



STANDARDIZATION PROCESS

OF THE

IPC

January 12, 2007

1 IPC STANDARD DOCUMENTATION PROCESS

The purpose of the IPC Standard Documentation Policy is to coordinate the approval and publication of all IPC consensus documents that result from consistent circulation and approval cycles. IPC is committed to openness, fairness, equal representation and due process in all levels of participation in the standardization process.

This policy covers the following areas of standards creation to final publication:

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2 HISTORY OF IPC

IPC is a trade association representing printed wiring board manufacturers, electronic assemblers and users of electronic interconnection. It also includes key suppliers to the industry and representatives from approximately 100 government agencies. IPC is international in scope, with approximately 25% of its member companies located outside of the United States.

The following independent producers of printed wiring boards organized IPC in 1957:

- Electralab
- Graphik Circuits Division of United Carr
- Methode
- Photocircuits
- Printed Electronics Corp
- Tingstol

The group chose the name the Institute of Printed Circuits (IPC). Very quickly, IPC expanded its horizons to include assembly and packaging of all types of interconnections. In terms of product, IPC became involved not only with rigid printed wiring boards but also with flat cable, flexible circuits, and connectors. Later, committees were formed to discuss discrete wiring and hybrid circuits. In 1977, IPC officially changed its name to the Institute for Interconnecting and Packaging Electronic Circuits to reflect the broad line of products associated with electronic interconnections. In 1998, IPC retained the initials and dropped the name. A positioning statement was adopted and the official name is now IPC–Association Connecting Electronics Industries®.

In 1991, the association adopted the following Mission statement:

“IPC is a United States-based trade association dedicated to furthering the competitive excellence and financial success of its members worldwide, who are participants in the electronic interconnect industry.

In pursuit of these objectives, IPC will devote resources to management improvement and technology enhancement programs, the creation of relevant standards, protection of the environment, and pertinent government relations.

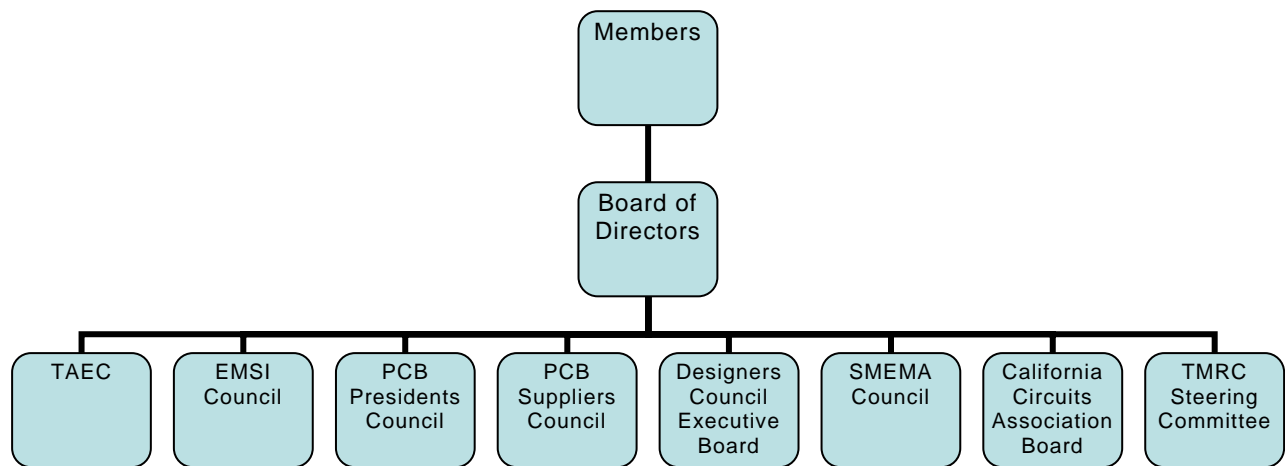
IPC encourages the active participation of all its members in these activities and commits to full cooperation with all related national and international organizations.”

3 ASSOCIATION GOVERNANCE

3.1 Membership

IPC has the following membership categories:

1. \$1,000.00 Annual dues for Primary Site Membership (Twelve months of IPC membership begins from the time the application and payment are received)
2. \$800.00 Annual dues for Additional Facility Membership: Additional membership for a site within an organization where another site is considered to be the primary IPC member.
3. \$600.00 Annual dues for an independent PCB fabricator or independent EMSI provider with annual sales of less than \$1,000,000.00.
4. \$250.00 Annual dues for Government Agency/not-for-profit organization



3.2 Right to Hold Office

Only representatives of member companies shall hold office in the IPC.

3.3 Officers and Board of Directors

The management of affairs of IPC is vested in the Board of Directors, which shall consist of the Chair, Vice-Chair and Treasurer, who shall be Directors by virtue of their office, not less than five or more than eleven Directors. There is one board seat for an associate member from the PWB Industry and one seat for an associate member from the assembly industry.

4 TECHNICAL STRUCTURE

The general chairs of technical committees have considerable authority to participate in the definition of objectives and the responsibility of conducting the affairs of their committee in such a way as to accomplish these objectives.

The current structure of IPC looks like this:

Technical Activities Executive Committee (TAEC)

General Committees reporting to the TAEC:

Packaging Categories

- B-10 Packaged Electronic Components Committee
- D-10 Flexible Circuits Committee
- D-20 High Speed/High Frequency Committee
- D-30 Rigid Printed Board Committee

Packaging Functions

- 1-10 Printed Board Design Committee
- 2-10 Data and Information Generation and Transfer
- 3-10 Printed Board Base Material Committee
- 4-10 Fabrication Processes Committee
- 4-30 Environmental Health and Safety Committee
- 5-20 Assembly and Joining Processes Committee
- 5-30 Cleaning and Coating Committee
- 6-10 Product Reliability Committee
- 7-10 Testing Committee
- 7-20 Process Control Management Committee
- 7-30 Product Assurance Committee

5 IPC COMMITTEE STRUCTURE

IPC technical committee, subcommittee and task group meetings present an opportunity for the industry to meet and discuss their assigned project. IPC provides the opportunity for the committees to hold meetings at least two times a year; in the spring at the co-located PCB Expo, APEX and Designers Summit (APEXPO) and in the fall at IPCWorks (Fall Meeting). Other meetings may be held as many times as deemed necessary by the chair of each group.

5.1 General Committees

IPC general committees are standing committees. Their scope of operations spans categories as functions within the technical mission of IPC.

General committees may form subcommittees and task groups to achieve their established charter. The chair and vice chair of IPC's general committees are members of the IPC's Technical Activities Executive Committee (TAEC).

5.1.1 General Committee Chairs

General committee chairs are appointed by the Chair of the IPC Board of Directors, based on recommendations from current and past chairs of the TAEC and the IPC staff. Term of service is for a period not to exceed five years. As a matter of policy, after four years of chairing, the general chair is required to have a vice-chair to serve one year as vice-chair prior to elevation to general chair. In the event the general chair cannot find a vice-chair willing to take on responsibility of the general chair or there are other extenuating circumstances (i.e., business reasons, unable to travel unless in leadership role), the general chair may petition the TAEC for a second term extending up to five years.

5.1.2 General Committee Vice-Chairs

The general chair of each standing technical committee will consult with the IPC Vice President of Standards, Technology & Int'l Relations in recommending an individual to serve as vice-chair.

5.2 Subcommittees

Subcommittees, formed under general committees and approved by the TAEC, address more specific areas of the technology dictated by the general committee. Subcommittees are formed to develop one or more specific standards or specifications and are most often "standing," as opposed to a task group working on a specific project.

5.2.1 Subcommittee Chairs

Subcommittee chairs will be appointed by the general committee chair after consultation with the IPC staff liaison and IPC Vice President of Standards, Technology & Int'l Relations. The subcommittee chair is encouraged to select a vice-chair to assist in conducting the meetings, taking minutes and providing leadership in the absence of the chair.

5.3 Task Group

A task group can be formed as part of a general committee or subcommittee and is approved by the TAEC. The task group is formed to undertake a specific assignment in accordance with the charter of the general committee. This may be to develop or update a specific document or address a particular technology process or problem. Approval by the TAEC is through formal ballot of a Project Initiation Form (PIN) (See 9.2.1). If there is any question as to whether the scope of the task group is in conformance with the general charter, the general committee chair must consult with the TAEC. Upon completion of the specific assignment, the general committee chair and vice-chair will determine additional assignments or make recommendations to the TAEC to deactivate the task group.

5.3.1 Task Group Chairs

In the case of appointments for task group chairs, there is often a need for immediate action on a short-term program. The general committee chair can make appointments of task group chairs without consultation.

6 COMMITTEE ELIGIBILITY AND CHARTER DEVELOPMENT

The IPC Board of Directors has the authority to appoint specific committees to undertake such activities that will benefit IPC members, the industry, or the public. The IPC Board of Directors likewise has the authority to terminate such committees. This power of the IPC Board of Directors is delegated to the IPC TAEC Chair. (See Section 7)

All IPC members are eligible to serve on all IPC committees and to serve as chairs of IPC committees.

Non-members of IPC are welcomed to participate in committee sessions.

Anyone who wishes to participate on an IPC committee is encouraged to advise the IPC office. IPC staff will assure that any interested parties will be added to the list of committee members.

6.1 Participation and Limitation of Committee Representatives

To be eligible for participation as a member of a technical committee, representatives are encouraged to attend at least one meeting or provide comments to a document review at least once within a two-year period. Individuals who do not meet these criteria can be considered for removal from the committee, subcommittee or task group roster.

Participation on IPC committees will not be limited to a specific number of participants except in the case where the committee chair or IPC Vice President of Standards, Technology & Int'l Relations decides the additional members would make the committee's operation cumbersome and impede the attainment of the committee's objectives.

6.2 Objectives and Charters

A technical committee of the IPC is formed to undertake programs in a specific area of technology, but in some cases it might cover a type of product such as multilayer boards, analyze a process, or study a given area of the technology such as soldering and joining techniques.

The charter of a committee is rather broad and in essence can work on its segment of the technology in the following areas:

- Provide an exchange of technical information.
- Prepare guideline documents and technical reports that are of value to the membership and the industry.
- Develop detailed standards and specifications.

The chair should review each new idea for a program or activity against these three objectives. If the activity meets one or more of the objectives, an IPC Project Initiation Form (PIN) is prepared by the chair in conjunction with the staff liaison. The PIN is then sent to the IPC Vice President of Standards, Technology & Int'l Relations for approval prior to submission to the TAEC for approval; see Section 7.

The IPC Board of Directors has requested all IPC committees to focus its energies and benchmark every program and activity against three metrics:

- Does it improve time-to-market?
- Does it enhance the members' and industry's global competitiveness?
- Does it enhance the members' and industry's profitability?

7 THE TECHNICAL ACTIVITIES EXECUTIVE COMMITTEE (TAEC)

TAEC Charter:

“The IPC Technical Activities Executive Committee (TAEC) is responsible for the management function related to the standardization and technical activity within IPC. The TAEC will review, prioritize and approve the technical programs of IPC and recommend allocation of appropriate resources to the Board of Directors.”

The TAEC consists of all chairs and vice-chairs of IPC general committees. On issues involving a vote, the vice chair will only vote if the general chair is not present. It is the responsibility of the TAEC to review all questions and problems pertaining to IPC Technical Programs. As indicated below, in certain cases, particularly in the discussion of programs involved with expenditures of IPC funds, or involved with IPC policy, the TAEC will make recommendations to the IPC Board of Directors.

The following specific items are the responsibility of the TAEC:

- Review reports of general committee chairs to ensure activities undertaken by one committee are not in conflict with a similar activity of another committee.
- Review proposed technical programs and advise the IPC Board of Directors on the advisability of undertaking new programs and the ways and means of doing so.
- Prioritize technical projects, review project status and program deadlines and recommend elimination of projects as deemed necessary.
- Determine jurisdiction over technical programs and activities and determine what committee will execute a specific program or activity.
- Settle disputes and problems that arise in technical committees.
- Review suggested realignment of committees including the addition of new committees and the dissolution of existing committees.
- Review all ideas and recommendations of the Committee Chair Council (CCC).

7.1 TAEC Members

All chairs that have served five years or more are eligible for lifetime membership on the TAEC. Each lifetime member has one vote.

7.2 Election of the TAEC Chair

At the IPC Annual Meeting during each even-numbered year, a chair of the TAEC will be selected based on a list of eligible chairs developed by the IPC Vice President of Standards, Technology & Int'l Relations. The TAEC Chair serves a two-year term, which begins at the conclusion of the IPC Annual Meeting at which he is elected. The election of the chair will be by Roman ballot. Only members of the TAEC are eligible to vote.

Those individuals who serve a two-year term as the chair of the TAEC will become ex-officio members of the TAEC and are eligible to participate in all TAEC Meetings.

8 COMMITTEE CHAIR COUNCIL (CCC)

All chairs and vice-chairs of general committees, subcommittees and task groups are members of the Committee Chair Council (CCC). It is the basic function of the CCC to meet twice a year in connection with the semi-annual meetings of the IPC (APEXPO and the Fall Meeting) to discuss technological developments that can affect future programming for the IPC. CCC meetings are designed to keep all

committee chairs and vice-chairs up-to-date on technical developments that may affect the work of their committees.

9 IPC STANDARDIZATION PROCESS

9.1 Overview

Sequentially, IPC working documents are developed through the following stages: Working Draft, Final Draft for Industry Review (Final Draft), and Proposed Standard for Ballot and Published.

As an overview of the process, a project is presented to the TAEC for approval (PIN), and then a draft document is built and circulated within the committee for comments. The project (document) is modified based on comments and resolutions and recirculated as many times as necessary to reach a stage where the committee feels it is ready to present to industry for review and comment as a Final Draft for Industry Review.

When comments from the Final Draft circulation have been resolved and incorporated into the document, the committee recommends the document be provided to industry as a Proposed Standard for Ballot. The procedures are slightly different for each stage, as detailed in the Sections 10, 11 and 12. The baseline time schedule for completion of a document is projected to be two and a half years or 921 days. Anyone can monitor the progress of document development by reviewing the IPC Status of Standardization, which is posted monthly in the IPC Review and updated regularly online at www.ipc.org/status.

The circulation and commenting procedures are common to all stages.

Note: In the following descriptions, the term “committee” is used generically to mean committee, subcommittee, or task group, except when a specific identification is required.

9.2 Project Initiation

9.2.1 IPC Project Initiation Notification (PIN)

The first step in IPC standardization is gaining approval from the TAEC to begin a project. This is accomplished by submission of an IPC Project Initiation Notification (PIN) form by a committee chair to IPC staff liaison. The PIN form will be assigned a tracking number and circulated to the TAEC. The TAEC will review the proposed project for technical soundness and possible conflicts with other committee projects and will ballot for approval. Approval of a PIN is based on 2/3 majority of returned ballots following attempted resolution of any negative votes. Once approved, the IPC PINs form becomes part of that project’s history file.

The IPC PINs form contains the following information:

- Title of project/document
- Proposed document number
- Scope, summary, or abstract of project (i.e. new project or change of scope)
- Purpose of Document Project
- ANSI approval
- Developing Committees/Subcommittee/Task Group Chair(s)
- IPC Staff Liaison
- Confirmation that project fits the IPC mission statement
- Volunteers

- Milestones
- Date submitted to TAEC
- Date approved by TAEC

Appendix A provides an example of a completed IPC PIN form.

9.2.2 Submission of PINS Forms to ANSI

If it is determined by the IPC Vice President of Standards, Technology & Int'l Relations that the project should be ANSI approved, the IPC ANSI coordinator will submit the ANSI PINS form to ANSI. A PINS form submitted to ANSI is subject to a 45-day public review. The submission of a PINS to ANSI is for notification only and not for approval of the IPC project and should be submitted after the IPC PIN is accepted by the TAEC.

ANSI PINS Forms will be submitted on-line as requested by ANSI. In some cases it may be necessary to fill out the form and submit via email as an attachment, using the ANSI PINS form Word template provided for this purpose. Appendix B provides an example of completed ANSI PINS form.

9.2.2.1 Amendments

Amendments to an existing standard are considered a separate document. A new PINS, BSR-8 and BSR-9 will be issued and designated "Supplement to a current standard."

9.3 Committee

IPC staff establishes a working committee by announcing the project through the IPC Review and the Status of Standardization online at www.ipc.org/status.

9.3.1 Establishing the IPC Consensus Group

At the "Final Draft for Industry Review" stage of the document development, a paragraph in the email correspondence will be added and a request made to reply, designating their desired level of participation. Three options will be offered (below); options 1 and 2 will receive the same committee correspondence related to the project.

1. Balloting Member, committed to reviewing drafts and casting ballots for their company location.
2. Public Review Member, primarily to stay current on document content and status. Comments and ballots are accepted, but not required.
3. Remove Me, unable to continue participation with the understanding that I will always have access to the latest drafts, comments and meeting minutes for this and all IPC work in progress at www.ipc.org/status. Also at any time can rejoin the committee.

If more than one individual from a company location requests to be a balloting member, IPC staff will select the one (1) person that has been most active with the committee during document development and will advise all others that they may submit public review ballots if they wish. Subsequently, if all the requesters from a company location reach agreement that a different person should be the balloting member for that company location, IPC will honor that request.

Options 1 and 2 of committee membership will receive the same committee correspondence related to the project and will be encouraged to participate in committee meetings, teleconferences and email discussions. See Appendix C for example.

Any individual submitting a comment will be given the opportunity to join the committee but will not be automatically added. Existing committee lists will be queried for continued participation when a revision is started. Individuals that do not respond to the second query in a 30-day time will be removed.

IPC will reserve the right to add to the voting roster as long as balance is maintained.

10 WORKING DRAFT PROCESS

Following TAEC approval of a PIN, the committee will develop a Working Draft of the document. The initiators of the project typically will already have an outline or strawman to build from. The committee chair will coordinate with IPC staff to set up a meeting. An announcement of the project may be provided to industry through press releases or posting to electronic forums with an invitation to participate.

10.1 Announcement of Availability

IPC staff will use email and the IPC Status of Standardization (online and in the IPC Review) to advise availability of a draft to members of the committee. The announcement will include a download link and staff contact information to resolve download problems or to request a hard copy.

10.2 Review and Comment

The draft document will be circulated to the entire committee for review and comment. All draft documents at this stage will contain wording that identifies the file as a Working Draft. The circulation period for Working Drafts is 30 days. (Appendix C provides an example of correspondence used to circulate drafts.)

Reviewers are requested to provide their comments in the electronic comment template that is made available to them. Mailed or faxed hard copy comments are also accepted and converted to electronic format by IPC staff. Appendix D provides an example of a comment form.

IPC staff collects the comments and compiles them in paragraph order. Each comment must include the submitter's name, company, paragraph/figure/ table identifier, recommendation and a reason for the recommendation. Compiled comment lists will be posted online and will be made available to committee members prior to the next scheduled meeting. The form includes a space to record committee resolution. Comments provided anonymously or without sufficient information to positively identify the submitter will be included in the compilation. However, if insufficient information is provided or the comment is otherwise unclear, it may not be possible to resolve and this will be so noted. If contact information is available, IPC staff will contact the commentor for clarification of the comment(s).

Resolution of comments must be fully documented. Comment resolution requires concurrence from at least 2/3 of the committee members present at the meeting. IPC staff will ballot the entire committee following the meeting if there is not substantial representation or if a 2/3 majority position cannot be reached. Resolution of a comment may be to accept, accept with modification, reject (with appropriate reason provided), or the submitter, if present during resolution, may withdraw the comment. Some comments will be overcome by events (OBE) due to changes already made as the result of a previous comment. When OBE is used, it must include a brief statement why the resolution is OBE.

10.3 Electronic File Format

All documents are converted to Portable Document Format (.pdf) and a link is provided in the email correspondence for easy download. (The .pdf file format has the advantage of a significantly smaller file

size, which permits shorter file transfer times, retention of color text and graphics within the document, and the ability for commenter to place comments as notes in the .pdf file.)

All review announcements include an email address or phone number to request a hard copy.

A comment form will be made available as a downloaded file or attached to the email and the user will be asked to email the completed form back to the project manager. A comment form may also be provided online.

10.4 Moving to the Next Stage

At some point the committee will determine the document is at or near completion, and will want to offer it to industry for review and oversight comment. This next stage is called the "Final Draft for Industry Review." The document will not be typeset at this point, but IPC staff will work with the committee chair to present it with all illustrations, tables and appendices/annexes in place.

11 Final Draft for Industry Review

This stage begins by providing industry with a notice of availability. Availability shall be made to all interested parties, regardless of membership in IPC or any other organization or on the basis of technical qualifications based on the content of the document.

11.1 Announcement of Final Draft Availability

The availability of the Final Draft for Industry Review is made by IPC staff through listing in the IPC Review Status of Standardization, which is received by all Official Representatives of IPC member companies. Public announcement is also made through the IPC web site (www.ipc.org/status).

The Final Draft circulation period is a minimum of 30 days from first publication in the IPC Review or posting on the IPC website. If time sensitive, the IPC Vice President of Standards, Technology & Int'l Relations may authorize fax or e-mail broadcast of the announcement of availability.

11.2 Review and Comment

The Final Draft document and comment form are provided to all members of the committee and any additional requesters. The correspondence, comment form and procedure for circulation are the same as used for Working Draft documents except for the identification of the draft as a Final Draft for Industry Review.

Comments received as a result of the circulation of the Final Draft are resolved in the same manner as those of a Working Draft.

11.3 Moving to the Next Stage

There may be instances of public review that cause major revisions to the Final Draft. IPC staff and the committee chair can determine that because of the nature or extent of changes the Final Draft should again be circulated as a Final Draft. The goal is to provide a document for ballot that will require few changes to reduce the possibility of multiple ballot circulations.

When the comments have been resolved by the committee, then in the absence of specific objection from members of the committee and upon consultation with IPC staff, the committee Chair can issue a Proposed Standard for Ballot.

12 PROPOSED STANDARD FOR BALLOT

Once IPC staff and the committee chair agree the document is ready to advance to Proposed Standard for Ballot, IPC staff will prepare the document for circulation. The following steps are integral to all Proposed Standard for Ballot circulations.

12.1 Formatting

The Proposed Standard for Ballot should be formatted if possible. This formatting allows the reviewer to see how the document will appear when published. Illustrations may have been developed at any time during the document's circulation process, but they all need to be completed before the Proposed Standard for Ballot circulation.

The document will be marked on each page "Draft Document for Industry Consensus Vote Only." This is done to prevent anyone from mistaking this document for a published standard or specification.

12.2 Determining Balance

IPC will take the necessary steps to make sure that the consensus body is fair and balanced and no interest group is more than the appropriate percentage of the total, whenever possible. If necessary, IPC staff and the committee leaders will seek additional ballot consensus members to resolve interest group balance. The following are IPC's interest categories:

User: Members of this category are users of the product covered by the document.

Supplier: Members of this category are suppliers of the product covered by the document.

General Interest: This category covers all other companies that may have a relationship to the product covered by the document (e.g., consultant, training site, service lab, etc.)

IPC's interactive electronic balloting (online) includes the requirement to designate a category. The online form will only allow for the selection of one designation.

Committee members can request IPC to change their voting site's interest category during the Proposed Standard for Ballot period. If a ballot consensus member attempts to designate more than one interest category, IPC staff will interact with the balloter to resolve the most correct category for that specific document. It is recognized that, depending on the scope and purpose of a standard, the same company may not always be in the same interest category.

IPC will strive to achieve balance in the interest categories noted above. IPC considers balance to be at least two voting sites in each of the aforementioned interest categories with a goal to have no single category with more than 50% of the vote. When a document appeals only to a much focused category IPC will provide a comment of explanation regarding heavy weighting of a category when the BSR-9 is submitted.

12.3 PROPOSED STANDARD FOR BALLOT Package

Prior to circulation, IPC staff must develop a Proposed Standard for Ballot. This consists of a cover sheet with the package contents list, Proposed Standard for Ballot, balloting committee roster, comment resolutions from the Final Draft circulation, and meeting minutes (if available) from the meeting where the Proposal comments were resolved. The Proposed Standard for Ballot circulation period is 30 days.

12.4 ANSI BSR-8

At the same time the Proposed Standard for Ballot is being distributed to the committee, an ANSI BSR-8 form is completed and sent to ANSI. The BSR-8 form requires that a link be given to download the document. This is so ANSI can provide a 45-day public review period for the document in Standards Action. (Appendix E shows an example of the ANSI BSR-8 form.) Any comments received from the filing of the ANSI BSR-8 form and announcement in the ANSI Standards Action are handled in the same manner as votes received from the Proposed Standard for Ballot circulation to the committee.

If a subsequent ballot is required as a result of substantive changes, IPC will submit a new BSR-8 to effect an additional public review cycle. After the second Proposed Standard for Ballot circulation, the committee at their discretion may consider the document frozen, with any new comments being held for amendment or future revision. This policy is to facilitate the process and prohibit a single member from stonewalling the development process.

12.5 Vote Process

If there are insufficient votes returned in response to the Proposed Standard for Ballot, additional circulations will be made. Prior to the deadline, a second request for votes will be sent to give members notice that the voting deadline is near. Throughout the balloting period, IPC staff will solicit the committee for votes on the Proposed Standard for Ballot document if ballot return is low.

IPC has set a goal of 65% ballot returns from the designated ballot group. If there is less than a 65% return and IPC has made at least two attempts at getting the responses, IPC Vice President of Standards, Technology & Int'l Relations will determine if any additional attempts must be made to get return or if the commenting period can be closed and the vote count sent to ANSI. IPC will not submit any ballot results to ANSI with less than a 50% return from the designated ballot group.

Ballots may also be received from public review. There are no expectations or requirements regarding the number of ballots from this undefined group. The only recording of public review ballots will be if a negative vote is maintained.

12.6 Determining Consensus

Consensus requires that all views and objections be considered, and that an effort be made toward their resolution. Consensus is the concurrence of 2/3 of the returned ballots from the designated ballot group; no more than 20% of total votes received can be negative and the balance may be to abstain.

If there are multiple ballots and a committee member votes during a Proposed Standard for Ballot circulation but fails to vote during subsequent Ballot or negative vote circulations, their vote from the previous circulation will be carried over and included in the tally for the next circulation(s) and will be tallied in the ANSI BSR-9 report. A statement to that effect will be contained in the correspondence to the balloting group.

Comments associated with a NO vote from that company location, whether from public review or a member of the designated ballot group, will be resolved following the process in clause 13 of these procedures.

The BSR-9 will reflect unresolved NO votes from public review in block 5. Negatives from a member of the designated ballot group, will be recorded in block 10 and the associated tally block. Public review yes and abstain votes will be not be included on the ballot summary in the BSR-9.

13 NEGATIVE VOTES/APPEALS PROCEDURE

13.1 Negative Votes

A negative vote may be submitted with technical comments or with no comments at all. IPC will encourage those submitting negative ballots to include substantiation so the developing committee can resolve the issues.

Any individual submitting a negative vote will be contacted to discuss and resolve their concerns. All negative ballots with comments, including those received through Public Review, will require a response from IPC staff with the decisions made by the committee and documented in the resolution of comments.

IPC staff will not change a vote unless instructed to do so by the voter. If the change of vote was not submitted in writing by the voter, then IPC staff will request a written confirmation that the voter agrees to the vote change. All negative votes that are maintained at the request of the voter shall be recorded and reported to the BSR as outstanding negatives.

Any maintained negative votes unaccompanied by comments will be recorded as “negative without comments” in the BSR-9 Report without further notice to the balloter.

Following resolution of comments of negative votes, it is then at the discretion of IPC staff to determine if the next circulation will be a rebalot or a negative vote circulation. This determination is usually based on the number of changes made to the document during the resolution period.

13.2 Substantive Comments

The voters will sometimes indicate their comments are editorial in nature. IPC staff will review all comments provided with ballots. If it is determined that resolution of the comment would make a substantive change to the document, the comment type will be changed from “editorial” to “technical” and the ballot will be considered a negative vote. The submitter must be notified of this action and afforded the opportunity to withdraw or modify the comment if desired.

13.2.1 Negative Vote Circulation

A negative vote circulation gives the committee the opportunity to review the negative votes and comments, resolutions, and changes made to the document (if any). During this period, balloters will be given the opportunity to maintain or change their original vote. The forms included in the negative vote circulation will also inform the negative voter(s) of their right to appeal. IPC must make every effort to disposition all negative votes before submitting the BSR-9 to ANSI. Should the negative vote not be accepted by the committee or committee chair and the voter refuse to rescind, the submitter, whether from public review or as a member of the designated ballot group, will be notified of this decision and their right to appeal to both IPC and ANSI.

If any member changes their vote to NO during the negative vote circulation, the NO vote will be treated as any previous NO vote. If reason is given (new technical comments submitted), then vote will be reviewed with the committee chair to determine whether the comment will be resolved for this version or whether it will be tabled for amendment or next revision. The balloter will be notified of decision and will be advised of their right to appeal to both IPC and ANSI. Votes will be report on the BSR-9 as stated in clause 12.6 of this procedures document.

13.3 IPC Appeals Procedure

The IPC Appeals Procedure is available to solve problems that are of significant nature and cannot be adjudicated within the framework of activity of a committee and/or through normal IPC document approval procedures.

Persons who have directly and materially affected interests and who have been or will be adversely affected by any substantive or procedural action or inaction by a standards developer with regard to the development of a proposed American National Standard or the revision, reaffirmation, or withdrawal of an existing American National Standard, have the right to appeal.

13.3.1 Significant Nature of Problem

Where possible, every effort will be made to process a conflict or a problem through the IPC Technical Committee comment resolution process. All appeals go to the IPC Vice President of Standards, Technology & Int'l Relations, who will follow the steps in 13.3.2 through 13.3.2.2 to establish an IPC Appeals Committee.

13.3.2 Function of IPC Appeals Committee

The IPC Appeals Committee will provide an opportunity for open discussion via written (such as a draft proposal from the appellant) and oral arguments by any parties involved in the appeal.

The appellate review and development of a specific recommendation shall not exceed 60 days following the date the appeal was submitted to the IPC Vice President of Standards, Technology & Int'l Relations.

13.3.2.1 Request for Candidates

IPC staff will contact the TAEC and Board of Directors to explain the problem and request recommendations for individuals to serve on the IPC Appeals Committee.

All recommended names of candidates to serve on the IPC Appeals Committee shall be reviewed and the following action taken:

- IPC staff, in cooperation with the appropriate committee chair(s), TAEC chair, and IPC Vice President of Standards, Technology & Int'l Relations, shall develop a list of proposed candidates.
- IPC staff will contact the individual or representative from a company who has made the appeal to review the proposed list of candidates. The appellant, IPC staff, and IPC Vice President of Standards, Technology & Int'l Relations will resolve any objection by the appellant to a specific individual serving on the IPC Appeals Committee.

13.3.2.2 Appointment of Appeals Committee

Following the review for candidates, an IPC Appeals Committee will be appointed by the IPC Vice President of Standards, Technology & Int'l Relations consisting of a minimum of three individuals. The total number of individuals to serve on any given IPC Appeals Committee will be determined by the nature of the problem. In cases where a conflict is between two or more IPC committees, appropriate representatives from each committee will be included on the IPC Appeals Committee. In cases where the objection comes from an individual, to maximize open discussion, the appellant may be invited to participate in the IPC Appeals Committee; this decision will be exercised at the discretion of the IPC Appeals Committee.

If an appellant is not satisfied with the decision(s) made by the IPC Appeals Committee, IPC will contact the appellant(s) and give them another opportunity to appeal at both the developer and ANSI levels. IPC

recognizes all negative appeal resolutions will have been exhausted before ANSI should become involved.

14 ANSI BSR-9

Upon completion of the Proposed Standard for Ballot circulation(s) and ANSI public review, IPC is required by ANSI to complete the American National Standards (ANS) Formal Submittal Checklist (ANSI BSR-9). Appendix F is an example of ANSI BSR-9 Form.

ANSI BSR-9 consists of a compilation of the ballot group votes, broken down by interest category, and a complete roster showing votes from both the designated ballot group. If any negative votes were unresolved during the negative ballot procedure in clause 13 of this document, a complete set of correspondence and identification of the negative voter must be submitted to ANSI. Notification will be sent to IPC upon completion of Final Action notifying IPC of ANSI Approval. As stated in clause 12.6 of this document, ballots will be accepted from Public Review; however only the ballots from the consensus voting group will be tallied and included on the BSR-9. Only unresolved negatives from Public Review will be noted on BSR-9

15 Publication

In the interest of providing publications to the industry in as timely a fashion as possible, IPC does not always wait for final ANSI approval of the document. Following BSR-9 submission, IPC staff, IPC Vice President of Standards, Technology & Int'l Relations and the committee chair can agree to wait for formal notification from ANSI or publish the document immediately without the ANSI approval notice and/or logo.

15.1 Placement of the ANSI Logo on IPC Documents

Once IPC receives approval by ANSI via the "Official Notification of Final Action," the ANSI logo will be printed on the inside title page of the document; the logo will include the ANSI approval date.

15.2 Department of Defense (DoD) Coordination

In 1995, the Perry Initiative, which called for the military to begin relinquishing its efforts in industry standards and specifications, was put into effect. Due to this, the DoD began calling for the Defense Supply Center Columbus (DSCC), which maintains military standards actions for the PCB industry, to begin cancelling military specifications, qualified manufacturers lists (QMLs), and qualified products lists (QPLs).

Since many companies IPC represents have a vested interest in military specifications, IPC took action to begin working with DSCC and the DoD to develop standards and specifications that could replace the military specifications as they were cancelled. If they so wished, the DoD would then determine the cancellation of the military standard and whether or not they would like to name the applicable IPC standard as its replacement. Due to past history of long delays in the process to obtain DoD approval, no IPC document will be held up for publication for DoD adoption notice.

If the DoD expresses interest in a proposed IPC standard, 25 copies of the Proposed Standard for Ballot are sent to DSCC. DSCC will then coordinate the document with the tri-services (Army, Navy, and Air Force).

IPC will attempt to resolve any comments submitted by the DoD or DSCC prior to publication of the document. Comments will be responded to in writing to the attention of DSCC-VA. If the DoD/DSCC comments are received after IPC publication, IPC staff must contact the committee chair to determine if an amendment should be considered to resolve comments and obtain adoption.

If the DoD adoption notice is received prior to publication, the announcement of DoD approval will be printed on the inside of the front cover. If the DoD adoption notice is not received at the time of publication, a logo is printed on the document cover indicating the date of submission for DoD adoption. If the adoption approval arrives at the IPC office, it will be posted on the IPC web site, submitted to all who have purchased the document, and inserted in documents to be sold.

16 IPC STANDARDIZATION POLICY STATEMENTS

16.1 Document Interpretation

When an "Official IPC Interpretation" (OII) is requested, the following procedure is followed:

- All OII requests must be submitted by e-mail, fax or mail.
- Committee chairs, staff liaison, and two other experts develop response.
- Response is filed for review at next meeting.
- IPC staff answers questions on documents on a daily basis. Most items are "What does IPC have on--"
- If questions or concerns arise for document clarification or justification, a copy is placed into the document file.
- If staff is unable to answer question, the committee chair is contacted.

16.2 IPC Standards Records Retention

IPC maintains all standards records until the next revision of the document. IPC maintains that standards documentation is accessible and maintained at IPC headquarters.

If IPC wishes to withdraw its approval of one or more of its American National Standards, it may do so without a vote of the relevant consensus body. If IPC does withdraw one or more of its American National Standards, then the standards developer shall notify ANSI immediately and the standard shall be withdrawn as an ANS and announced in Standards Action.

Records relating to withdrawn ANSs shall be maintained for five years from the date of withdrawal. Within four years of approval of an ANS, IPC shall initiate the necessary action to reaffirm, revise or withdraw the ANS accreditation notice.

16.3 Metric Policy

The TAEC has stated that all units of measure in IPC documents will be stated in the International System of Units (SI). When requested by the committee, a parenthetical expression of a "soft English" equivalent measurement may be included for linear dimensions only.

16.4 Patent Policy

There is no objection in principle to drafting a proposed IPC document in terms that include the use of a patented item if it is considered that technical reasons justify this approach.

If IPC receives a notice that a proposed IPC standard and specification may require the use of a patented invention, the procedures in Section 16.4.1 through 16.4.4 shall be followed.

16.4.1 Statement from Patent Holder

Prior to approval of such a proposed IPC, the IPC shall receive from the identified party or patent holder (in a form approved by the Institute) either: assurance in the form of a general disclaimer to the effect that such party does not hold and does not currently intend on holding any invention the use of which would be required for compliance with the proposed IPC or assurance that:

A license will be made available without compensation to the applicants desiring to utilize the license for the purpose of implementing the standard; or a license will be made available to applicants under reasonable terms and conditions that are demonstrably free of any unfair discrimination.

16.4.2 Record of Statement

A record of the patent holder's statement shall be placed and retained in the files of the IPC. A copy will be provided to ANSI to be in compliance with the ANSI Patent Policy.

16.4.3 Notice

When IPC receives from a patent holder the assurance set forth in 16.4.1 and 16.4.2 the standard shall include a note as follows:

Note: The user's attention is called to the possibility that compliance with this standard may require use of an invention covered by patent rights.

By publication of this standard, no position is taken with respect to the validity of this claim or of any patent rights in connection therewith. The patent holder has, however, filed a statement of willingness to grant a license under these rights on reasonable and nondiscriminatory terms and conditions to applicants desiring to obtain such a license. Details may be obtained from the standards developer.

16.4.4 Responsibility for Identifying Patents

IPC shall not be responsible for identifying all patents for which a license may be required by IPC Standards or for conducting inquiries into the legal validity or scope of those patents that are brought to its attention.

17 APPENDICES

The Appendices include the following documentation

- Appendix A: IPC PIN Form
- Appendix B: ANSI PINS Form
- Appendix C: Circulation Correspondence
- Appendix D: IPC Comment Form
- Appendix E: BSR-8 Example
- Appendix F: BSR-11 Example
- Appendix G: BSR-9 Example



IPC Project Initiation Notification (PIN) Form

PIN Number assigned:		Date:
IPC Document number:		
DOCUMENT/PROJECT TITLE:		
SCOPE, SUMMARY OR ABSTRACT OF DOCUMENT/PROJECT:		
AMENDED PIN SUBMITTAL:		
<input type="checkbox"/> Change of Scope <input type="checkbox"/> Other (give reason)		
General Committee (# and Title):		Developing Subcommittee/Task group(# and Title):
Purpose of Document Project:		
<input type="checkbox"/> Create a new IPC Standard/Guideline	<input type="checkbox"/> Discontinue a project/Dissolve Group	
<input type="checkbox"/> Revise an existing IPC Standard/Guideline	<input type="checkbox"/> Withdraw existing Standard/Guideline	
<input type="checkbox"/> Reaffirm an existing Standard/Guideline	<input type="checkbox"/> Develop other program (define)	
List other Committees impacted by this project:		
ANSI APPROVAL	This document will be submitted for ANSI Approval: <input type="checkbox"/> Yes <input type="checkbox"/> No	
Developing Committee/ Subcommittee/Task Group Chair(s):		
Project Leader	Name/Address:	Phone: Fax: Email:
Project Co-Chair	Name/Address:	Phone: Fax: Email:
IPC Staff Liaison:		
<p>IPC MISSION STATEMENT</p> <p>The IPC is a United States based trade association dedicated to furthering the competitive excellence and financial success of its members worldwide who are participants in the electronic interconnect industry.</p> <p>In pursuit of these objectives, the IPC will devote resources to management improvement and technology enhancement programs, the creation of relevant standards, protection of the environment and pertinent government relations.</p> <p>The IPC encourages the active participants of all its Regular, Allied and Associate Members in these activities and commits to full cooperation with all related national and international organizations.</p>		
Does this project fit within the IPC mission statement? <input type="checkbox"/> Yes <input type="checkbox"/> No – Explain importance:		
Committed Volunteers	Name	Company



IPC Project Initiation Notification (PIN) Form

Milestones	Milestone	Date
	1.	
	2.	
	3.	
	4.	
	5.	
	6.	
TO BE COMPLETED BY IPC STAFF		
Date Submitted to TAEC		
Date Approved by TAEC		

Form Revised October 6, 2004

Date:	
-------	--

This form may be submitted via E-mail to mweldon@ansi.org

PINS: PROJECT INITIATION NOTIFICATION SYSTEM FORM *(Effective 3/20/03)*

*NOTE: Adoptions of an ISO or IEC standards require compliance with ANSI's Sales & Exploitation Policy.

1. Designation of Proposed Standard:	
2. Title of Standard:	
3. Project Intent: (Check the applicable box below)	3a. Supersedes or Affects: (Specify designation of approved ANS standard(s) to be superseded and/or ISO or IEC standard(s)* to be adopted)
Create new standard	
*Adopt ISO or IEC standard (<u>3.0 Expedited Procedures for the Identical Adoption of an ISO or IEC standard as an ANS</u>)	
*Adopt modified ISO or IEC standard (<u>2.0 Requirements Associated with the Identical or Modified Adoption of an ISO or IEC Standard as an ANS</u>)	
*AND this adoption revises this current ANS	
Revise current standard	
Revise and Redesignate current standard	
Revise, Redesignate and Consolidate current standard	
Revise and Partition current standard	
Reaffirm current standard	
Reaffirm and Redesignate current standard	
Supplement to a current standard	
Withdraw current standard	
4. This standard contains excerpted text from an ISO or IEC standard, but is not an ISO or IEC adoption.	Check here if this standard includes excerpted text from an ISO or IEC standard but is not an identical or modified adoption of an ISO or IEC standard.
4. Provide a brief explanation of the need for the project:	
5. Identify the stakeholders (e.g., telecom, consumer, medical, environmental, etc.) likely to be directly impacted by the standard:	
6. This PINS revises a previous PINS submittal:	Note: A revised PINS is only required if the previously identified stakeholders have changed substantively (see item 6 on this form.).
7. Description of Contents of Standard: (Provide a one paragraph description, not to exceed 500 characters.)	
8. Canvass Developers: (This request must include a statement of how to obtain a copy of the canvass list.)	Check here to request Canvass Initiation Announcement.

9. Obtain a Copy of the Canvass List: (Specify name of contact or a URL address.)							
10. Consumer Product or Service:		Check here if standard covers Consumer Product or Service					
11. Accredited Standards Developer Acronym:							
12. Procedure Used for Consensus: (check one)		<input type="checkbox"/>	Canvass	<input type="checkbox"/>	Committee	<input type="checkbox"/>	Organization
13. Submitter: (Specify submitter's name and complete contact information, address, phone, email, etc.)	Name:						
	Title:						
	Organization:						
	Address:						
	City, ST, Zip:						
	Phone:						
	Fax:						
	Email:						

WORKING DRAFT EXAMPLE

Date

TO: All Members of the <Name of Task Group>, TG#, and other interested parties
SUBJECT: Working Draft of <Document title>

Dear Colleagues:

A copy of the Working Draft of <IPC-XXXX>, <Document title>, is available for your review. The file is in PDF format and can be opened with the freeware Adobe Acrobat Reader (www.adobe.com).

You may download a copy of the document through the following link:

http://members.ipc.org/committee/drafts/TG#_d_XXXXWD.pdf

In addition, a comment form is attached to this message with which you can provide your comments. If you have any problems opening the files, please contact us immediately.

The comment period for this circulation is 30 days. Please return any comments to <EmailAddress> as soon as possible, or by <deadline> at the latest. Your continued participation in this committee may be contingent on the return of the document comment form.

We would like to give special thanks to <name of chair>, for chairing the <task group name>.

Sincerely,

IPC staff person name
Technical staff
<EmailAddress>

FINAL DRAFT FOR INDUSTRY REVIEW EXAMPLE

Date

TO: All Members of the <Name of Task Group>, TG#, and other interested parties
SUBJECT: Final draft of <Document title>

Dear Colleagues:

A copy of the Final draft of <IPC-XXXX>, <Document title>, is available for your review. The file is in PDF format and can be opened with the freeware Adobe Acrobat Reader (www.adobe.com).

You may download a copy of the document through the following link:

http://members.ipc.org/committee/drafts/TG#_d_XXXXFD.pdf

In addition, a comment form is attached to this message with which you can provide your comments. If you have any problems opening the files, please contact us immediately.

The comment period for this circulation is a minimum of 30 days. Please return any comments to <EmailAddress> as soon as possible, or by <deadline> at the latest.

We have two categories of committee membership. They are:

- (1) supporting member, primarily to stay current on document content and status; and
- (2) voting member, committing to reviewing drafts and casting ballots for their company location.

IPC is required to have a balloting roster representing balanced participation from user, supplier, and general (training/lab/consultant) companies. Either category of committee membership is encouraged to participate in committee meetings, teleconferences and email discussions.

Please reply to this message selecting one of the following committee membership options.

Name:

Company:

BALLOTING MEMBER <IPC Task Group #> -- Yes, I am able to commit my time to review and ballot on <document> (If more than one individual from a company site requests to review and ballot a document, the individual with the highest level of participation will be added to consensus voting roster; all others will be added to Public Review) (IPC requires that these people decide which person will be the official balloter and that all others if submitted will be added to Public Review.)

Public Review <IPC Task Group #> -- Yes, please keep on the committee so that I receive email announcements of meetings, teleconferences and availability of new <document#> drafts. I'll review and comment the best I can. I understand ballots will be accepted from Public Review, however only the ballots from the consensus voting group will be tallied and included in results submitted to ANSI.

REMOVE ME -- I'm not able to continue participation in the <Task Group> at the present time. I understand that I will always have access to the latest drafts, comments and meeting minutes for this and all IPC work in progress at www.ipc.org/status. Further, I understand that I can rejoin this committee in any capacity at any time in the future just by making a request to the IPC staff liaison.

If we don't receive your response and we aren't able to otherwise establish contact you will be removed from the task group.

We would like to give special thanks to <Name of chair>, for chairing the <TaskGroupName>.
Sincerely,

IPC staff person name
Technical staff
<EmailAddress>

PROPOSED STANDARD FOR BALLOT EXAMPLE

DATE

TO: All Members of the <Name of Task Group>, TG#, and other interested parties
SUBJECT: Consensus Vote on <Document #> <Document title>

Dear Colleagues:

Since IPC is an accredited standards developing association in accordance with rules established by the American National Standards Institute, all IPC documents are circulated at the "Proposed Standard for Ballot" stage to the members of the task group where the document originated for a final vote of consensus.

A copy of <Document#>, <Document Title>, is available for your review. The file is in PDF format and can be opened with the freeware Adobe Acrobat Reader (www.adobe.com). You may download a copy of the document through the following links:

http://members.ipc.org/committee/drafts/TG#_d_XXXXPSB.pdf

Comments received during the Final Draft circulation and their resolution, as well as a roster of the 'consensus voting group' are included at the end of the file.

We have attached a ballot/comment form for you to submit your vote and any comments you may have on the document. If you prefer, you may cut-and-paste the form below into a new email message to submit your vote. Please return the form to <EmailAddress> with "<Document#> Ballot" in the subject line.

The deadline for submitting ballots/comments is <Deadline> at the latest.

All technical comments must be responded to in writing from the committee and the IPC staff. These records become a permanent part of the document file. If the comments are editorial in nature, they can be easily incorporated and need no official response. Comments received during this circulation will be resolved either by a face-to-face meeting or teleconference which will be held after the voting period has ended.

We would like to give special thanks to <Name of chair, Company>, for chairing the <TaskGroupName> and to all those who contributed to the development of this document.

Sincerely,

IPC staff person name
Technical staff
<EmailAddress>

Shall IPC publish <Document #> <Document title>?

The following information is required:

Name:
Company:
Address:
City/State:
Email:

I vote:

Approve (Editorial comments only, technical comments require a NO vote)

Disapprove

(Please note: Reasons for a negative vote are requested and should include specific wording or actions that could lead to resolution.)

Abstain

Category of Balloter (This information is required per our ANSI procedure to assure a balanced vote.)

User

Supplier

General Interest

COMMENTS: (Optional for "YES" or "ABSTAIN" votes)

Paragraph #

Comments or recommendations for changes: (Please check.)

Editorial Technical

RECOMMENDATION:

REASON FOR RECOMMENDATION (required):

PROPOSED STANDARD FOR BALLOT EXAMPLE (2)*

DATE

TO: All Members of the <Name of Task Group>, TG#, and other interested parties
SUBJECT: Consensus Vote on <Document #> <Document title>

Dear Colleagues:

Since IPC is an accredited standards developing association in accordance with rules established by the American National Standards Institute, all IPC documents are circulated at the "Proposed Standard for Ballot" stage to the members of the task group where the document originated for a final vote of consensus.

A copy of <Document#>, <Document Title> is available for your review. The file is in PDF format and can be opened with the freeware Adobe Acrobat Reader (www.adobe.com). The comment resolution is included at the end of the document which is a compilation of all comments received during the Final draft circulation. Also included is a copy of the voting roster.

You may download a copy of the document through the following link:

http://members.ipc.org/committee/drafts/TG#_d_XXXXPSB.pdf

A comment form is provided which you may use to submit your comments or concerns with the document. Please return the form to IPCstaffpersonName@ipc.org with "<Document#>" in the subject line. All technical comments must be responded to in writing from the committee and the IPC staff. These records become a permanent part of the document file. If the comments are editorial in nature, they can be easily incorporated and need no official response.

The comment form can be downloaded through this link:

http://members.ipc.org/committee/comments/TG#_c_XXXXcomm.pdf

Please return the form to <EmailAddress> with "<Document#> Ballot" in the subject line.
The deadline for submitting ballots is <Deadline> at the latest.

Add link

We would like to give special thanks to <Name of chair, Company>, for chairing the <TaskGroupName> and to all those who contributed to the development of this document.

Sincerely,

IPC staff person name

Technical staff

<EmailAddress>

* We are also using an online survey tool to enable balloters to more easily submit their vote. Ballot may be circulated either through email or by using the online survey service.

NEGATIVE VOTE RESOLUTION EXAMPLE

<DATE>

TO: All members of the Consensus Voting Group and Public Review
SUBJECT: Negative Vote on <DocNumber>, <DocName>

Dear Colleagues:

<Docnumber>, <Docname>, received a negative vote during its Proposed Standard for Ballot circulation. IPC's procedures as an accredited standards developing organization for the American National Standards Institute (ANSI) require that we circulate these negative comments as well as resolution by the task group.

Acting on behalf of the <ComName>, <Chair>, <Company>, has reviewed and responded to each of the comments. Attached you will find a .pdf file, <DocNumber>, which incorporates both the comment resolutions and the pages of <DocNumber> that have been changed due to these comments. The file is readable with the Acrobat Reader; freeware available at www.adobe.com).

If you are part of the balloting group, please review the changes and indicate your vote on the form, which is included in this message. The deadline for votes is <Deadline>.

If you are reviewing this document as part of Public Review, please indicate if you are satisfied with the changes.

We hope this circulation resolves all negative votes. Any maintained negative votes will be noted in the vote tally submitted to ANSI. According to the IPC standardization process, persons who feel they have been or will be adversely affected by any substantive or procedural action or inaction by IPC have the right to appeal. Appeals must relate to the document development process and not to the content of the negative vote. All appeals should be directed to:

David W. Bergman, CAE
Vice President, Vice President of Standards, Technology & Int'l Relations
IPC-Association Connecting Electronics Industries
3000 Lakeside Drive # 309S
Bannockburn, IL 60015
Phone 847-597-2840 Fax 847-615-5640
Email davidbergman@ipc.org

Appeals must be received in writing within 21 days of the date of this correspondence. In the event the appellant is unsatisfied with IPC appeals results, they have the right to appeal to ANSI. Such appeals shall be directed to ANSI in accordance with the procedures of the appropriate ANSI board or council (e.g., Board of Standards Review, Executive Standards Council).

We thank you for your help in developing this IPC document, and greatly appreciate your response as soon as possible.

Sincerely,

IPC staff person name
Technical staff
<EmailAddress>

<DocNumber>, <DocName>

Proposed Standard for Ballot - NEGATIVE VOTE RESOLUTION

NOTE: YOUR PROMPT RESPONSE IS REQUIRED

Please return your ballot by <Deadline> to:

IPC staff person name
Technical staff
IPC-Association Connecting Electronics Industries
3000 Lakeside Drive # 309S
Bannockburn, IL 60015
<EmailAddress>

IF YOU VOTED ON THE PREVIOUS CIRCULATION OF THE PROPOSED STANDARD FOR BALLOT BUT DO NOT VOTE ON THIS CIRCULATION, YOUR VOTE WILL BE CARRIED OVER AND INCLUDED IN THE TALLY FOR THIS CIRCULATION.

The following information is required:

Name:
Company:
Address:
City/State:
Email:

Upon reviewing the negative comments, resolutions and resulting changes to <DOCNUMBER>:

- () I wish to maintain my affirmative vote.
- () I wish to maintain my negative vote.
- () I wish to abstain.
- () I wish to change my vote to affirmative:
- () I wish to change my vote to negative.

IPC staff person name
Technical staff
<EmailAddress>

NEGATIVE VOTE MAINTAIN EXAMPLE

<DATE>

TO: <NEGVOTE>

SUBJECT: Negative Vote on <DOCNUMBER>, <DOCNAME>

Dear <NEGVOTE>:

This letter serves as official notice that the IPC <COMNAME> (<COMNUMBER>) has voted to publish <DOCNUMBER>.

Recognizing you have maintained your negative vote, we are notifying you of your right to appeal.

According to the IPC standardization process, persons who feel they have been or will be adversely affected by any substantive or procedural action or inaction by IPC has the right to appeal. Appeals must relate to the document development process and not to the content of the negative vote. All appeals should be directed to:

David Bergman
IPC – Association Connecting Electronics Industries
3000 Lakeside Drive, Suite 309S
Bannockburn, IL 60015
Phone 847-597-2840 Fax 847-615-5640
Main 847-615-7100
Email davidbergman@ipc.org

Appeals must be received in writing within 21 days of the date of this correspondence.

Thank you for your attention to this matter.

Sincerely,

IPC Technical Staff
Email address

PLEASE RETURN FORM TO: <JeanneCooney@ipc.org> SUBJECT LINE: "IPC-XXXX COMMENTS"

IPC DOCUMENT COMMENT FORM

IPC-XXXX Comments

Deadline Date	Document IPC-XXXX
------------------	----------------------

IPC-XXXX Document Title

FORM SUBMITTED BY:

- Name:
- Company:
- Address:
- City/State:
- Tel:
- Email:

Commentor (Name, Company)	Paragraph # Figure/Table	Type of comment Technical (T) Editorial (E) Rejection (R)	Recommendation	Reason for Recommendation
<name> <company>	1.4.2 In Note	E	Change From: "but none the less can impact the hardware's performance;" To: "but can impact the hardware's performance;".	The term None the less is useless but if you must use it the spell it as one word. Secondly, the hardware must show ownership of the performance.

TO ENSURE YOUR BEST OPPORTUNITY FOR ACCEPTANCE OF YOUR COMMENTS,
Please use the following format:

1. Suggest the fix. If a paragraph needs rewording, please suggest the rewording.
2. Identify reasoning behind the requested change.
3. PLEASE don't ask questions; present suggestions.
4. If your company, address, or phone/fax/email has changed, please note in one of the above boxes.

Date:	
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This form may be submitted via E-mail to mweldon@ansi.org

BSR-8/108: STANDARDS ACTION PUBLIC REVIEW REQUEST FORM *(Effective 3/20/03)*

*NOTE: Adoptions of an ISO or IEC standards require compliance with ANSI's Sales & Exploitation Policy.

1. Designation of Proposed Standard:	
2. Title of Standard:	
3. Project Intent: (Check the applicable boxes below)	3a. Supersedes or Affects: (Specify designation of approved ANS standard(s) to be superseded and/or ISO or IEC standard(s)* to be adopted)
Create new standard	
*Adopt ISO or IEC standard (3.0 Expedited Procedures for the Identical Adoption of an ISO or IEC standard as an ANS)	
*Adopt modified ISO or IEC standard (2.0 Requirements Associated with the Identical or Modified Adoption of an ISO or IEC Standard as an ANS)	
*AND this adoption revises this current ANS	
Revise current standard	
Revise and Redesignate current standard	
Revise, Redesignate and Consolidate current standard	
Revise and Partition current standard	
Reaffirm current standard	
Reaffirm and Redesignate current standard	
Supplement to a current standard	
Withdraw current standard	
4. This standard contains excerpted text from an ISO or IEC standard, but is not an ISO or IEC adoption.	Check here if this standard includes excerpted text from an ISO or IEC standards but is not an identical or modified adoption of an ISO or IEC standard.
5. Scope Summary: (Provide a one paragraph description of contents of standard, not to exceed 500 characters.)	
6. Public Review: (Check appropriate box if period requested is less than 60-days or is a second or third, etc. public review.)	30-day: Text of revisions not to exceed 1 page and must be attached.
	45-day: Electronic Drafts to be made available within 24 hours.
	Check here if this is a second (or third, etc.) public review request.

7. Single Copy Price:				
8. Order paper copy from: (Specify name of contact.)				
9. Order electronic copy: (Specify the E-mail or URL address for 45-day PR drafts)				
10. Send comments to: (Specify name of contact.)				
11. Canvass Developers: (This request must include a statement of how to obtain a copy of the canvass list.)		<input type="checkbox"/> Check here to request canvass initiation announcement in SA.		
12. Obtain a Copy of the Canvass List: (Specify name of contact or a URL address.)				
13. Consumer Product or Service:		<input type="checkbox"/> Check here if standard covers Consumer Service or Product		
14. Accredited Standards Developer Acronym:				
15. Procedure Used for Consensus: (check one)		<input type="checkbox"/> Canvass	<input type="checkbox"/> Committee	<input type="checkbox"/> Organization
16. Submitter: (Specify submitter's name and complete contact information, address, phone, email, etc.)	Name:			
	Title:			
	Company:			
	Address:			
	City, ST, Zip:			
	Phone:			
	Fax:			
	Email:			



Submit to: electronically to: psa@ansi.org or via fax to: ANSI BSR Secretary, 212-840-2298

(BSR-11: Effective 4/03)

Multi-purpose Extension Request Form

This form, or equivalent information, is to be submitted to the Procedures and Standards Administration (PSA) Department in accordance with the requirements set-forth in the *ANSI Essential Requirements: Due process requirements for American National Standards (ANSI Essential Requirements)*. If you are requesting an extension for more than one standard, please submit a table that contains the relevant information, as defined and labeled herein, in table format or tab separated text.

This Form may be used for the following Extension Requests:

1. **PUBLIC REVIEW EXPIRATION.** Extension requested to submit BSR-9 more than one year after the close of the ANSI public review period.
2. **OVERAGE STANDARD.** Extension requested to submit candidate standard that is more than 4 years past its approval date as an ANS and for which a PINS or BSR-8 has not been submitted. (Note that the approval of an ANS as such automatically expires on the tenth anniversary date of its approval – no extensions are possible.)
3. **PUBLICATION EXTENSION.** Extension requested to publish approved standard as an American National Standard.

Please complete:

ANSI-accredited standards developer name:	
Submitter:	
Title:	
Phone:	
E-mail:	
Fax:	

Please indicate the type of extension requested and provide the information listed:

1. **PUBLIC REVIEW EXPIRATION.** Extension requested to submit BSR-9 more than one year after the close of the ANSI public review period in *ANSI Standards Action (SA)*. Relevant clause from the *ANSI Essential Requirements*:

4.2 Approval of actions in connection with American National Standards

A proposed new American National Standard or a proposed revision or reaffirmation of an American National Standard to be approved by the BSR shall be submitted to the secretary of the BSR within one (1) year from the close of the comment period listed in *Standards Action* using the appropriate form provided by ANSI, unless the standards developer notifies the secretary of the BSR in writing of good cause for a different schedule for submittal.

Failure to make the submittal within two (2) years from the close of the comment period listed in *Standards Action* shall require consideration by the BSR, i.e., withdrawal, extension for cause, or another listing in *Standards Action*.

Standard designation:	
ANSI SA public review end date:	
Duration of requested extension:	
Reason for requested extension:	

2. **OVERAGE STANDARD.** Extension requested to submit candidate standard that is more than 4 years past its approval date as an ANS. Relevant clause from the *ANSI Essential Requirements* follows. Note that the submittal of a related PINS or BSR-8 form eliminates the need for an extension request:

4.7.1 Periodic maintenance of American National Standards

Periodic maintenance is defined as the maintenance of a standard by review of the entire document and action to revise or reaffirm it on a schedule not to exceed five years from the date of its approval as an American National Standard.

In the event that a PINS or BSR-8/108 has not been submitted for an American National Standard within five years after its approval, the standards developer may request an extension of time to reaffirm or revise the standard, or shall withdraw the standard. The request for an extension of time shall be submitted to ANSI within thirty days following five years after the approval date of the American National Standard. Requests for extensions shall provide the program and schedule of work that will lead to revision, reaffirmation, or withdrawal. The extension may be granted by the ExSC or its designee.

No extension of time beyond ten years from the date of approval shall be granted for action on a standard. In no case shall a standard maintain its status as a current American National Standard beyond ten years from the date of approval. Such approval automatically expires on the tenth anniversary date of approval as an American National Standard.

In the event that an American National Standard approved by a standards developer who has been granted authority to designate its standards as American National Standards is not reaffirmed, revised, or withdrawn within five years after its approval, the standards developer shall follow its own procedures to ensure that work is proceeding and shall notify the Institute and provide the estimated time of completion. In no case shall a standard maintain its status as a current American National Standard beyond ten years from the date of approval. Such approval automatically expires on the tenth anniversary date of approval as an American National Standard.

Standard designation:	
Date of approval of standard as an American National Standard:	
Duration of requested extension:	
Reason for requested extension:	

3. **PUBLICATION EXTENSION.** Extension requested to publish approved standard as an American National Standard. Relevant clause from the *ANSI Essential Requirements*:

4.5 Publication of American National Standards

American National Standards shall be published and made available as soon as possible, but no later than six months after approval as an American National Standard. The standards developer shall publish the standard or shall grant the right of publication to ANSI.

If an American National Standard is not published within six months following its approval, the standards developer may request an extension of this deadline from the ExSC or its designee. Such a request shall be in writing, shall supply the reason for the delay, and shall indicate a firm final date for publication. At its discretion, the ExSC or its designee may grant an additional period of time for publication.

The ExSC or its designee shall publish a notice in *Standards Action* of intent to withdraw approval if the standards developer a) fails to publish the standard or fails to grant ANSI the right to publish within six months after its approval as an American National Standard and does not request an extension of the deadline despite follow-up or b) fails to meet the extended deadline.

Standard designation:	
Date of approval as an ANS:	
Duration of extension:	
Date standard will be published:	
Reason for requested extension:	

BSR-9 (Effective Date: 4/1/03)

DATE: _____

American National Standard (ANS) Formal Submittal Checklist

PLEASE NOTE: This document is used to transmit the final submittal of a candidate American National Standard to ANSI. A standard should only be submitted to ANSI for approval if all of the appropriate evidence of consensus accompanies it in accordance with the *ANSI Essential Requirements: Due process requirements for American National Standards (ANSI Essential Requirements.)*
 *NOTE: Adoptions of international standards require compliance with ANSI's Sales & Exploitation Policy.

Please direct questions to: psa@ansi.org or by fax to the PSA Department at (212) 840-2298.

1. Designation of Standard: _____
 Year that should be included in the designation, if other than the year of approval as an ANS:

2. Title of Standard:

3. Project Intent (relates to the status of the standard in terms of ANSI only, e.g., any standard that is not an approved ANS, is a new standard):
 - Create new standard
 - *Adopt identical international standard (see ANSI Procedures for the National Adoption of ISO and IEC Standards as ANS)
 - *Adopt modified international standard (see ANSI Procedures for the National Adoption of ISO and IEC Standards as ANS)
 - ***AND** this adoption revises this current ANS
 - Revise current standard
 - Revise and Redesignate current standard
 - Revise, Redesignate and Consolidate current standard
 - Revise and Partition current standard
 - Reaffirm current standard
 - Reaffirm and Redesignate current standard
 - Supplement to a current standard
 - Withdraw current standard

4. Attach consensus body roster including interest category of each member and vote. (See *ANSI Essential Requirements 4.2.1.1.*) Identify the group that is considered to be the consensus body and whose vote is included in item 10 below: _____.

5. Indicate the total number of unresolved objections to the proposed action on the standard resulting from all public review period(s) only, including ANSI Standards Action _____. Attach evidence of attempted resolution. (See *ANSI Essential Requirements 2.5.*) (Note: do not include unresolved votes of consensus body members here; see item 10 for an accounting of such votes.)

6. Date(s) on which unresolved objections (public review/consensus body) were provided to the consensus body for consideration. Attach evidence of compliance with this requirement (also referred to as "recirculation" or "reconsideration".) (See *ANSI Essential Requirements 2.5.*)
 Date(s): _____ Not applicable: _____

7. Were all unresolved objectors informed of their right to appeal to the standards developer?
 Yes ___ No___ (See *ANSI Essential Requirements 2.5.*) _____ Not Applicable, because:

Attach documentation of written notification of the right to appeal to standards developer.

8. Did any unresolved objectors complete the appeals process available through the standards developer?
(See *ANSI Essential Requirements 2.7.*)

Yes (Name and contact information for each is attached) No Not Applicable

9. Date of Final Consensus Body Vote (i.e., date the vote was closed): _____

10. Evidence of Consensus, i.e., the FINAL consensus body vote tally (See *ANSI Essential Requirements 2.6.*)

SUMMARY OF CONSENSUS BODY VOTE BY INTEREST CATEGORY

Interest Category	Affirmative(s)	Negative(s)	Negative(s) without comment	Abstention(s)	Not Returned	Total
TOTALS						

11. State the applicable numerical requirements for consensus as established in your ANSI-accredited procedures:

Check here to certify that these requirements have been satisfied.

12. Publication: Publication of an ANS is required within 6 months of the date of its approval as such. To request ANSI to provide publication services, please contact the ANSI Publications Department.

13. Check here if there are statements from patent holders (patent letters of assurance) that have been received regarding the proposed ANS. Please attach a copy of all such statements.

Certification Statement

14. ***Please read and confirm compliance before signing and submitting to ANSI.***

I hereby declare the ANSI criteria for approval/withdrawal have been met and that the draft standard was acted on in accordance with section 4.2, Criteria for Approval and Withdrawal of American National Standards of the *ANSI Essential Requirements* and the following criteria and that evidence to this effect is enclosed or otherwise available for inspection:

- That due process requirements were met.
- That the standard is within the scope previously registered with ANSI.
- That any identified significant conflict with another American National Standard was addressed in accordance with the requirements set-forth in the *ANSI Essential Requirements*.
- That other known national standards were examined with regard to harmonization and duplication of content; if duplication exists, there is a compelling need for the standard.
- That objectors have been notified in writing of their right to appeal to the standards developer and that all appeals to the standards developer were completed.
- That any known unresolved objection as defined in the *ANSI Essential Requirements* to the approval/withdrawal of this standard as an American National Standard is documented herein.
- That no substantive changes have been made in the draft standard as listed in *Standards Action*.
- That we agree to comply fully with the *ANSI Patent Policy*.

I agree that the evidence supporting any statement in this submittal or its attachments may be verified at any time through inspection or audit by the American National Standards Institute, either on its own initiative or upon appeal or request by any substantially concerned party. Reasonable requests for specific information that we receive directly from substantially concerned parties will be honored.

If it develops that misstatements of fact have been made in connection with this submittal, I understand that the standard in question is subject to withdrawal with appropriate public notice with reasons therefor. Furthermore, I understand that our organization may be subject to disqualification for a period of time or withdrawal of accreditation for improper submission of a standard to the Board of Standards Review.

Our organization agrees to maintain the American National Standard by reaffirmation, revision, or withdrawal within five years of the date of ANSI approval.

Submitter's Name: _____ Title: _____

Accredited Standards Developer: _____

Address: _____ City: _____ State: _____ Zip: _____

E-mail: _____ Fax: _____

Signature: _____