

1.2.4 Other Resources

IPC Works includes many additional resources for committee members and leaders on IPC Works. Visit the IPC Works dashboard to view all resources.

2 IPC POLICY STATEMENTS

IPC Patent Policy

Please see the IPC Standardization Procedures for IPC's Patent Policy.

Antitrust and Export Control

IPC staff and chairs **shall** work to ensure there are no breaches of antitrust laws during committee activities. Towards this end, the IPC Antitrust and Export Control Statement video is to be presented at each IPC committee meeting, and IPC encourages all committee volunteers to familiarize themselves with IPC's Antitrust Statement (see IPC's Standardization Procedures).

In the event of an antitrust breach during a meeting, a break to the meeting **shall** be called by staff, the chair or a committee participant. If the staff liaison is not present, the meeting participant and/or the committee chair **shall** immediately inform the IPC staff liaison.

Please see IPC Standardization Procedures for IPCs Antitrust and Export Control Statement.

International Trade Compliance Policy

IPC standards and publications are designed to serve the public interest. When participating in standards development, contributors **shall** abide by the rules of IPC's antitrust/export control statement and patent policy. Participants should not share any information if it is restricted by their country's export laws and regulations (e.g., ITAR).

3 COMMITTEE POLICIES

3.1 IPC Works Online Committee Workspace

All communications regarding committee activities **shall** be conducted through IPC Works. IPC Works users will only be able to view the committees of which they are a member.

Use of IPC Works is required for all committee participants. Committee members who do not login at least once every six months will be deactivated in IPC Works.

3.2 Content Contributions

Resources provided for the development of a standard or publication **shall** be considered voluntary contributions from industry. This includes volunteer expertise during meetings, written content, company data table or spreadsheet, as well as providing images such as illustrations or photos. The following policies apply to content contributions:

- Content and images **shall** be submitted directly to the staff liaison and **shall** include written permission for use by the content owner at the time of submission. Content or images submitted without written permission for use will not be used in a published IPC document.
- It is the responsibility of the submitter to obtain permissions from their employer to provide company-developed resources before submitting content or images.
- Content submissions **shall not** include any text, images, illustrations, or graphics from other sources. This includes sources such as wikis, news organizations, company websites or any other copyrighted sources that do not have knowledge that their materials are being used.
- All images submitted for use in IPC documents should be print-ready and high-resolution.
- Committee participants **shall not** share copyrighted content with their committee. This includes posting resources or images to IPC Works. Violation of this policy may result in expulsion from IPC standards development activities.

3.3 Disruptive Behavior

Volunteers who exhibit disruptive behavior or impede committee business may be removed from the group by the IPC staff liaison in consultation with the TAEC Global.

3.4 Delay of Comment Resolutions During Committee Meetings

If a group begins deliberation of a comment during a meeting, the comment resolution **shall** not be delayed to a future meeting without unanimous consent of the voting sites attending that meeting, not including abstentions.

3.5 Commenting

3.5.1 Submitting Comments

All comments on draft documents **shall** be submitted in English according to the instructions on the comment form. This may be sending an IPC Works Message to the staff liaison or by using an IPC Works comment tracker.

Comments **shall not** be posted to IPC Works News Feeds.

3.5.2 Incomplete Comments on Documents

Each comment **shall** include a proposed change to the content of the document based on the comment and should include any supporting data or other materials, including graphics, to support the comment. Comments without proposed changes and comments which are in the form of a question **shall** be returned to the commentor and noted as incomplete.

3.6 Ballot Group Requirements

Individuals who wish to participate in a ballot group **shall** sign up using IPC Works. IPC staff does not automatically add individuals to ballot groups.

IPC reserves the right to refuse ballot group volunteers due to ballot group abuse or other irregularities.

If for any reason, a ballot group member cannot meet their voting obligations (e.g., retirement, left company, illness), a representative of the voting site can submit a request in writing to replace the ballot group member with a proxy. The staff liaison will confirm this change in writing via IPC Works Message. This message will provide instructions for the original voter to not vote using the IPC Works Ballot system and for the proxy voter to submit their vote to the staff liaison via IPC Works Message.

3.7 IPC Style Guide

Each IPC standard and publication **shall** follow the specific format of the IPC Style Guide. The IPC staff liaison **shall** ensure draft and published standards adhere to the IPC Style Guide. The IPC staff liaison can provide a clean template to chairs for use in developing a new standard or publication. This template follows the IPC Standards Style Guide.

3.7.1 Published Standards Acknowledgment Page

Each published IPC standard will list all active committee participants at the time of ballot close on an acknowledgement page. In addition to the committee roster, this acknowledgement page will also list separate rosters for A-Teams and/or any other individuals from the committee who are deserving of

specific acknowledgement for their efforts (i.e., provided draft content, submitted multiple graphics, conducted data collection).

3.8 Use of Languages

Task group and A-Team meetings, communications and standards development **shall** be conducted in English (except as noted below).

If an IPC task group is formed with non-English-speaking subject matter experts who will draft a new IPC standard, those experts can conduct its development in their native language. Any such instances **shall** be declared on the PIN form for the project. Once the group has prepared the Final Draft for Industry Review for call for comments, it **shall** be translated to English, and English **shall** take precedence with the document development from that point forward. A volunteer representative from the group is responsible for faithfully translating documentation into English in these cases.

Though IPC strives to provide perfectly harmonious translations of standards documents, there may arise unintentional conflict between the original English and a translated version of a standards document. In all cases, the English-language document **shall** take precedence over the translated version. Statements as such **shall** be included in all translated draft and published works. Example:

If a conflict occurs between the English language and translated versions of this document, the English version will take precedence.

3.9 IPC Meetings

All IPC committee meetings **shall** be scheduled and announced via the IPC Works Calendar.

In-person meetings **shall** not include web or telephone remote access for anyone outside the room. In cases of an emergency, IPC may choose to make an exception on an individual basis for committee leaders or key invited guests to have remote access to an in-person meeting.

All IPC committee meetings **shall** be led by the chair (see Section 5). If the chair is not able to attend the meeting, the co-chair or vice-chair **shall** lead the meeting. If no established chair is available, the General Chair(s) **shall** lead the meeting or approve another volunteer to lead that meeting. If a chair resigns from the meeting and after a reasonable attempt to reach the General Chair, they are unavailable, the staff liaison will ask for a volunteer from the meeting to chair it. Staff liaisons do not lead meetings. See also Section 6.

3.10 Project Cancellation

Any IPC standards project may be cancelled and its committee disbanded if a project is no longer viable (e.g., lack of industry support). In these instances, the staff liaison **shall** make a recommendation to the TAEC Global (see 4.1) regarding the cancellation of the project with any supporting documentation. The TAEC Global **shall** make a final decision to revoke the PIN.

3.11 Requests to Join Committees

IPC committees are open to anyone worldwide for participation. All requests to join an IPC committee **shall** come directly from the individual (e.g., email to answers@ipc.org, IPC website, direct contact with IPC staff). IPC will not add individuals to committees based on third-party requests, including IPC staff.

4 COMMITTEE GOVERNANCE

The following is an explanation of the IPC's committee chair leadership groups.

4.1 Technical Activities Executive Committee Global (TAEC Global)

The Technical Activities Executive Committee Global (TAEC Global) is comprised of the TAEC leadership and two members each from Europe, Asia and the Americas. The TAEC Global holds meetings to conduct committee business on a quarterly basis. All members of the TAEC Global are also members of the TAEC. The responsibilities of the TAEC Global include:

- Annually review activities of each IPC General Committee and request changes to committee leadership if progress is not being made in a committee
- Review newly submitted project initiation notification (PIN) forms and recommend PINs for balloting by the TAEC or request modification and resubmission of PINs for review
- Review topics of interest for industry
- Plan the use of resources for IPC standards development

4.1.1 TAEC Global Terms of Service

Members of the TAEC Global are appointed by IPC staff for a four-year term. Service may continue after four years if the member is selected by IPC staff for an extended term.

4.2 Technical Activities Executive Committee (TAEC)

The Technical Activities Executive Committee (TAEC) is comprised of leadership of all IPC general committees, TAEC Global members, lifetime members of the TAEC (see 4.2.2) and invited participants at the direction of IPC. The TAEC also includes one IPC Board of Directors (BOD) liaison to the TAEC.

4.2.1 TAEC Responsibilities

The following are the specific responsibilities of the TAEC:

- Review and vote on PIN forms recommended by TAEC Global
- Ensure activities undertaken by one committee are not in conflict with a similar activity of another IPC committee or standards organization

4.2.2 Election and Term of Service of the TAEC Chair and Vice-Chair

At the IPC Annual Meeting during each even-numbered year, a chair and vice-chair of the TAEC **shall** be elected by Roman ballot by TAEC members present during the meeting. The chair will be selected by the most votes received in the Roman ballot and the vice chair will be selected by the second most votes. The TAEC chair and vice-chair serve a two-year term, which begins at the conclusion of the IPC Annual Meeting where the election took place.

Individuals who serve a two-year term as TAEC chair and/or vice-chair **shall** remain members of the TAEC and are eligible to participate in all TAEC meetings.

Chairs that have served five years or more may be eligible for lifetime membership on the TAEC at the discretion of IPC staff. Each lifetime member has one vote during TAEC activities.

4.3 Committee Chair Council

The Committee Chair Council (CCC) is comprised of leaders of only IPC general committees, subcommittees and task groups. The basic function of the CCC is to meet twice a year in connection with the semi-annual meetings of IPC to discuss technological developments that can affect future programming for IPC.

CCC meetings are designed to keep committee chairs and vice-chairs up to date on technical and other developments that may affect the work of their committees.

5 STRUCTURE OF IPC COMMITTEES

5.1 General Committees

IPC general committees are standing committees organized around large areas of technology.

5.2 Subcommittees

Subcommittees form under general committees and may be responsible for standards development tasks.

5.3 Task Groups

Task groups (also referred to as originating task groups) form under general committees or subcommittees to develop or update a specific standard or other IPC document or to address a particular technology process or problem.

5.4 A-Teams

A-Team working groups can form at any time under task groups, at the discretion of the chair and staff liaison. A-Teams can serve many purposes including developing a working draft standard or individual sections of a draft standard for full committee review and comment.

A-Teams may also fully disposition clearly editorial comments (e.g., misspellings, grammar correction) and may propose resolutions to technical comments.

Participation on an A-Team is open to anyone, but because these are active-body groups, A-Team members who do not regularly contribute may be removed from the team at the discretion of the staff liaison or committee leadership. Individuals removed from A-Teams can still remain members of the committee.

All A-Teams **shall** conduct their business through IPC Works. IPC can establish a separate group in IPC Works for A-Teams.

A-Teams are encouraged to self identify with creative team names.

5.5 Ad Hoc Working Groups

Ad hoc working groups are small groups of subject matter experts approved by the chair to address a specific issue or question, follow up on an action item, work on a document comment marked as Deferred for Action or other short-term activity.

5.6 Regional Liaison Groups

IPC invites groups from geopolitical locations to form regional groups to provide local input to originating task group activities. These regional groups allow individuals from those areas the convenience of participating in meetings on their local time and, if necessary, in their local language.

In addition to the committee policies in Section 3, the following policies apply to regional liaison groups.

5.6.1 Group Formation

To form a regional group, interested individuals **shall** work with an IPC staff liaison to complete a regional approval process (RAP) form. This RAP form **shall** indicate in English the location for the group, the originating task group with which it will work and the chair(s). This will be used to establish the regional group in IPC's systems, including IPC Works. The RAP **shall** be approved by the IPC Senior Director Assembly and Standards Technology. All approved regional groups **shall** have an IPC committee code that begins with the originating task group designator followed by a two-letter identifier for the region, country, etc.

At that point, any interested volunteers can join the group in accordance with 3.11.

5.6.2 IPC Works

Regional task groups **shall** use IPC Works for all communications (e.g., Calendar invitations, file sharing, balloting), as is required for all IPC committee activities.

5.6.3 Membership on Originating Task Groups

Regional task group members may also be members of the originating task group. To join the originating task group, individuals **shall** contact the staff liaison for that originating group to request to be added to the roster.

5.6.4 Commenting on Draft Documents

All comments on draft documents by regional task group members **shall** be submitted by the individual in accordance with IPC's policy for submitting comments (see 3.5). Comments **shall not** be submitted to the regional task group or any other staff liaison.

5.6.5 Proposing Resolutions to Open Comments

Regional groups may debate open comments for resolution from the originating task group. Any outcomes from those discussions **shall** be documented in English on a resolution of comments form provided by the staff liaison for the originating task group. All proposed resolutions **shall** meet the requirements for resolving comments as stated in the IPC Standardization Procedures.

The regional group liaison **shall** provide all documentation and supporting materials to the originating task group liaison at least 30 calendar days prior to the next meeting of the originating task group. This will allow sufficient time for validation of the documentation and for the originating task group liaison to submit documentation to the originating task group in time for the meeting.

The originating task group will make all final decisions on comment resolutions and any content to be added/changed. All final resolutions of comments will be in English and will be shared with the originating task group and regional task group liaison through IPC Works.

Action items from the originating task group are open for discussion but not for voting by the regional group.

5.6.6 Submitting Content for Consideration

All content, tables, figures or other material for consideration by the originating task group **shall** be submitted to the staff liaison for the originating task group and meet the requirements of 3.2 and 3.8.

5.6.7 Regional Group Meetings Documentation

The regional group liaison **shall** collect minutes of these meetings from the group leaders and provide a copy of the minutes to the regional group through IPC Works. Any meeting documentation that will be submitted to the originating task group (e.g., voting, proposed content for a standard) **shall** be submitted in English to the originating task group staff liaison for records maintenance.

If during a meeting, attendees made any consensus resolutions for communicating to the originating task group for consideration, these **shall** be clearly and accurately documented in English in a resolution of comments form and submitted to the originating task group staff liaison to review before sharing with the originating task group.

5.7 Steering Committees

IPC Steering committees are think tanks approved by the TAEC Global that identify gaps in international standardization, produce ideas for IPC standards development projects and provide feedback and suggestions regarding other IPC programs and services. These committees are separate from standards development activities, including interaction with regional liaison groups. All steering committee activities **shall** take place through IPC Works, with official documentation in English.

Active participation **shall** be required by all participants. IPC steering committees **shall** meet quarterly, at a minimum and **shall** provide reports to the IPC Senior Director of Assembly and Standards Technology on a biannual basis 14 calendar days prior to each face-to-face TAEC meeting.

5.8 Round Robin Groups

Round robin test programs are conducted to obtain technology data and information for use in IPC standards, specifications, test methods or technical reports. Proposed round robin programs are approved by a consensus vote during a committee meeting.

Committees may request a round robin test program to gather data for a standard or specification. This is often in response to a request from members of a committee who feel information is needed in an area of technology to satisfy/support proposed requirements, methodologies, or procedures.

Data are provided to and archived by IPC staff. The data are typically published as a white paper or technical paper (but not both) that is reviewed by the committee but does not need industry consensus (ballot) to publish.

The following are some general guidelines regarding round robin test programs.

1. Requests for undertaking round robin test programs may originate from any IPC Committee.
2. Round robin programs are presented to an IPC staff liaison, who will evaluate the project for relevance.
3. If an industry consortium cannot be formed to fund the project, the committee may request special IPC funding by submitting a written proposal to the applicable staff liaison. Written proposals **shall** contain, at a minimum, commitments from a minimum of three volunteer testing facilities who have the equipment and staff expertise to ensure best industry practices.

The IPC staff liaison can provide more information about round robin programs.

6 CHAIR ROLES, RESPONSIBILITIES AND ELIGIBILITY

6.1 Roles and Responsibilities of All Chairs

Chairs, co-chairs, and vice chairs are IPC members who are responsible for guiding the direction of their group.

Leadership team responsibilities include:

- Lead and attend meetings of their groups
- Prepare meeting agendas and minutes and post minutes to the applicable IPC Works page within 10 business days following a meeting
 - Meeting minutes **shall** include:
 - Review of PIN milestones
 - Any voting which occurs outside of comment resolution
 - Comments discussed
 - Next meeting date and time
- Review PIN milestones with group at least four times per year
- Encourage committee members to provide input on activities during and between meetings
- Assigning tasks/action items and work with the assigned individuals to meet deadlines
- Work with the staff liaison to ensure the goals of the committee are met
- Actively lead and encourage group discussions with a goal of driving the group to consensus
- Prepare and submit annual reports

General committee chair responsibilities include:

- Submitting progress reports for their committee and each subcommittee and task group under their general committee to the TAEC Global annually
- Responding to requests from IPC staff
- Monitoring and guiding their subcommittee and task group chairs

If a member of the leadership team fails to meet attendance requirements or one or more of these responsibilities IPC staff liaison will notify the individual of their removal from the leadership role. IPC staff will also notify the TAEC Global Chair and the applicable General Committee chair.

6.2 Chair Leadership Training

All chairs **shall** complete periodic IPC Leadership Training. Training topics and agendas are at the discretion of IPC staff and are intended to enable chairs to meet their responsibilities according to IPC Standardization Procedures and other best practices to ensure their groups run efficiently and effectively. Training will be made available virtually.

Chairs are encouraged to recommend training topics to IPC staff.

6.3 Chair Voting

Chairs (including cochairs and vice-chairs) **shall not** be eligible to vote during meetings of the groups over which they preside.

During meetings, the chair **shall** call for and tally votes. This includes a motion, any discussion, a possible modification to the motion, the second and the vote. Staff will not manage this process but can provide the chair procedural guidance.

6.4 Leadership Appointment and Terms

Leadership teams **shall** not exceed three individuals with no more than one individual serving as vice chair.

Outgoing chairs for all groups other than general committees may be asked to mentor the new leaders in their responsibilities. This is an honorary chair emeritus role and is not counted towards the three leader limit. The chair emeritus role shall not exceed one revision cycle in length.

Outgoing chairs and co-chairs may not serve as vice chair on future terms of service for the group in which they served as chair or co-chair.

6.5 Eligibility

Chairs, cochairs and vice-chairs of any IPC committee **shall** be an IPC member. In special circumstances in which an IPC member cannot be found to chair a committee, the IPC Senior Director, Standards and Technology may allow a nonmember to chair a committee.

6.6 Attendance

Absence from three consecutive meetings (including teleconferences) or 25% of the meetings (including teleconferences) held in a rolling 6-month period without communication with the staff liaison **shall** result in removal from the leadership position.

6.7 General Committee Leadership Terms

General committee chairs serve at the invitation of IPC staff. The term of service for a general committee chair is five years.

6.8 Subcommittee and Task Group Leadership Terms

The term of service for leaders of subcommittee or task group is one revision cycle. Leaders may serve more than two consecutive terms at the discretion of the general committee chair and staff liaison.

Following completion of their term, a leader is encouraged to consider taking on a chair emeritus role, recommending a new leader to take on their role and fostering new talent for leadership positions.