Exhibit 61

IEEE-SA Standards Board Operations Manual

The Institute of Electrical and Electronics Engineers, Inc. 3 Park Avenue, New York, NY 10016-5997, USA

Copyright © 2011 by the Institute of Electrical and Electronics Engineers, Inc. All rights reserved. Published 2011. Printed in the United States of America.

Reproduction and distribution of this document in whole or in part by any medium is permitted. Appropriate acknowledgement of the source and ownership of the material should be made with any such reproduction and distribution.

Please note that this document may be revised periodically. The latest edition will be made available at the IEEE Standards website at no charge. The document on the IEEE Standards website is considered to be the definitive version (http://standards.ieee.org/guides/opman/index.html). For further information, contact the IEEE Standards Department, 445 Hoes Lane, Piscataway, NJ 08855-1331, USA.

Contents

| I Introduction | |
|---|----|
| 1.1 Scope and purpose | |
| 1.2 Types of IEEE standards | |
| 1.3 Standards documentation | 2 |
| 2. Related documents | 3 |
| 3. Abbreviations and acronyms | 4 |
| | |
| 4. IEEE-SA Standards Board and committee procedures | |
| 4.1 IEEE-SA Standards Board | |
| 4.2 Standing committees of the IEEE-SA Standards Board 4.3 Forming a Standards Coordinating Committee (SCC) | |
| 4.4 Organization of SCCs | |
| 4.5 Responsibilities of SCCs | |
| 4.6 Disbanding a Standards Coordinating Committee (SCC) | |
| | |
| 5. Standards development | |
| 5.1 Sponsor | |
| 5.2 Project authorization | |
| 5.3 Standards development meetings. | |
| 5.4 Standards ballot by the Sponsor | |
| 5.5 Submission of proposed standards to the IEEE-SA Standards Board | |
| 5.6 Adoption | |
| 5.7 Trial-Use standards | |
| 5.9 Interpretations and explanations | |
| | |
| 6. Copyright, commercial terms and conditions, patents, and standard structure | 34 |
| 6.1 Copyright | 34 |
| 6.2 Commercial terms and conditions | |
| 6.3 Patents | |
| 6.4 IEEE standard document structure | 37 |
| 7. IEEE participation on committees outside the IEEE | 39 |
| 7.1 IEEE representatives on ANSI Accredited Standards Committees (ASCs) | |
| 7.2 IEEE Category D Liaisons with the International Electrotechnical Commission (IEC) | |
| 8. Publication | 43 |
| 8.1 Standards | |
| 8.2 Publication of drafts. | |
| 9. Maintenance of IEEE standards. | 45 |
| 9.1 Reaffirmation | 45 |
| 9.2 Revision | 46 |
| 9.3 Stabilized standards | |
| 9.4 Withdrawal | 47 |
| 10. Maintenance and modification of the IEEE-SA Standards Board Operations Manual | |
| 10.1 Interpretations of the IEEE SA Standards Roard Operations Manual | 48 |

IEEE-SA Standards Board Operations Manual

1. Introduction

1.1 Scope and purpose

The organization and basic procedures of the IEEE-SA Standards Board are covered by the IEEE-SA Standards Board Bylaws. The following material supplements the provisions of the IEEE-SA Standards Board Bylaws, which shall be the prevailing document in the event of conflict. The purpose of this document is to specify the procedures that shall be followed in the standards-development process in use within the IEEE.

1.2 Types of IEEE standards

IEEE standards include but are not limited to:

- Lists of terms, definitions, or symbols, applicable to any field of science or technology within the scope of the IEEE.
- Expositions of scientific methods of measurement or tests of the parameters or performance of any device, apparatus, system, or phenomenon associated with the art, science, or technology of any field within the scope of the IEEE.
- Characteristics, performance, and safety requirements associated with devices, equipment, and systems with engineering installations.
- Recommendations reflecting current state-of-the-art in the application of engineering principles to any field of technology within the scope of the IEEE.

IEEE standards are classified as:

- Standards: documents with mandatory requirements.¹
- Recommended practices: documents in which procedures and positions preferred by the IEEE are presented.
- Guides: documents in which alternative approaches to good practice are suggested but no clear-cut recommendations are made.

¹Mandatory requirements are generally characterized by use of the verb "shall," whereas recommended practices normally use the word "should." See the *IEEE Standards Style Manual* for further information.

— *Trial-Use documents*: publications in effect for not more than two years. They can be any of the categories of standards publications listed above. (See 5.7.)

The IEEE standards development process may result in one or more of the following documents:

- --- New: A document that does not replace or modify another standard.
- --- Revision: A document that updates or replaces an existing IEEE standard in its entirety.
- --- Amendment: A document that contains new material to an existing IEEE standard and may contain technical corrections to that standard.
- Corrigendum: A document that only contains technical corrections to an existing IEEE standard.
- --- Erratum: A document that contains only grammatical corrections to, or errors introduced during the publishing process of, an existing IEEE standard.

IEEE Standards Project Editors can assist Sponsors in determining whether an amendment or revision is appropriate.

IEEE Standards may be in one of four states of activity:

- Developing: Standards projects that have not yet been approved as standards.
- --- Active: Approved standards that are subject to the requirements for regular maintenance. (See clause 9).
- --- Stabilized: Approved standards that
 - a) Are not health or safety standards
 - b) Address mature technologies or practices
 - Are required for use in connection with existing implementations or for reference purposes
 - d) Contain no identified significant erroneous information
 - e) Are not likely to require revisions. (See 9.3).
- --- Withdrawn: Standards that are no longer maintained and may contain significant obsolete or erroneous information. (See 9.4).

1.3 Standards documentation

All IEEE-SA draft standards, meeting minutes, Sponsor ballot materials, and Sponsor ballot comments shall be in the English language.

2. Related documents

American National Standards Institute, ANSI Essential Requirements: Due process requirements for American National Standards (current edition).

IEEE Standards Association Operations Manual.

IEEE-SA Standards Board Bylaws.

PAR Form.

IEEE-SA Standards Board Working Guide for Submittal of Proposed Standards and Form for Submittal of Proposed Standards. (Known as the IEEE-SA Working Guide for the Submittal of Proposed Standards.)

IEEE Standards Style Manual.

Robert's Rules of Order, Newly Revised (current edition).

3. Abbreviations and acronyms

AdCom: IEEE-SA Standards Board Administrative Committee

ANSI: American National Standards Institute

ASC: ANSI Accredited Standards Committee

AudCom: IEEE-SA Standards Board Audit Committee

IEEE: Institute of Electrical and Electronics Engineers

NesCom: IEEE-SA Standards Board New Standards Committee

PAR: Project Authorization Request

PatCom: IEEE-SA Standards Board Patent Committee

ProCom: IEEE-SA Standards Board Procedures Committee

RevCom: IEEE-SA Standards Board Standards Review Committee

SASB: IEEE-SA Standards Board

SCC: Standards Coordinating Committee

SDO: Standards-Developing Organization

TC: Technical Committee

WG: Working Group

4. IEEE-SA Standards Board and committee procedures

4.1 IEEE-SA Standards Board

4.1.1 Transaction of business

Except as specified in the *IEEE-SA Standards Board Bylaws* and these procedures, business of the *IEEE-SA Standards Board meeting will be conducted in accordance with the latest edition of <i>Robert's Rules of Order*.

4.1.1.1 Agenda

A preliminary agenda for each meeting shall be prepared by the Secretary and sent to the members of the IEEE-SA Standards Board, including liaison representatives, at least two weeks prior to a scheduled meeting. The preliminary agenda shall also be sent to the IEEE-SA Board of Governors (BOG).

A final agenda shall be presented at the time of the IEEE-SA Standards Board meeting. Recommendations to the IEEE-SA Standards Board from the committees of the IEEE-SA Standards Board shall be contained in an agenda item known as a "consent agenda." Prior to approval of the agenda, any member may request that an item on the consent agenda be removed and considered separately as part of the agenda. Adoption of the consent agenda as modified constitutes approval of all included items by unanimous consent. The balance of the agenda normally includes, in the order shown, the Chair's report, the Secretary's report, action items, information and discussion items, committee reports, and new business.

4.1.1.2 Minutes

The minutes of each meeting of the IEEE-SA Standards Board shall be distributed by the Secretary to voting members, liaison representatives, the IEEE-SA BOG, those present at the meeting, and anyone involved in an action of the IEEE-SA Standards Board within four weeks following the meeting. In reporting an official action of the IEEE-SA Standards Board, the minutes shall, on request of dissenters, contain a record of the dissenting votes. In addition, a listing of resolutions of each meeting of the IEEE-SA Standards Board shall be publicly distributed by the Secretary within four weeks following the meeting.

4.1.1.3 Project Authorization Requests (PARs)

PARs that have been submitted by Sponsors to the Secretary of the IEEE-SA Standards Board by the established deadline shall be submitted by the Secretary to the New Standards Committee (NesCom) for review. Notification of this distribution shall be given to all members of the IEEE-SA Standards Board. (For additional information on the procedures of NesCom, see 4.2.2.)

4.1.1.4 Submittal of proposed standards

Proposed standards, together with the required documentation, that have been submitted by Sponsors to the Secretary of the IEEE-SA Standards Board by the established deadline shall be submitted by the Secretary to the Standards Review Committee (RevCom) for review. Notification of this distribution will be given to all members of the IEEE-SA Standards Board. (For additional information on the procedures of RevCom, see 4.2.3.)

4.1.1.5 Confidentiality Statements and Copyright Notices on Communications

The IEEE-SA Standards Board and its committees operate in an open manner. To that end, no material submitted to the IEEE-SA Standards Board or its committees will be accepted or considered if it contains

any statement that places any burden on the recipient(s) with respect to confidentiality or copyright. Any communication, including electronic mail, containing language with such restrictive wording will not be accepted or considered.

It should be noted that this policy does not apply to IEEE copyrighted materials, such as draft standards, or to materials to or from IEEE counsel appropriately classified as attorney-client privileged. In the event that copyrighted materials are to be incorporated in an IEEE standard, an acceptable copyright release or assignment must be obtained from the copyright owner prior to approval of the standard by the IEEE-SA Standards Board.

4.1.2 Liaison representatives

The Secretary of the IEEE-SA Standards Board shall circulate the following information to the liaison representatives for review and action:

- a) Each IEEE Project Authorization Request (PAR) submitted for approval. The liaison representative is expected to review each request to see if his or her organization has a substantial interest in the project.
- b) Agenda for each IEEE-SA Standards Board meeting. This should be reviewed to determine if there is any item on the agenda of substantial interest to the organization. The liaison member should be present, if necessary, to support the interests of the organization.
- Minutes of meetings of the IEEE-SA Standards Board. This shall include action taken on PARs and draft standards.
- d) Notice of assignment of a standards project. When the IEEE-SA Standards Board, on its own initiative, agrees on the need for a standard, a request to develop the standard shall be sent to the liaison representative of the Society and/or the Standards Coordinating Committee (SCC) having primary interest in the subject. The liaison representative is expected to assign the project to the appropriate technical unit as Sponsor for the development of the standards project.
- e) Status Reports. The liaison representative shall review any sections of the project reports that may be assigned to his or her organization and notify the Secretary of the IEEE-SA Standards Board of any corrections and revisions. The liaison representative should ensure that action is taken to update all standards assigned to the Society within five years of the date of publication. If no action is initiated by the Sponsor to update a standard within the five-year period, the liaison representative should arrange for submission of a recommendation to withdraw the standard. The liaison representative should monitor work being done on all standards projects, including revisions of existing standards, and report any changes in the status of the standards to the Secretary of the IEEE-SA Standards Board.

4.2 Standing committees of the IEEE-SA Standards Board²

4.2.1 Procedures Committee (ProCom)

This committee shall review proposed modifications to the *IEEE-SA Standards Board Operations Manual* and the *IEEE-SA Standards Board Bylaws* and submit its recommendations for a vote of the IEEE-SA Standards Board. It shall hold meetings as the need requires.

²Note that not all committee operations are detailed in this subclause.

This committee shall review proposed modifications to the *IEEE Standards Style Manual* and submit its comments to IEEE-SA Staff.

4.2.2 New Standards Committee (NesCom)

This committee shall examine Project Authorization Requests (PARs) and make recommendations to the IEEE-SA Standards Board regarding their approval. Such forms shall be reviewed in detail to make certain that all necessary information has been properly provided.

4.2.3 Standards Review Committee (RevCom)

This committee acts in an advisory capacity to the IEEE-SA Standards Board by making recommendations on the approval or disapproval of standards submitted for IEEE-SA Standards Board approval or adoption.

Approval or adoption of a standard requires a consensus of RevCom that the requirements of the procedures of RevCom and those of the IEEE-SA Standards Board have been satisfied. Specifically, this means that the final results of the ballot and statements submitted by balloters who participated in the development of the standard indicate that consensus has been achieved and unresolved negative ballots have been properly considered, together with reasons why the comments could not be resolved.

4.2.3.1 RevCom agenda

A preliminary agenda for each RevCom meeting shall be prepared by the Secretary of the IEEE-SA Standards Board or a designated person and distributed to RevCom members at least 30 days³ prior to a scheduled meeting of RevCom. Included with the agenda shall be a list of all proposed standards to be presented to the IEEE-SA Standards Board for approval. At the same time the agenda, without supporting documentation, shall be sent to all members of the IEEE-SA Standards Board, liaison representatives, and other organizations and persons. The agenda is to be sent to all persons and organizations that have expressed an interest in the standards activities of the IEEE.

4.2.3.2 Review of draft standards

The RevCom Administrator shall distribute a copy of each proposed standard to the members of RevCom, together with the submittal form and any other pertinent information, for review. An IEEE-SA Standards Board member or the liaison representative may request a copy of the proposed standard from the RevCom Administrator. RevCom members are responsible for reviewing the documents and submitting comments to the RevCom Administrator. All comments and objections with reasons shall be distributed by the RevCom Administrator to RevCom members and the liaison representative of the Sponsor.

All requests for approval of a standard shall be reviewed by RevCom to ensure that the submittal is complete and that appropriate IEEE procedures are followed completely and correctly (see the IEEE-SA Working Guide for Submittal of Proposed Standards).

Examples of some of the points that must be carefully analyzed are given in the following paragraphs:

- --- Title of Document. The title on the draft document and submittal form shall be within the scope as stated on the most recently approved PAR, or action(s) shall be taken to ensure this.
- Scope and Purpose of Document. For new and revision projects, the scope and purpose of the draft document submitted to RevCom shall match the scope and purpose stated in the approved PAR.

³Throughout this document, the term 'days' shall mean calendar days.

- Coordination. Mandatory coordination comments shall be addressed. If the Sponsor believes that satisfying specific mandatory coordination comments will impede the utility of the draft standard, appropriate documentation of this position shall be presented to RevCom.
- --- Ballot Summary. A ballot summary of the vote of the members is required, e.g., showing the classification of members of the balloting group and including comments accompanying unresolved negative ballots. For complete details, see 5.4.1 and 5.4.3.
- --- Balloting Group. The balloting group shall be formulated according to 5.4.1.
- Classification of Balloting Body. Classification of the balloting body shall be in accordance with 5.4.1.
- --- Comment Responses. All comments shall receive consideration and response in accordance with 5.4.3.

4.2.3.3 Sponsor representation at RevCom

At the suggestion of the Secretary, the Sponsor may send a representative to the RevCom meeting at which a proposed standard having unresolved negative comments is to be reviewed. The Secretary shall ensure that the representative receives a copy of all comments, objections, and negative RevCom votes with reasons. The Sponsor representative shall be given an opportunity to discuss them at the meeting.

4.2.3.4 Proponents and objectors to actions before RevCom

Proponents and objectors to actions before RevCom may attend meetings to present their views. When negative comments are received in advance from RevCom members, the Sponsor shall be invited to send a representative(s) to the RevCom meeting to answer questions and help resolve issues.

4.2.3.5 Dissenting opinions

At the request of any member of RevCom, a recommendation may be accompanied by a statement in disagreement with the recommendation. While there seldom is a "minority" position, the IEEE-SA Standards Board shall be informed of significant controversies.

4.2.4 Audit Committee (AudCom)

This committee shall make routine reviews and inspections to assure that each standards-developing entity, through its Sponsor and Working Group policies and procedures (P & P), is adhering to the procedures described in the *IEEE-SA Standards Board Bylaws* and the *IEEE-SA Standards Board Operations Manual*. It will make recommendations as appropriate to advise the standards-developing entities of changes that are needed. The committee shall periodically issue reports when requested by the *IEEE-SA Standards Board*, summarizing its findings and making recommendations as appropriate for Standards Board action.

The committee shall develop sets of basic Sponsor and Working Group operating procedures for standards development and shall use such operating procedures as a baseline when performing audits of P & P.

4.2.4.1 AudCom review of Sponsor P & P

AudCom recommends to the IEEE-SA Standards Board the following actions concerning IEEE-SA Sponsor P & P:

--- Accepted

- --- Not accepted
- --- Visibly under development

A Sponsor's P & P shall be determined by AudCom to be visibly under development or accepted by AudCom before performance of any standards work (including but not limited to: PAR actions, Sponsor ballot actions, interpretations, etc.) by that Sponsor is authorized by the IEEE-SA Standards Board to commence,

After a Sponsor's P & P have been submitted to AudCom and an AudCom member is assigned as mentor to review the document, the P & P may be determined by AudCom to be visibly under development. The P & P will remain in such a state until AudCom is either satisfied that they are complete and acceptable or that the Sponsor is no longer responsive to AudCom and that the P&P are not acceptable.

AudCom will ensure that each Sponsor has based its P & P on the appropriate Sponsor procedures (e.g., individual, entity, SCC Type 1, or SCC Type 2) available from the IEEE-SA.

Sponsor P & P shall be subject to review by AudCom every five years to ensure currency. However, if a Sponsor revises its P & P prior to its next scheduled AudCom review, the Sponsor shall immediately submit its revised P & P to AudCom for review and acceptance.

The IEEE Standards Sponsor P & P document accepted by AudCom shall be the official policies of that Sponsor and shall reside online on the IEEE-SA Standards Board AudCom website. No other copy shall be designated as the official copy. Links to the IEEE-SA Standards Board AudCom website are encouraged.

4.2.4.2 AudCom review of Working Group P & P

It is the responsibility of the Sponsor (see 5.1.2) to approve the P & P of its working groups involved in the technical development work of a standard. However, at any time, AudCom may-select a working group on which to conduct a WG P & P audit, from the various working groups that the Sponsor has active at the time. At least one of a Sponsor's WG P & P shall be subject to review by AudCom every five years to ensure currency. AudCom will conduct the review based on comparison to the then-current baseline WG P & P available from IEEE-SA.

AudCom will review the WG P & P of the selected working group and, if no issues are found, will report this to the IEEE-SA Standard Board. If issues are identified with the selected WG P & P, AudCom will suggest revisions. AudCom may also require review of additional WG P & P of other working groups for the Sponsor. If issues are not resolved in a reasonable time, or significant issues are found among the WG P & P of several working groups, AudCom may recommend to the IEEE-SA Standards Board that the Sponsor's Working Group P & P be considered "not accepted", and that Sponsor standards development activities be stopped. If issues exist but progress is being made, AudCom may recommend to the IEEE-SA Standards Board that the Sponsor's Working Group P & P be considered "visibly under development".

Stopping of standards development activities includes PAR submissions, Sponsor ballot activities, interpretation actions, etc.

4.2.5 Patent Committee (PatCom)

This committee reviews patent letters of assurance and other patent information submitted to the IEEE Standards Department. It examines issues brought to its attention regarding IEEE Standards development and patents, and makes recommendations as appropriate.

4.2.6 Continuous processing of IEEE-SA Standards Board and committee agenda items

In order to reduce the time involved in standards development, the IEEE-SA Standards Board and its committees may use continuous processing through electronic technologies to consider appropriate agenda items. Each agenda item to be considered under this methodology shall be carefully appraised as to its suitability for this process. The IEEE-SA Standards Board and its committees should establish means for continuous processing according to their unique needs. These methods are publicly available by contacting the Secretary of the IEEE-SA Standards Board.

Any votes taken by the IEEE-SA Standards Board during continuous processing are subject to the provisions stated in subclause 5.1 of the IEEE-SA Standards Board Bylaws.

4.3 Forming a Standards Coordinating Committee (SCC)

The IEEE-SA Standards Board will consider petitions from persons who outline the desirability of an SCC type 1 or SCC type 2, defined in subclause 4.3.1 of the *IEEE-SA Standard Board Bylaws*.

4.3.1 Notification of affected IEEE Societies and Councils

A proposal to create a new SCC type 1 or SCC type 2 or to change the scope of an existing SCC shall first be submitted to all IEEE Society/Council Presidents whose scopes of activity are related to the program of work to be covered by the proposed SCC or affected by a proposed change in the scope of an existing SCC.

4.3.1.1 New SCC

For proposed new SCCs, the notification shall include

- a) A scope of work for the SCC.
- b) Supporting material demonstrating the need for and feasibility of the SCC.
- c) A statement explaining why the SCC should undertake the sponsorship of standards in a particular subject area rather than the current committees of IEEE Societies or Councils.
- d) A nominee for chair, including a statement of his or her willingness to serve.
- A budget that estimates annual resource requirements and identifies sources of revenue to support the activity.
- f) An opportunity for the IEEE Society/Council to sponsor the work.

Notified Presidents shall be requested to respond to the notification indicating whether the IEEE Societies/Councils they represent would be willing to sponsor the work. The response date should be set to be prior to the proposed submission to the IEEE-SA Standards Board. A period of at least three months should be given to respond to the notification.

4.3.1.2 Change in scope of an existing SCC

The notification for changes in the scope of an existing SCC shall include

- a) The proposed scope change.
- b) Supporting material demonstrating the need for and feasibility of the change.
- c) Recommendations for any changes in current sponsorship.

d) Any change in budget and other resource requirements.

Notified IEEE Society/Council Presidents shall be requested to respond to the notification. The response should be set to be prior to submission of the proposed scope change to the IEEE-SA Standards Board. A period of at least three months should be given to respond to the notification.

4.3.2 Proposal to the IEEE-SA Standards Board

A proposal to create a new SCC type 1 or SCC type 2 or to revise the scope of an existing SCC shall be submitted to the IEEE-SA Standards Board. The proposal shall include all of the information in items a) through f) of 4.3.1.1 for new SCCs and in items a) through d) of 4.3.1.2 for changes in scope of an existing SCC that was submitted to the IEEE Society/Council Presidents. It shall also include documentation of any responses or indication of a lack of response from IEEE Society/Council Presidents.

Consideration of proposals for a new SCC or a change in scope of an existing SCC by the IEEE-SA Standards Board shall take no longer than six months without notification to the submitter.

In considering approval of a new SCC, the IEEE-SA Standards Board shall evaluate the need for and feasibility of the proposed SCC. If the IEEE Societies/Councils have indicated a willingness to serve as the standards Sponsor, the IEEE-SA Standards Board will evaluate their expertise and breadth of knowledge to sponsor the work.

For changes in an existing SCC scope, the IEEE-SA Standards Board shall evaluate the appropriateness of the scope change and the feedback received from the IEEE Society/Council Presidents.

If the formation or revised scope of the SCC is approved, the Chair of the IEEE-SA Standards Board shall formally notify the IEEE Society/Council Presidents and invite their participation by naming member(s) to the SCC from the various IEEE Societies/Councils. Notification shall also be sent to the members of the IEEE-SA BOG and announced in appropriate media.

4.4 Organization of SCCs

4.4.1 Membership

Membership in the IEEE-SA is encouraged for all SCC members.

4.4.2 Officers of an SCC

Each officer shall be an IEEE member of any grade except Student grade and shall be a member of the IEEE-SA.

The IEEE-SA Standards Board Chair shall appoint the chair of each SCC. The appointment shall be for the calendar year, but the SCC Chair may, at his or her discretion, serve until a successor is appointed.

Other SCC officers (e.g., vice chair and secretary) are chosen as provided in the approved SCC Operating Procedures.

The IEEE-SA Standards Board Chair has the authority to remove an officer of an SCC.

4.4.3 Membership in an SCC type 2

The members of an SCC type 2 and its subcommittees are appointed by one or more of the following:

- a) The SCC Type 2 Chair,
- b) An IEEE Society,
- c) The IEEE-SA Standards Board.

4.5 Responsibilities of SCCs

The chair of an SCC (types 1 and 2) shall submit a written report each year to the IEEE-SA Standards Board for approval. This report should contain the scope, activities, budget and expenses, and meeting schedules, along with the membership roster. The roster shall indicate the IEEE membership status and society affiliation of each member. The SCC chair may also be asked to give an oral report to the IEEE-SA Standards Board every three to four years.

Interested Societies of the IEEE may designate members to an SCC who then function as official representatives of the Society. The IEEE-SA Standards Board may designate representatives of outside organizations as additional members.

Each member of an SCC who is an official representative of a Society, technical committee, or outside organization may have a single designated alternate to act on behalf of the member in his or her absence. Alternates for other members shall not be permitted.

An SCC may establish subcommittees as necessary to perform its function. The formation of non-technical (e.g., administrative) subcommittees requires prior approval by the IEEE-SA Standards Board

4.6 Disbanding a Standards Coordinating Committee (SCC)

The IEEE-SA Standards Board should consider the disbandment of an SCC if any of the following applies:

- --- The SCC leadership is nonresponsive to requests for annual reports, minutes, or status.
- The membership or activity of the SCC is no longer representative of its stated scope.
- The SCC's P & P are found to be deficient or out of date and the SCC does not initiate corrective action.
- --- There is no current SCC chair and a suitable replacement chair cannot be found.
- ---- The requirement to submit a written, annual report to the IEEE-SA Standards Board is not met.
- There have been no meetings of the SCC or any of its subcommittees within the last 12 months and none are scheduled.
- Coordination is no longer needed and an IEEE Society/Council is willing to assume responsibility for the SCC's standards.
- --- The SCC requests dissolution.

5. Standards development

5.1 Sponsor

Sponsors are defined in subclause 5.2.2 of the IEEE-SA Standards Board Bylaws.

5.1.1 Responsibilities of the Sponsor

The Sponsor shall be responsible for the development and coordination of the standards project, and for supervising the standards project from inception to completion. The Sponsor also shall be responsible for the maintenance of standards after their approval by the IEEE-SA Standards Board. As part of this responsibility, each Sponsor shall operate in accordance with a written set of policies and procedures (P & P) that have been accepted by the IEEE-SA Standards Board. Such P & P shall not be in conflict with the IEEE-SA Standards Board Operations Manual. Sponsors should note that there are model operating procedures (e.g., individual, entity, SCC Type 1, or SCC Type 2) available for use by the Sponsor.

If a Sponsor's P & P has been in force for five years and the Sponsor determines that its standards activities should remain active, the Sponsor shall submit its P & P, or an extension request, to the AudCom Administrator. AudCom will make a recommendation to the IEEE-SA Standards Board whether or not to accept its P & P or the extension. An extension request may be granted for one or more years.

If the Sponsor does not submit its Sponsor P & P or an extension request, and the P & P has reached the deadline authorized in the P & P approval letter or a previous extension approval letter, the Sponsor P & P shall be subject to administrative withdrawal.

In the case of a Sponsor that is a committee of an IEEE Society, the Society may develop a common set of P & P for standards development that is applicable to all Sponsors in that Society. Individual Sponsors within the Society may have specific P & Ps in addition, but these shall not be in conflict with the Society P & P. The P&P for the Sponsor shall define the process by which the Sponsor handles appeals (see subclause 5.4 of the IEEE-SA Standards Board Bylaws and 5.8).

5.1.2 Duties of the Sponsor

Supervision of a standards project by the Sponsor includes the following mandatory requirements:

- a) Submit a properly completed Project Authorization Request (PAR) for IEEE-SA Standards Board approval within six months of the first decision to initiate the project. Forms and information may be obtained from the NesCom Administrator (see 5.2).
- b) After approval of the project, work with the IEEE Standards Department Staff to give notice of the project in appropriate publications and to appropriate entities, for the purpose of soliciting an expression of interest in the work of the sponsoring committee.
- Ensure that mandatory coordination requirements are accomplished (see 4.2.3.2 and 5.4.4).
- d) Organize the technical development work on the standard.
- e) Notify persons who have expressed interest in the time and the place of meetings as specified in the P & P of the Sponsor (see 5.1.1).
- f) Ensure that all meetings involving standards are open to all interested parties.

- g) Conduct the standards ballot in accordance with these procedures.
- h) Submit the proposed standard together with the submittal form to the IEEE-SA Standards Board.
- Submit annually to the IEEE Standards Department an electronic roster of individuals participating on standards projects.
- j) Without exception, the Sponsor shall ensure the submission of an annual financial report(s) for the operation of the Sponsor and all of its standards development committees (e.g., working groups, task groups). Those groups operating without treasury are required to submit an annual declaration thereof via the report (see 5.3.6).
- k) Monitor standards developing committees for signs of dominance by any single interest category, individual, or organization. If dominance is suspected, the Sponsor shall promptly notify the IEEE-SA Standards Board and shall immediately address the concern with the standards developing committee leadership.
- If a Working Group (WG) was created for technical development work on a standard, ensure that a written set of WG policies and procedures (P & P) is created and approved by the Sponsor. Such P & P shall not be in conflict with the IEEE-SA Standards Board Operations Manual. Sponsors should note that IEEE-SA Standards Board maintains a baseline WG P & P, and may occasionally request to review a Sponsor's WG P & P for alignment.

5.1.3 Statements to external bodies

Each IEEE Standards Sponsor shall have policies and procedures in place concerning the creation and handling of public statements prior to sending any such statements in any format to any body other than the IEEE Standards Association. These procedures should state a means for developing and approving the Sponsor statement and a methodology for presentation of those statements. These procedures shall also conform both to the IEEE-SA procedures as administered by the IEEE-SA Board of Governors (BOG) and set forth in subclause 6.5 of the IEEE Standards Association Operations Manual and to the rules in Section 15 of the IEEE Policies.

Each statement shall clearly identify the group creating this statement in its opening paragraph, and shall include in that paragraph, or a footnote thereto, the exact sentence that "this document solely represents the views of *name of group* and does not necessarily represent a position of either the IEEE or the IEEE Standards Association." If the public statement addresses safety, that statement shall be reviewed and approved in writing by IEEE legal counsel prior to issuance.

Upon issuance of all such public statements, electronic copies shall be sent to the Secretary of the IEEE-SA Standards Board and to the Secretary of the IEEE-SA BOG.

If the Sponsor wants to issue an entity position statement on standards that represents the viewpoint of the IEEE Standards Association, the rules in the IEEE Standards Association Operations Manual shall be followed. Approval from the IEEE-SA BOG shall be obtained prior to a Sponsor requesting another IEEE entity (as defined in Section 15 of the IEEE Policies) to offer a position statement on a standards matter.

5.1.4 Standards publicity

5.1.4.1 Press releases

Sponsors are encouraged to prepare press releases to promote their activities. IEEE Standards staff is available to assist in the preparation of press releases.

Copies of all press releases developed by IEEE Standards Sponsors shall be submitted to the Secretary of the IEEE-SA Standards Board. Copies may be supplied electronically. If the press release has been made available on a public website, the URL shall be supplied as well. Press releases may be made available on the IEEE Standards website, or links to existing websites may be provided to aid users in locating appropriate standards press releases.

5.1.4.2 Other forms of publicity

Sponsors are encouraged to use all means possible to promote their standards and standards activity. IEEE Standards staff is available to assist in standards promotion.

Copies of any articles from Sponsors concerning an IEEE standards activity submitted to publications shall be submitted to the Secretary of the IEEE-SA Standards Board. Copies may be supplied electronically. If the article has been made available on a public website, the URL shall be supplied as well. Articles may be made available on the IEEE Standards website, or links to existing websites may be provided to aid users in locating appropriate standards promotional material.

5.2 Project authorization

No formal activity shall take place after six months from the day of the first meeting of the working group without formal submittal of a PAR to the IEEE-SA Standards Board and assignment of a project number (see 5.1.2). Only the NesCom Administrator has the authority to assign project numbers (see the IEEE-SA Project Numbering Policy).

The Sponsor shall submit the original signed copy of the PAR to the NesCom Administrator. This original PAR shall be submitted prior to the submittal deadline specified. For the first three quarterly meetings of the year, the submittal deadline shall be at least 40 days before the meeting of the IEEE-SA Standards Board. For the last quarterly meeting of the year, the submittal deadline shall be at least 50 days before the meeting of the IEEE-SA Standards Board. The individual signing the PAR shall be an IEEE-SA member.

At the time of PAR submission, the Sponsor shall state the type of balloting group that will be formed to approve or disapprove the standard (see 5.4.1).

Any PAR that includes a change in sponsorship shall be submitted to the NesCom Administrator, accompanied by letters of agreement from both the Sponsor ceding sponsorship and the Sponsor accepting sponsorship.

After the PAR has been approved by the IEEE-SA Standards Board, the PAR form becomes an important part of the project file for the standard and is referred to at the time that a standard is submitted for IEEE-SA Standards Board approval. It is important for standards-writing committees to examine the approved PAR periodically in order to make certain that its information is current as shown on the form. This will minimize delays in obtaining approval of final submittals.

For standards and their amendments that may be submitted to international standards-developing organizations, the project chair should supply a coordination plan to the IEEE-SA Standards Board during the draft development of the standard that will illustrate the plan they will follow to coordinate the necessary multiple approvals.

If a standards project has not been completed by the four-year deadline authorized in the PAR and the Sponsor determines that the project should remain active, the Sponsor shall complete the IEEE-SA Standards Board Extension Request Form and submit it to the NesCom Administrator. NesCom will make a recommendation to the IEEE-SA Standards Board whether or not to approve the extension to the PAR. A PAR extension may be granted for one or more years.

If the Sponsor does not submit an IEEE-SA Standards Board Extension Request Form and the standards project has reached the deadline authorized in the PAR approval letter or a previous extension approval letter, the standards project shall be subject to administrative withdrawal.

5.3 Standards development meetings

5.3.1 Objective

The objective of IEEE standards development meetings is to develop and produce IEEE standards documents. All IEEE Standards meeting participants are encouraged to produce standards that address the technical needs of their industry and that are feasible, timely, and of high quality.

5.3.2 Standards Sponsors

Sponsors are responsible for managing and hosting meetings whose purpose is to facilitate development of IEEE Standards. These series of meetings operate on a break-even basis and are not operated to generate a profit in the long term. The following subclauses specifically address this additional role of managing and hosting standards development meetings.

5.3.3 Standards development meetings

Standards development meetings are to be conducted consistent with the principle of openness. Working group participants may include members and non-members when the requirements to gain membership are specified in Sponsor or working group P & P. A 'meeting' includes any convening for which notice was required to be given or for which membership-credits or other participation rights are either earned or exercised. Meetings may be in-person or may be via electronic means, as appropriate.

While a WG may maintain its own participants list to track membership status, the authoritative list of participants is maintained in an IEEE-SA database.

5.3.3.1 Disclosure of affiliation

Each participant's affiliation shall be disclosed at any working group or project meeting. The chair or the chair's delegate shall inform the meeting of the requirement for disclosure of affiliation (see 5.2.1.5 of the *IEEE-SA Standards Board Bylaws*). This shall be via a sign-in (e.g., sign-in sheet, electronic sign-in, verbal disclosure, or electronic communication) that provides for disclosure of employer and any other affiliation, a reminder of the definition of affiliation, and possible penalties for non-compliance.

Whenever an individual is aware that the ownership of his or her employer or other affiliation may be material to the process, or when the Sponsor or the IEEE-SA Standards Board requests, that individual shall also declare the "ultimate parent entity" of their affiliation. The ultimate parent entity is an entity that directly or indirectly, through one or more intermediaries, controls the entity identified as the individual's affiliation. For the purposes of this definition, the term "control" and its derivatives, with respect to forprofit entities, means the legal, beneficial or equitable ownership, directly or indirectly, of more than fifty percent (50%) of the capital stock (or other ownership interest, if not a corporation) of an entity ordinarily having voting rights. "Control" and its derivatives, with respect to nonprofit entities, means the power to elect or appoint more than fifty percent (50%) of the Board of Directors of an entity.

The minutes of each working group or project meeting shall record a list of attendees and the disclosed affiliation of each attendee.

5.3.3.2 False or misleading disclosure

A meeting attendee who fails to disclose affiliation shall not accrue any membership rights, including rights of or towards voting membership, until such disclosures have been made. The chair shall review the adequacy of disclosures. Failure to disclose affiliation, or materially false or misleading disclosure of affiliation, shall result in loss of membership privileges and may also result in loss of other participation privileges within the IEEE-SA for such participants and any affiliated entities.

The Sponsor of the project shall, when appropriate, review the adequacy of disclosures and, if deemed inadequate, may direct corrective action(s). In the absence of effective corrective action(s) by the Sponsor, the IEEE-SA Standards Board may impose further corrective action(s).

5.3.3.3 Job recruiting

Job recruiting at IEEE Standards meetings is inappropriate and is actively discouraged. However, posting of notices of job opportunities by employers and of notices of jobs sought may be permitted at IEEE Standards meetings only if approved by the IEEE Standards Sponsor.

5.3.3.4 Audio recording, video recording, and photography

IEEE Standards Sponsor committees may apply restrictions on the use of audio recording, video recording, or photography equipment where they may impede free discussion, where they compromise commercial value, or where they are disruptive. Such restrictions should be clearly identified, in advance, to attendees.

5.3.3.5 Press attendance

Normally, individuals from the press are not encouraged to attend standards meetings. If the press is in attendance, the chair should announce press attendance. Normal meeting fees are not expected to be waived for the press.

5.3.3.6 Commercial activities

Exhibits of vendor products, distribution of literature, sales presentations, and similar activities are discouraged at standards meetings as they detract from and compete with the normal standards development process.

5.3.4 General approvals, endorsements, and notifications

All Sponsors of IEEE standards development meetings with per-meeting budgets or expenses for the IEEE of US \$25,000 or greater shall submit forecasts of their meetings [including the location (if known), approximate date, and anticipated subject matter] to the IEEE-SA BOG at least one year in advance on an annual basis. Such forecasts shall be kept current.

Because of its unique membership categories (e.g., entities), the IEEE-SA may enter into hosting arrangements with for-profit enterprises for its meetings, provided these arrangements do not violate the not-for-profit status of the IEEE.

5.3.5 Meeting budgets

The IEEE-SA BOG and the IEEE Society, where applicable, shall receive the budgets for all IEEE standards development meetings for which the budgeted meeting income or expenses for the IEEE exceeds US \$25,000 per meeting.

For these meetings, the following actions shall be taken:

--- The budget should provide all needed financial information and be consistent with analysis of the

attendance and financial results of any preceding meeting on the same subject. Income, expenses, and reserve funds shall be reported to the IEEE-SA BOG annually, but no later than six months after the close of the fiscal year. All budgets shall be based on non-deficit expectations. However, if a series of meetings are organized, the series should be on a self-sustaining basis. The Sponsor committee, for sufficient reasons, may elect to budget a particular meeting on a deficit basis.

- Such a deficit budget will be approved if properly related to the total fiscal picture of the Sponsor committee.
- The Sponsor committee assumes the entire risk of deficit; i.e., if a deficit is incurred in the operation of a meeting, that deficit is chargeable against the Sponsor committee. Conversely, if a surplus results from the operation, the surplus will be credited to the Sponsor committee.
- If substantial financial changes are made to previously approved budgets, a revised budget should be submitted.

For IEEE Standards meeting budgets where the budget or expenses for the IEEE are greater than US \$25,000, failure to submit a budget may result in action from the IEEE-SA BOG.

For IEEE Standards meetings operating without a budget or with a minimal budget, the operating procedures of the committee shall apply.

An IEEE Standards Sponsor may choose to set a meeting fee as a means of offsetting the costs of meeting administration, logistics, and other similar costs of standards development.

5.3.6 Annual financial report

All Sponsors are required to submit an annual report (IEEE Form L50-S) detailing financial activity for the previous fiscal year. The report will be due within three months of the completion of the previous fiscal year. Failure to submit this report shall result in action from the IEEE-SA Standards Board. Actions shall include, but not be limited to, suspension of all activities until the report is filed and accepted as complete.

5.3.7 Bank accounts

All IEEE standards development committees that have or intend to have bank accounts shall use the IEEE Concentration Banking Program as their only bank account. It is the policy of the IEEE that all bank accounts provide for the signatures of at least two volunteers (who shall be IEEE Member grade or higher in good standing).

Bank accounts shall be closed six months after the standards development activity has ceased and if further projects are not planned. Closing bank statement(s) shall be submitted to the IEEE-SA BOG and the relevant IEEE Society with the final budget report.

5.3.8 Auditing of finances

All IEEE Standards Sponsor committees with actual or budgeted income or expenses of US \$100,000 or more per year shall be audited by a professional independent source, outside the sponsoring organizational unit. The IEEE-SA BOG may select an outside accounting firm, another fully qualified resource, or the IEEE Operations Audit Department to arrange for and perform the audit. The selection of such auditors should avoid any conflict of interest with members of the relevant IEEE Standards Sponsor committees.

IEEE Standards Sponsor committees with more than US \$25,000 but less than US \$100,000 in income or expenses per year will be audited on a rotational basis. The IEEE Operations Audit Department will schedule and arrange for the audits of these Standards activities. For those committees not scheduled for an

Operations Audit review in a given year, an informal review should be conducted by a committee composed of individuals who have no direct or indirect responsibility for the financial transactions of the committee.

IEEE Standards meetings with a non-IEEE organizational unit, when the IEEE share of annual revenues or expenses is expected to exceed US \$100,000 per year, are required to participate in the audit process. If the cooperating organizational units agree to the audit but refuse to share in the audit fee, the IEEE Sponsor will be assessed an audit fee of no more than 50% of the standard fee rate.

All audit fees, as determined by the IEEE Operations Audit Department, shall be incorporated in the budgets of IEEE Standards Sponsor committees and displayed as a separate line on budget reports.

The IEEE Operations Audit staff will assure that committee financials are audited in accordance with the guidelines developed for this purpose.

5.3.9 Closings

All IEEE standards development committees with meeting income or expenses of US \$25,000 or greater per meeting shall complete the following tasks within six months of cessation of the IEEE standards development activities:

- --- Close bank accounts:
- Distribute any surplus as directed by the IEEE-SA BOG;
- --- Complete final financial reports;
- Complete the audit, if required.

Many of these tasks are required by United States Internal Revenue Service regulations and by the audit process. Documentation concerning these tasks shall be reviewed by the IEEE-SA BOG and the relevant IEEE Society, where applicable.

5.3.10 Legal compliance and other issues

5.3.10.1 Compliance with laws

All IEEE-SA standards meetings shall be conducted in compliance with all applicable laws, including antitrust and competition laws. In the course of IEEE standards development, participants shall not engage in fixing product prices, allocating customers, dividing sales markets, or other conduct that violates antitrust or competition laws.

5.3.10.2 Discussion of litigation, patents, and licensing

No discussions or other communications regarding the following topics shall occur during IEEE-SA working group standards-development meetings or other duly authorized IEEE-SA standards-development technical activities:

- --- The status or substance of ongoing or threatened litigation
- --- The essentiality, interpretation, or validity of patent claims
- Specific patent license terms or other intellectual property rights, other than distribution of Accepted Letters of Assurance as permitted under the IEEE-SA patent policy (see 6.2 of the IEEE-SA Standards Board Bylaws)

5.3.10.3 Discussion of relative cost/benefit analyses

When comparing different technical approaches in IEEE-SA standards development technical activities, participants may discuss the relative costs (in terms, for example, of percentage increases or decreases) of different proposed technical approaches in comparison with the relative technical performance increases or decreases of those proposals. The relative costs may include any potentially Essential Patent Claims, but not the price at which compliant products may or will be sold. Technical considerations should be the main focus of discussions in IEEE-SA standards development technical activities.

5.3.11 Naming meetings and use of IEEE logo

This policy applies to naming all IEEE Standards Sponsor activities.

- --- The meeting title shall include "IEEE" for identification purposes.
- The name of a meeting shall be used in all publicity and all related material pertaining to the meeting, including electronic mail.

IEEE Standards Sponsor activities shall have the IEEE logo on all promotional material and publications.

5.3.12 Contracting

IEEE Standards meetings may require contracts for various services. These services include but are not limited to hotel services and meeting management services.

The IEEE Standards Sponsor committee or designee shall review all contracts connected with running a meeting. Contracts are subject to limitations as defined in IEEE Policy 12.6 and subclause 5.1.3 of the IEEE Standards Association Operations Manual.

All meeting contracts shall be maintained in a readily accessible file at the IEEE Standards Department for audit purposes. It is the responsibility of the IEEE Standards Sponsor chair or working group chair to send a copy of the contract, when executed, to the IEEE Standards Department promptly for retention within the IEEE.

In signing a contract, competitive bidding procedures shall be used whenever practical. If competitive bidding is not practiced, the IEEE Standards Sponsor committee or working group chair shall be prepared to provide justification.

5.3.13 Insurance

All Sponsor committees of IEEE Standards meetings with annual meeting budgets or expenses for the IEEE of US \$25,000 or greater are responsible for obtaining necessary insurance coverage for their meetings if this is not covered in established contracts with meeting facilities. The IEEE can provide such coverage as stipulated in the *IEEE Financial Operations Manual*.

5.3.14 Tax liability

The IEEE is a non-profit organization, incorporated in New York State, USA. IEEE holds standards meetings throughout the world, and the legal and tax requirements can vary greatly for each site. In the United States, the IEEE is exempt from paying income taxes and is also exempt from paying sales taxes on purchases in some states. Some states require sales taxes to be collected on-site for sales of books and other items. Order taking can be done without consideration of sales taxes.

Outside of the USA, there are other sales taxes that may be required to be collected at IEEE Standards

meetings for on-site sales, such as Value Added Tax (VAT) and the Goods & Services Tax (GST) in Canada. It may be required to collect such taxes on meeting fees. There are also exemptions from paying VAT and GST and the rules are unique by country. In most countries, but not all, the IEEE is exempt from paying income taxes.

Because the laws and requirements of each country, state and province vary, it is very important that each IEEE Standards Sponsor committee contact the IEEE Tax Compliance Office (tax-staff@ieee.org) to find out the specific legal and tax requirements to operate at their site. This must be done very early in the planning stages of the conference; if planned properly, large savings may result

Financial support by industry of IEEE-SA Standards meetings and events is acceptable. All such support shall not violate the not-for-profit status of the IEEE.

5.4 Standards ballot by the Sponsor

A balloting group shall be one of the following:

- --- Individuals with voting privileges
- -- Persons with voting privileges who are of any category other than individual

As of 1 June 2003, all IEEE Standards Association Sponsor ballots shall be conducted by the IEEE Standards Balloting Center.

As of 1 January 2005, all IEEE Standards Association Sponsor ballots shall be conducted by electronic means.

IEEE-SA shall maintain a single authoritative database for the list of individual or person participants related to Sponsor balloting.

5.4.1 Balloting group

The balloting group shall meet the criteria in subclause 5.2.2.3 of the *IEEE-SA Standards Board Bylaws*. Balloting group members vote on the acceptability of a new, revised, or stabilized standard based on their interest in and commitment to reviewing and voting on a specific proposed standard. The balloting group shall provide for the development of consensus by all interests significantly affected by the scope of the standard. This is achieved through a balance of such interests in the balloting group membership. Balance is achieved by not permitting any single interest category to comprise 50% or more of the Sponsor balloting group.

No balloter shall have more than one vote.

The IEEE-SA Standards Board Bylaws allow for the participation of invited individual experts in ballots of specific standards projects upon approval of the IEEE-SA Standards Board. An invited individual expert is a non-IEEE-SA member who has been invited by a Sponsor to ballot on a specific standards project for the purpose of providing his or her technical expertise to improve the quality of that document. The Sponsor shall provide the following information to the IEEE-SA Standards Board when requesting the participation of an invited individual expert in a particular balloting group:

- a) A rationale as to why the invited individual expert is needed
- b) Brief background information on each invited individual expert, including qualifications

- c) A statement explaining the detrimental impact if the invited individual expert does not participate
- d) The total number of individual experts invited to participate in this balloting group
- e) The contact information for the individual

Upon approval by the IEEE-SA Standards Board, an invited individual expert is entitled to the same balloting privileges as an IEEE-SA member for the specified standards project.

Balloters are required to classify their relationship to the balloting group relative to the scope of standards activity (for example, producer, user, and general interest). Where appropriate, additional classifications, such as "testing laboratory" or "academic," may be added by the Sponsor. This decision should be based on the effect the standard may have on participants not already recognized by the primary classifications. Individuals classify themselves based on their technical background, which may be related to their employment, job functions, or experience. IEEE-SA entity balloters are classified based on their entity interest as it relates to the scope of the standards project (for example, producer, consumer, general interest). No group (classification) is permitted to constitute 50% or more of the balloting group membership. Care shall be taken to ensure that all classes of interest are represented to the extent possible.

It is desirable to have representation of the materially interested and affected parties when reviewing the balance of the balloting group. Sponsors shall ensure balance prior to conducting a Sponsor ballot. Balloting groups of individuals should have at least 10 members to ensure adequate balance.

Interested or affected persons who pay the appropriate fees associated with voting privileges may join the balloting group for a specific standards project. Once the ballot has begun, the balloting group is closed to additional participants. Even if IEEE-SA membership status changes during the balloting period or recirculation period, there shall be no change to the voting status of the balloter with respect to that ballot.

Persons may also purchase the ballot draft for information only. Such persons may submit comments on the draft within the balloting period. However, they may not vote to approve, disapprove, or abstain on the proposed standard, nor are they entitled to receive any material other than the revised draft and responses to their comments.

Comments from persons who are not members of the balloting group shall be given due consideration and an appropriate response.

5.4.1.1 Balloting group made of entities

Several distinct rules apply to Sponsor ballots by entities. For each balloting group, each such entity shall name one primary voting representative and, at the entity's option, one alternate voting representative to the Sponsor. Only a ballot from one of these representatives shall be accepted. If ballots are received from other parties, they shall not be counted; if ballots are received from both the primary voting representative and the alternate voting representative, only the vote from the primary voting representative shall be counted.

Each primary and alternate voting representative can ballot for only one entity; no one representative can represent the interests of more than one entity. Each representative shall declare what entity he or she represents and that their voting shall be independent of any other entity.

In order to be a voting member in a particular Sponsor ballot, each entity's representative shall declare that the interests of that entity are not knowingly represented by another member of the ballot body and that the entity is not knowingly funding directly or indirectly the participation of another person in that Sponsor ballot for the purposes of influencing the outcome of the vote. Any entity representative who cannot make such a declaration shall not be able to be a voting member in that particular Sponsor ballot.

It is desirable to have representation of the materially interested and affected parties when reviewing the balance of the balloting group. Sponsors shall ensure balance prior to conducting a Sponsor ballot. Balloting groups shall have at least five members to ensure adequate balance.

In the event that, through merger or acquisition or other similar event, an entity member of the IEEE-SA has its assets totally or substantially transferred to another entity, membership in the Sponsor ballot body may be transferred to the new entity, provided that the new entity is not already a member of the Sponsor ballot body.

5.4.2 Ballot invitations

IEEE Standards balloting groups shall be formed by means of ballot invitations conducted by the IEEE Standards Balloting Center. A ballot invitation is sent to all parties known by the Sponsor to be interested in the subject matter of the proposed standard. Information about IEEE Standards Sponsor ballot invitations shall also be made available at the IEEE Standards website to allow additional interested parties the opportunity to participate.

Ballot invitations shall remain open for a period of no less than 15 days. Those who respond affirmatively to the invitation during the period in which the ballot invitation is open and who otherwise fulfill the criteria in both subclause 5.2.2.3 of the *IEEE-SA Standards Board Bylaws* and 5.4.1 shall become members of the balloting group for that proposed standard. If a ballot does not open within 6 months of the invitation close date, the ballot group will be considered invalid and the Sponsor shall conduct a new invitation. Once the ballot has begun, no changes shall be made to the membership of the balloting group.

5.4.3 Conduct of the standards balloting process

When a proposed standard is ready for Sponsor balloting, a standards ballot shall be conducted by the Sponsor or Sponsor designee via the IEEE Standards Association balloting tools. The standards balloting process consists of Sponsor balloting group members casting votes, with or without accompanying comments, in one or more successive ballots until completion of the standards balloting process. Sponsor balloting group members shall submit votes and comments in a manner and in a format compatible with approved IEEE Standards Association balloting tools.

5.4.3.1 Ballot term

Each ballot in the standards balloting process shall close at 11:59 p.m. ET⁴ on the closing date specified on the ballot.

The Sponsor shall assess the return rate of the first ballot, where the return is the ratio of the sum of Sponsor balloting group members' *Approve*, *Do Not Approve*, and *Abstain* votes to the count of Sponsor balloting group members.

In the first ballot, if the ballot has not achieved a 75% return by the specified closing date, the ballot may be extended to close when a 75% return is received. This extension for receipt of a 75% return shall not be longer than 60 days.

5.4.3.2 Voting in the ballot

The ballot shall provide the following vote choices to Sponsor balloting group members:

a) Approve (Affirmative). This vote may be accompanied by comments suggesting corrections and

⁴ET is the time in New York City, New York, USA.

improvements. All comments shall be considered; making a change to the proposed standard as a result of the comments is left to the discretion of the Sponsor.

b) Do Not Approve (Negative with comment). This vote must be accompanied by one or more specific objections with proposed resolution in sufficient detail so that the specific wording of the changes that will cause the Do Not Approve voter to change his or her vote to Approve can readily be determined. The Sponsor shall encourage the submission of comments with all Do Not Approve ballots.

Balloters who vote *Do Not Approve* shall be permitted to differentiate those comments that caused their *Do Not Approve* vote from other comments that they may wish to submit. Any comments that are explicitly identified not to be part of the *Do Not Approve* vote shall be treated as comments associated with an *Approve (Affirmative)* vote.

If no comments are submitted associated with the *Do Not Approve* vote, then the vote shall be counted in the total tally of votes as a *Do Not Approve (Negative without comment)*.

If i) all comments associated with a *Do Not Approve* vote are deemed by the Sponsor as out-of-scope and ii) the balloter is notified that the comment(s) are out-of-scope and such notifications are accompanied with specific rationale for such out-of-scope determination, then the vote may be counted in the total tally of votes as a *Do Not Approve (Negative without comment)*.

During a recirculation ballot, *Do Not Approve* voters may indicate acceptance of the response to any or all comments associated with their *Do Not Approve* vote. Each *Do Not Approve* voter shall be given an opportunity to review comment responses, determine if he or she is satisfied, either entirely or in part, and either to change his or her vote to *Approve*, to *Abstain*, or to retain his or her *Do Not Approve* vote.

c) Abstain. This category is provided to allow for ballot returns from Sponsor balloting group members who do not wish to vote Approve or Do Not Approve because of conflict of interest, lack of expertise, or other reasons.

During a recirculation ballot, Sponsor balloting group members shall have an opportunity to cast votes or change their previously cast votes.

5.4.3.3 Comments in the ballot

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

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

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

Until the proposed standard has achieved 75% approval, comments can be based on any portion of the proposed standard. Comments not based on the proposed standard may be deemed out-of-scope of the standards balloting process by the Sponsor.

Once the proposed standard has achieved 75% approval, comments in subsequent ballots shall be based only on the changed portions of the balloted proposed standard, portions of the balloted proposed standard

affected by the changes, or portions of the balloted proposed standard that are the subject of unresolved comments associated with *Do Not Approve* votes. If comments are not based on the above criteria, the comments may be deemed out-of-scope of the recirculation. Such comments need not be addressed in the current standards balloting process and may be considered for a future revision of the standard.

Comments addressing grammar, punctuation, and style, whether attached to an *Approve* or a *Do Not Approve* vote, may be referred to the publications editor for consideration during preparation for publication. It should be borne in mind that proposed standards are professionally edited prior to publication.

Comments received before the close of ballot from participants who are not in the Sponsor balloting group, including from the mandatory coordination entities, require acknowledgement sent to the commenter and presentation to the Sponsor comment resolution group for consideration. The Sponsor shall send an explanation of the disposition of the mandatory coordination comments to the commenter.

5.4.3.4 Recirculation ballots

Changes may be made in the proposed standard to resolve *Do Not Approve* votes that are accompanied by comments or for other reasons. All substantive changes made since the last balloted proposed standard shall be identified and recirculated to the Sponsor balloting group. All unresolved *Do Not Approve* votes with comments shall be recirculated to the Sponsor balloting group. The verbatim text of each comment, the name of the *Do Not Approve* voter, and a response by the Sponsor conducting the resolution of comments shall be included in the recirculation ballot package. Responses to comments that are not accepted verbatim shall include sufficient detail for Sponsor balloting group members to understand the rationale for rejection of the comment or revision of the change proposed by the commenter.

Further resolution efforts, including additional recirculation ballots, shall be required if *Do Not Approve* votes with new comments within the scope of the recirculation are submitted.

The Sponsor is not required to conduct a recirculation ballot solely for *Do Not Approve (Negative without comment)* votes.

5.4.3.5 Completion of the standards balloting process and submittal to RevCom

A minimum of 75% of those voting *Approve* or *Do Not Approve* (*Negative with comment*) must approve the draft in order to submit the ballot result to the IEEE-SA Standards Board. In the event that 30% or more of the returned ballots are *Abstentions*, the standards balloting process shall be considered invalid.

In the event that a 75% return cannot be obtained, the standards balloting process is considered to have failed and further disposition of the proposed standard shall be the responsibility of the Sponsor.

Once all required recirculations have been completed and 75% approval has been achieved, the IEEE requirements for consensus have been met. Efforts to resolve *Do Not Approve* votes may continue for a brief period; however, if such resolution is not possible in a timely manner, the Sponsor should forward the submittal to RevCom because the IEEE has an obligation to the majority to review and publish the proposed standard quickly.

Copies of all unresolved *Do Not Approve* votes, together with the reasons given by the *Do Not Approve* voters and the responses by the Sponsor, shall be included with the ballot results submitted to RevCom.

The Sponsor shall, if not included in a recirculation package, provide to the *Do Not Approve* voter and to RevCom an explanation why any comments associated with a *Do Not Approve* vote were not required to be recirculated. In order for a *Do Not Approve* vote to be changed to an *Approve* or *Abstain* vote, the Sponsor shall obtain and provide to RevCom written confirmation from each voter (by letter, fax, or electronic mail)

that indicates concurrence with any change of his or her vote. Any *Do Not Approve* vote with comment that RevCom is asked to consider as a *Do Not Approve (Negative without comment)* shall be explained to RevCom.

Proposed standards receiving a significant number of unresolved *Do Not Approve* votes should be considered by the Sponsor for trial-use (see 5.7).

5.4.3.6 Death or incapacity of a member of the Sponsor balloting group

In the event that the IEEE Standards Department receives documentation of the death or incapacity of a member of a Sponsor balloting group by the closing date for the first ballot, that person shall be administratively removed from the Sponsor balloting group. In the event that such documentation is received following the closing date for the first ballot, the Sponsor balloting group member shall be deemed unavailable for balloting purposes and shall not be sent any further balloting material. Comments associated with *Do Not Approve* votes that are received before the Sponsor balloting group member became unavailable will be treated normally; note that confirmation of resolution is not expected. However, no tally shall be recalculated as a result of such a determination of unavailability, including ballots, abstention rate, return, or approval rate.

5.4.3.7 Comments received as a result of a public review

If a comment is received as a result of a public review process, that comment will be addressed by the Sponsor and a disposition returned to the commenter, along with information concerning their right of appeal.

5.4.4 Mandatory coordination

The Sponsor shall coordinate via circulation of drafts with the following entities:

- SCC14 (Standards Coordinating Committee on Quantities, Units, and Letter Symbols)
- --- IEEE Standards editorial staff

The Sponsor shall indicate the IEEE Registration Authority Committee (RAC) as a mandatory coordination entity when the draft is submitted for Sponsor ballot if

- The PAR indicates the possible registration of objects or numbers to be included in or used by the project;
- It becomes apparent through development of the draft that registration of objects or numbers will be included in or is used by the project;
- --- Requested by the RAC.

Comments from these entities shall be given appropriate consideration and response. At the time of project submittal to the IEEE-SA Standards Board for consideration for approval, the Sponsor shall supply the most recent coordination comments and indicate either acceptance or a request for a waiver (see 4.2.3.2).

5.4.5 IEEE 100

IEEE 100, *The Authoritative Dictionary of IEEE Standards Terms*, is a compendium of terms from both approved IEEE standards and non-IEEE sources. Terms given in the definitions clauses of approved IEEE standards shall be added to IEEE 100.

5.5 Submission of proposed standards to the IEEE-SA Standards Board

The Sponsor shall submit all required documentation, including a complete copy of the last balloted draft, in accordance with the most current version of the IEEE-SA Standards Board Working Guide for Submittal of Proposed Standards, to the RevCom Administrator. This submittal shall be made prior to the submittal deadline specified. For the first three quarterly meetings of the year, the submittal deadline shall be at least 40 days before the meeting of the IEEE-SA Standards Board. For the last quarterly meeting of the year, the submittal deadline shall be at least 50 days before the meeting of the IEEE-SA Standards Board.

When the proposed standard is considered at a meeting of RevCom, it may be necessary for the Sponsor to be represented at that meeting, particularly if there were unresolved negative votes during the balloting (see 4.2.3.3 and 5.4.3.2) and/or if RevCom members submit negative comments prior to the RevCom meeting (see 4.2.3.4).

Approved IEEE standards may be submitted for adoption by other organizations (see also 5.6). As part of the adoption process, the adopting organization may receive comments on the technical content of the standard. These comments should be sent to the IEEE Standards Department. The comments will then be referred to the Sponsor for a response. Responses shall be directed to the commenter, with a copy sent to the IEEE Standards Department. If, in the opinion of the Sponsor, such comments warrant an amendment or revision to the approved IEEE standard, the Sponsor shall submit a PAR.

5.6 Adoption

The IEEE is a focal point for various technologies and is willing to share its expertise with standards developers worldwide. One method for doing this is through adoption.

Adoption of IEEE standards by national, regional, and international standards organizations is encouraged. This adoption shall be a formal process that may include a reciprocal agreement between the IEEE and the organization adopting the IEEE standard. The following subclauses discuss the methods for processing adoption requests.

5.6.1 Process for adoption of IEEE Standards

Arrangements for non-IEEE organizations to adopt IEEE standards are established in binding memoranda of understanding. These memoranda of understanding shall be executed by the Managing Director, Standards, and the responsible person in the other organization. IEEE staff shall have responsibility for negotiating the terms and conditions of these agreements. Requests for adoption of IEEE standards shall be forwarded to the Senior Administrator-Business Development, IEEE Standards Department.

Adopting organizations are encouraged to participate in future updates of the originating IEEE standard.

5.6.2 Process for adoption of non-IEEE Standards

5.6.2.1 Sponsor identification

A Sponsor, as defined by subclause 5.2.2 of the *IEEE-SA Standards Board Bylaws*, shall assume responsibility for coordinating the adoption of a non-IEEE standard by the IEEE. The Sponsor shall be responsible for the standard upon adoption and until withdrawal in accordance with all IEEE Standards policies and procedures.

5.6.2.2 Project initiation

A Sponsor shall submit a PAR for the adoption of a non-IEEE standard to the IEEE-SA Standards Board to initiate an adoption. At the same time, the Sponsor shall contact the Senior Administrator-Business Development, IEEE Standards Department, to initiate copyright negotiations.

5.6.2.3 Draft development

The adoption of a non-IEEE standard shall not include any revisions or changes to the actual document being adopted. However, IEEE exceptions addressing any differences between the IEEE adoption and the non-IEEE standard may be added to either the front matter of the document or in an annex.

5.6.2.4 Sponsor ballot

The ballot shall include a cover letter explaining the reasons for the adoption, the options available to the balloters when casting their votes, and the provisions for consideration of comments by the developer of the non-IEEE standard. The Sponsor ballot shall meet the requirements outlined in 5.4.

Ballot comments and any Sponsor responses shall be forwarded to the developer of the non-IEEE standard for consideration.

5.7 Trial-Use standards

Trial-Use standards are effective for not more than two years from the date of publication. In the absence of comments received in the trial period, the document is subject to adoption as a full-status standard by the IEEE-SA Standards Board upon recommendation of the Sponsor. Trial-Use standards shall contain a published scheduled cutoff date for receipt of comments and for further revision and approval action. This cutoff date shall be at least six months before the end of the trial-use period for the standard.

The approval period for a trial-use standard that is adopted as a full-status standard without change shall be for a total of five years from the start of the trial-use period. If the trial-use period demonstrates that a trial-use standard has to undergo changes to become a full-status standard, a PAR for revision of an existing standard shall be prepared.

Trial-Use standards may result from one of the following:

- At the Standards Development Level. When a draft has been generated that generally satisfies the standards-developing group (i.e., subcommittee or working group) but needs input from a very broad constituency, such a draft may be processed as an IEEE Trial-Use Standard. For approval, such a draft requires a letter ballot of the Sponsor and approval by the IEEE-SA Standards Board as a trial-use standard.
- b) At the Sponsor Level. When a Sponsor is unable to resolve negative ballots to a satisfactory level, or uncertain aspects of the document justify preliminary distribution, it may consider submission of the draft to the IEEE-SA Standards Board as a trial-use standard.
- c) At the IEEE-SA Standards Board Level. When the IEEE-SA Standards Board cannot attain a suitable level of approval for a draft submitted for adoption as an IEEE Standard, it may decide to approve it as a trial-use standard.

5.8 Appeals

5.8.1 Appeals pool

The IEEE-SA Standards Board Chair shall select six to nine members of the IEEE-SA Standards Board to serve as the appeals pool.

The Past Chair of the IEEE-SA Standards Board shall serve as the SASB Vice Chair for Appeals. If the SASB Vice Chair for Appeals has a conflict regarding the subject matter of an appeal, the IEEE-SA Standards Board Chair shall appoint another member of the IEEE-SA Standards Board to serve as the SASB Vice Chair for Appeals for that particular appeal.

Members of the appeals pool will serve until a new appeals pool is appointed.

5.8.2 Appeal brief

The appellant shall file a written appeal brief with the Secretary of the IEEE-SA Standards Board within 30 days after the date of notification of action of the IEEE-SA Standards Board or at any time with respect to inaction or following an appeal panel final decision from a subordinate committee. The appellant shall first have exhausted the appeals procedures of any relevant subordinate committees prior to filing an appeal with the IEEE-SA Standards Board. The appeal brief shall state the nature of the objection(s) including any adverse effects, the clause(s) of the procedures or the standard(s) that are at issue, actions or inaction that are at issue, and the specific remedial action(s) that would satisfy the appellant's concerns. Previous efforts, including all subordinate appeals, to resolve the objection(s) and the statement of outcome/decision of each, including a sequence of events of these efforts, shall be provided. The appellant shall include documentation supporting all statements in the appeal brief.

All issues regarding the action or inaction of the SASB shall be filed together in one appeal.

The Secretary shall send the appellant a written acknowledgment of receipt of the appeal brief within five days of such receipt. The IEEE-SA Standards Board Chair and the SASB Vice Chair for Appeals ("SASB Appeal Officers") shall review the appeal brief and determine within ten days of receipt of the appeal brief whether the appeal should be heard by the IEEE-SA Standards Board or should be referred to the IEEE-SA BOG or should be returned to the appellant with instructions to file the appeal as follows: (i) if the appeal deals with ethical issues, with the IEEE Ethics and Member Conduct Committee or IEEE-SA Standards Conduct Committee, as appropriate; (ii) if the appeal deals with technical issues, with the Sponsor of the body that made the decision; or (iii) if the appealant has not exhausted the appeals procedures of a relevant subordinate committee, then with such subordinate committee. If the IEEE-SA Standards Board Chair has a conflict regarding the subject matter of the appeal, the SASB Chair shall appoint a non-conflicted member of AdCom to serve as the second Appeal Officer.

If the SASB Appeal Officers determine that the IEEE-SA BOG should hear the appeal, the Secretary of the IEEE-SA Standards Board shall notify the appellant and the appellee (the chair of the committee at issue) of that fact within five days of receipt of the notice from the SASB Appeal Officers that the IEEE-SA BOG will be hearing the appeal. The appeal shall be referred to the IEEE-SA BOG and adjudicated according to IEEE-SA BOG processes (see subclause 4.4 of the IEEE Standards Association Operations Manual). If the IEEE-SA BOG hears an appeal that originated from a referral from the IEEE-SA Standards Board, the results of that appeal shall be reported to the Secretary of the IEEE-SA Standards Board.

If the SASB Appeal Officers determine that the IEEE-SA Standards Board should hear the appeal, the Secretary shall, within 20 days of receipt of the appeal brief, send the appellee a copy of the appeal brief and acknowledgment, and shall send the appellant and the appellee a written notice of the time and location of the hearing ("hearing notice") with the Appeal Panel.

The hearing with the Appeal Panel shall be scheduled at the location set for, and during the period of, the first IEEE-SA Standards Board meeting series that is at least 60 days after mailing of the hearing notice by the Secretary. New evidence meeting the requirements of 5.8.5 shall be provided at least two weeks before the date of the Appeal Panel hearing.

5.8.3 Reply brief

Within 45 days of receipt of the hearing notice, the appellee may send the appellant and Secretary a written reply brief, which specifically and explicitly addresses each allegation of fact in the appeal brief to the extent of the appellee's knowledge. If the appellee furnishes a reply brief, the brief shall include documentation supporting all statements contained in the reply brief.

5.8.4 Appeal Panel

The IEEE-SA Standards Board Chair shall appoint from the appeals pool an Appeal Panel consisting of a chair and two other members who have not been directly involved in the matter in dispute, and who will not be materially or directly affected by any decisions made concerning the dispute ("Appeal Panel"). At least two members shall be acceptable to the appellant and at least two shall be acceptable to the appellee. If the parties to the appeal cannot agree on an Appeal Panel within a reasonable amount of time, the matter shall be referred to the IEEE-SA Standards Board, which shall appoint the members of the Appeal Panel. If an Appeal Panel member resigns or is removed from the Appeal Panel at any time before the appeal hearing, then the IEEE-SA Standards Board Chair shall appoint a replacement from the appeals pool. The replacement shall be subject to the acceptability criteria described above.

To ensure continuity of the appeals process, a specific Appeal Panel will remain impaneled until the publication of the Appeal Panel's final decision(s).

5.8.5 Conduct of the hearing

The number of participating (i.e., speaking) representatives for each of the parties to the appeal is limited to a maximum of three (3). Other individuals may attend the hearing, but will not be permitted to address, or be addressed by, the Appeal Panel or either of the parties to the appeal at any time (including during the question and answer period). No recordings or verbatim transcriptions of the hearing are allowed, except by the IEEE-SA at its sole discretion.

The Appeal Panel may call an Executive Session before, during the course of, or following an appeal hearing to consider its action on a specific appeal.

No party to an appeal may communicate with any member of the Appeal Panel regarding the appeal while the matter is pending (i.e., from the time of filing of the appeal brief to finalization of the Appeal Panel decision).

The appellant has the burden of demonstrating adverse effects, improper action(s) or inaction, and the efficacy of the requested remedial action. Each party may adduce other pertinent arguments, and members of the Appeal Panel may address questions to individuals. The Appeal Panel shall only consider documentation included in the appeal brief and reply brief, unless

- a) Significant new evidence has come to light; and
- b) Such evidence reasonably was not available to the appellant or appellee, as appropriate, at the time of filing; and
- c) Such evidence was provided by the appellant or appellee, as appropriate, to the other parties as soon as it became available.

Prior to the hearing, the members of the Appeal Panel may convene to review the ground rules before the participants appear.

5.8.6 Appeal Panel decision

The Appeal Panel shall not consider technical or make findings with respect to ethical rules, but shall limit its consideration to procedural matters. The Appeal Panel shall render its decision, based upon majority vote of the Appeal Panel (Appeal Panel members shall vote to find in favor of the appellant or the appellee and shall not abstain), in writing within 30 days of the hearing, stating findings of fact and conclusions, with reasons therefore, based on a preponderance of the evidence. Consideration may be given to the following positions, among others, in formulating the decision:

- a) Finding for the appellant, remanding the action to the appellee, with a specific statement of the issues and facts in regard to which fair and equitable action was not taken;
- b) Finding against the appellant, with a specific statement of the facts that demonstrate that appellant failed to meet its burden to demonstrate that fair and equitable treatment of the appellant was not taken;
- c) Finding that new, substantive evidence has been introduced, and remanding the entire action to the appropriate committee for reconsideration.

The Appeal Panel Chair, through the Secretary, shall notify the appellant, the appellee, and members of the IEEE-SA Standards Board in writing of the decision of the Appeal Panel.

If an Appeal Panel member resigns or is removed after a hearing, then the remaining two members of the Appeal Panel may issue a decision if their decision is unanimous. If it is not unanimous, then the IEEE-SA Standards Board Chair shall appoint a replacement from the appeals pool and a re-hearing shall be conducted during the next IEEE-SA Standards Board meeting series.

5.8.7 Request for re-hearing of the Appeal Panel decision

The decision of the Appeal Panel shall become final 30 days after it is issued, unless one of the parties files a written notice of request for re-hearing prior to that date with the Secretary, based on new evidence, provided such new evidence existed at the time of the hearing, but was not reasonably available to either the appellant or appellee, as appropriate, at the time of the hearing. In such case, the decision of the Appeal Panel shall be stayed pending review by the SASB Appeal Officers within 20 days of receipt of the written request. The review shall decide

- a) To adopt the report of the Appeal Panel, and thereby deny the request for re-hearing; or
- b) To direct the Appeal Panel to conduct a re-hearing; or
- c) At its discretion, to ask the IEEE-SA Standards Board to consider the matter.

Only one re-hearing can be conducted per appeal.

If the appeal was delegated to the IEEE-SA Standards Board by the IEEE-SA BOG, the decision shall also be sent to the Secretary of the IEEE-SA BOG. Appeals from a decision of the SASB Appeal Officers to deny the request for a re-hearing or from the decision of the Appeal Panel after a re-hearing shall be referred to the IEEE-SA BOG.

5.8.8 BOG appeal

The SASB Appeal Panel's final decision can be appealed to the IEEE-SA BOG in writing to the Secretary of the IEEE-SA BOG within 30 days after the Appeal Panel decision becomes final on the basis of a perceived error in the Appeal Panel process or of a perceived error in the Appeal Panel decision. Such appeal shall proceed in accordance with the IEEE Standards Association Operations Manual.

5.8.9 Informal settlement

The IEEE-SA encourages settlement of disputes at any time if the settlement is consistent with the objectives of the IEEE-SA Policies and Procedures. Any settlement (to which the parties agree in writing) that is consistent with these P & P, or an agreement to withdraw the appeal, will terminate the appeal process.

5.9 Interpretations and explanations

Requests for interpretations shall be submitted or confirmed in writing to the Secretary of the IEEE-SA Standards Board, who shall forward the request to the appropriate Sponsor.

Upon receipt, the Sponsor shall screen all such requests to separate those that require formal interpretation from those requesting an explanation. An interpretation provides meaning to a clause, phrase, or sentence when it is open to more than one reading or is ambiguous. An explanation does not attempt to resolve ambiguities, but tries to elucidate the reasons for a particular concept or approach. The Sponsor shall notify the Secretary of the IEEE-SA Standards Board in writing, including electronic mail, preferably within 10 days but no more than 30 days from the date of receipt of the request, of which classification has been assigned to the request.

The Secretary of the IEEE-SA Standards Board shall notify the requestor within 10 days of the Sponsor's written notification of the classification of the request and the anticipated response date.

5.9.1 Explanations process

The Sponsor shall prepare explanations in the manner it deems practical and send them to the party initiating the request and to the Secretary of the IEEE-SA Standards Board. The correspondence shall clearly note that the request was considered to be an explanation only. The explanation shall be developed in a timely manner. A copy of the explanation shall be kept in the Sponsor's records for consideration in developing any revisions or amendments to the standard.

The Sponsor shall not be required to develop a response that in its estimation constitutes engineering application information that would normally be within the area of consultant services. The explanation will be made available to any other party who makes a request to review the explanation. A charge may be incurred for providing such a copy and is the responsibility of the review requestor.

5.9.2 Interpretations process

The Sponsor may forward requests for interpretation to a designated interpretations group.

The proposed response prepared by the designated interpretations group shall be approved by a majority of that group prior to submittal to the Sponsor.

Once accepted by the interpretations group, a vote on the proposed response shall be taken in accordance with Sponsor rules. As a courtesy, the preliminary response may be sent to the requestor. If the requestor submits comments on the preliminary response within 15 days of the date that the proposed interpretation is sent to the requestor, the Sponsor shall consider the comments and respond to the requestor. The proposed interpretation response shall be concluded within nine months of notification of classification of the interpretations request as an interpretation by the Sponsor.

The final interpretation shall be transmitted to the party initiating the request. A copy shall be forwarded to the Secretary of the IEEE-SA Standards Board, together with a list of the members of the designated interpretations group for IEEE records. IEEE Standards interpretations shall be posted at the IEEE

Standards website until the next amendment or revision of the standard.

If the Sponsor is unable to reach consensus on an interpretation, the Sponsor can respond to the requestor that an interpretation will not be forthcoming on this matter. It should be noted that, if the Sponsor cannot issue an interpretation for a request, this area of the standard should be considered for revision.

Interpretations shall be developed in a timely fashion. If the Sponsor classifies the request as an interpretation, the Secretary of the IEEE-SA Standards Board shall provide a status report to the requestor no more than 90 days from the Sponsor's classification of the interpretation request as an interpretation. The Sponsor shall keep a log of all interpretations requested and completed. The Sponsor shall consider interpretations either as corrigenda, when developing an amendment to the standard, or for inclusion in the next revision of the standard.

5.9.3 Disclaimer

Wording to this effect is included in each IEEE standard published:

"At lectures, symposia, seminars, or educational courses, an individual presenting information on IEEE standards shall make it clear that his or her views should be considered the personal views of that individual rather than the formal position, explanation, or interpretation of the IEEE."

When a proposed interpretation is sent to a requestor and a Sponsor, the following wording shall be attached:

"WARNING: This proposed interpretation is not an official IEEE Sponsor interpretation, as it has not yet been balloted and, as such, is subject to change. This proposed interpretation is for informative purposes only. USE AT YOUR OWN RISK."

6. Copyright, commercial terms and conditions, patents, and standard structure

6.1 Copyright

The IEEE owns the copyright of draft and approved IEEE standards (see 7.2 of the IEEE-SA Standards Board Bylaws).

Contributions made by participants in an IEEE-SA standards development meeting, whether the contributions are Published or not, are subject to the IEEE-SA Copyright Policy set forth in Clause 7 of the IEEE-SA Standards Board Bylaws.

6.1.1 Project Authorization Request (PAR)

At the time a PAR is submitted for approval, any known previously Published material intended for inclusion in the proposed IEEE standard shall be identified on the PAR. The Working Group Chair is responsible for obtaining written permission to use all previously Published material prior to the start of the initial ballot or prior to the next recirculation ballot if the excerpted material is inserted during comment resolution.

6.1.2 Contributions from previously Published sources

Participants in an IEEE Standards group who submit contributions containing excerpted content from previously Published sources shall notify the Chair of the need for permission, and should assist the Chair in obtaining that permission. Working Group Chairs are responsible for requesting and obtaining permission from external entities and for forwarding the completed response forms to the IEEE.

IEEE Permission Form Letters should be used to request and grant such permissions. Permission Form Letters to use material unchanged or modified are available online. Agreements that do not conform to the IEEE Permission Form Letters are possible, but such requests shall be in writing and shall be approved by IEEE-SA staff.

6.1.3 Drafts of proposed IEEE standards

All drafts shall be clearly labeled to reflect their status as unapproved.

6.1.3.1 Draft copyright statements

All drafts shall carry a copyright statement that:

- a) The document is an unapproved draft of a proposed IEEE standard
- b) The document is subject to change
- c) The document shall not be utilized for conformance/compliance purposes.

An IEEE draft standard may be distributed without charge to the participants for that IEEE standards development project. Other persons seeking permission to reproduce the document, in whole or in part, must obtain permission from the IEEE Standards Activities Department.

The IEEE Standards Style Manual provides example text to meet the above requirements.

6.2 Commercial terms and conditions

Provisions involving business relations between buyer and seller such as guarantees, warranties, and other commercial terms and conditions shall not be included in an IEEE standard. The appearance that a standard endorses any particular products, services, or companies shall be avoided. Therefore, it generally is not acceptable to include manufacturer lists, service provider lists, or similar material in the text of an IEEE standard. Where a sole source exists for essential equipment, materials, or services necessary to comply with or to determine compliance with the standard, it is permissible to supply the name and address of the source in a footnote as long as the words "or the equivalent" are added to the reference.

6.3 Patents

The patent policy is set forth in clause 6 of the IEEE-SA Standards Board Bylaws and is incorporated herein by reference.

Letters of Assurance are to be e-mailed, faxed, or mailed to the IEEE Standards Association (to the attention of the PatCom Administrator). The PatCom Administrator shall accept each Letter of Assurance that is complete and is received from an individual within the issuing organization whose title suggests authority for intellectual property and legal matters. The PatCom Administrator's duties with regard to Letters of Assurance shall be purely ministerial (i.e., without regard to or exercise of the PatCom Administrator's discretion regarding the content of the Letters of Assurance received). For each Accepted Letter of Assurance, the PatCom Administrator shall record the date on the signed Letter of Assurance and the date upon which the IEEE accepted such. The chair or the chair's delegate of an IEEE standards-developing working group or the chair of an IEEE standards Sponsor shall request a Letter of Assurance from Affiliates specifically excluded on an Accepted Letter of Assurance.

Upon written request, the IEEE will make available copies of any Accepted Letter of Assurance and its attachments. Letters received after 31 December 2006 shall be posted on the IEEE-SA website.

6.3.1 Public notice

The following notice shall appear when the IEEE receives assurance from a claimed patent holder or patent applicant prior to the time of publication that a license will be made available to all applicants either without compensation or under reasonable rates, with reasonable terms and conditions that are demonstrably free of any unfair discrimination.

Attention is called to the possibility that implementation of this standard may require use of subject matter covered by patent rights. By publication of this standard, no position is taken with respect to the existence or validity of any patent rights in connection therewith. A patent holder or patent applicant has filed a statement of assurance that it will grant licenses under these rights without compensation or under reasonable rates, with reasonable terms and conditions that are demonstrably free of any unfair discrimination to applicants desiring to obtain such licenses. Other Essential Patent Claims may exist for which a statement of assurance has not been received. The IEEE is not responsible for identifying Essential Patent Claims for which a license may be required, for conducting inquiries into the legal validity or scope of Patents Claims, or determining whether any licensing terms or conditions provided in connection with submission of a Letter of Assurance, if any, or in any licensing agreements are reasonable or non-discriminatory. Users of this standard are expressly advised that determination of the validity of any patent rights, and the risk of infringement of such rights, is entirely their own responsibility. Further information may be obtained from the IEEE Standards Association.

If the IEEE has not received Letters of Assurance prior to the time of publication, the following notice shall appear:

Attention is called to the possibility that implementation of this standard may require use of subject matter covered by patent rights. By publication of this standard, no position is taken with respect to the existence or validity of any patent rights in connection therewith. The IEEE is not responsible for identifying Essential Patent Claims for which a license may be required, for conducting inquiries into the legal validity or scope of Patents Claims or determining whether any licensing terms or conditions provided in connection with submission of a Letter of Assurance, if any, or in any licensing agreements are reasonable or non-discriminatory. Users of this standard are expressly advised that determination of the validity of any patent rights, and the risk of infringement of such rights, is entirely their own responsibility. Further information may be obtained from the IEEE Standards Association.

6.3.2 Call for patents

The chair or the chair's delegate of an IEEE standards-developing working group or the chair of an IEEE standards Sponsor shall be responsible for informing the participants at a meeting that if any individual believes that Patent Claims might be Essential Patent Claims, that fact should be made known to the entire working group and duly recorded in the minutes of the working group meeting. This request shall occur at every standards-developing meeting once the PAR is approved by the IEEE-SA Standards Board.

The chair or the chair's delegate shall ask any patent holder or patent applicant of a Patent Claim that might be or become an Essential Patent Claim to complete and submit a Letter of Assurance in accordance with Clause 6 of the *IEEE-SA Standards Board Bylaws*. Information about the draft standard will be made available upon request.

6.3.3 Withdrawn standards

All active IEEE standards are subject to periodic review for reaffirmation, revision, or withdrawal every five years, and for stabilization every ten years. Thus, any standard that incorporates patented technology may at some point in time be withdrawn. Clause 6 of the *IEEE-SA Standards Board Bylaws* contains policies concerning the period of validity for any Letter of Assurance received from a party regarding an Essential Patent Claim.

6.3.4 Multiple Letters of Assurance and Blanket Letters of Assurance

A Submitter may provide the IEEE with a Blanket Letter of Assurance for a specific [Proposed] IEEE Standard that covers all Essential Patent Claims the Submitter may currently or in the future have the ability to license. A Submitter may submit separate Letters of Assurance providing different licensing positions for different potential Essential Patent Claims.

Over time, a Submitter may also provide multiple assurances for a given Patent Claim by submitting multiple Letters of Assurance for such claim. For Essential Patent Claims, each such Letter of Assurance shall be binding on the Submitter. Each potential licensee may choose to invoke the terms of any applicable Letter of Assurance accepted by the IEEE, with one exception: If a Submitter has signed and submitted a Letter of Assurance specifically identifying a Patent Claim before or concurrently with signing and submitting a Blanket Letter of Assurance, the Blanket Letter of Assurance cannot be invoked as to the specified Patent Claim. (The Submitter, however, may submit a separate specific Letter of Assurance offering the Blanket Letter of Assurance terms for the specified Patent Claim.) The intention of this paragraph is to permit the Submitter to offer alternative assurances, and to permit the potential licensee to choose from among the alternative assurances offered.

If, after providing a Blanket Letter of Assurance, the Submitter acquires an Essential Patent Claim or a controlling interest in an entity that owns or controls an Essential Patent Claim, the existing Submitter's Blanket Letter of Assurance shall apply to such acquired Essential Patent Claims unless the acquired entity or the prior holder of the acquired Essential Patent Claim has submitted a Letter of Assurance before the

acquisition. Any Blanket Letter of Assurance submitted by the acquired entity or the prior holder of the acquired Essential Patent Claims before the acquisition shall continue to apply to acquired Essential Patent Claims covered by such assurance (but not to the acquirer's Essential Patent Claims). Letters of Assurance covering specified Essential Patent Claims shall continue to apply to specified Essential Patent Claims, whether acquired in the acquisition or held by the acquirer before the acquisition, as provided in this Operations Manual. Nothing in this paragraph shall prevent an acquiring party from asking a seller of an acquired Essential Patent Claim or an acquired entity to submit additional Letters of Assurance before closing of the acquisition.

6.3.5 Applicability of Letters of Assurance to Amendments, Corrigenda, Editions, or Revisions

An Accepted Letter of Assurance referencing an existing standard, amendment, corrigendum, edition, or revision will remain in force for the application of the Essential Patent Claim(s) to the technology specified in another amendment, corrigendum, edition, or revision of the same IEEE Standard but only if (a) the application of the technology required by the amendment, corrigendum, edition, or revision of the same IEEE Standard has not changed from its previous usage and (b) the same Essential Patent Claims covered by the prior Accepted Letter of Assurance remain Essential Patent Claims in the same IEEE Standard or revision thereof.

The Working Group Chair shall initiate a request for a new Letter of Assurance from a known Submitter when re-using portions of, or technologies specified in, an existing [Proposed] IEEE Standard, amendment, corrigendum, edition, or revision referenced in an Accepted Letter of Assurance in a different [Proposed] IEEE Standard.

6.4 IEEE standard document structure

6.4.1 Normative and informative

Normative material is information required to implement the standard and is therefore officially part of the standard. Informative material is provided for information only and is therefore not officially part of the standard.

6.4.2 Frontmatter

The frontmatter of an IEEE standard is informative.

6.4.3 Notes and footnotes

Notes and footnotes are informative except as noted in subclauses 6.4.4 and 6.4.5.

The IEEE Standards Style Manual provides further information about notes and footnotes.

6.4.4 Notes to tables and footnotes to tables

A note to a table is informative. A footnote to a table is normative.

6.4.5 Notes to figures and footnotes to figures

A note to a figure is informative. A footnote to a figure is normative.

6.4.6 Normative references

Normative references are documents that contain additional material that is necessary to implement the standard. Thus, normative references are indispensable when applying the standard. Each normative reference shall be cited, and the role and relationship of each normative reference shall be explained in the body of the standard.

IEEE and other nationally or internationally recognized standards developing organizations (SDOs) are preferred as the source of normative references. Documents published by other organizations may be cited provided the document is publicly available at a cost that is not unreasonable at the date of publication of the IEEE standard. Documents that are cited as normative references, but that are developed by organizations that are not nationally or internationally recognized SDOs, shall include the edition or date of publication in the citation. References to standards that are not active are permitted, provided such standards are publicly available at the date of publication of the IEEE standard. Draft standards may be used as normative references if they are unambiguously dated, readily available, and retrievable at the date of publication of the IEEE standard. Please consult with an IEEE Standards project editor if such inclusion is necessary.

References to specific clauses or subclauses, tables, and figures of another document shall include the date of said document.

6.4.7 Shall, should, may, and can

The word *shall* indicates mandatory requirements strictly to be followed in order to conform to the standard and from which no deviation is permitted (*shall* equals is required to).

The word *should* indicates that among several possibilities one is recommended as particularly suitable, without mentioning or excluding others; or that a certain course of action is preferred but not necessarily required (*should* equals is recommended that).

The word may is used to indicate a course of action permissible within the limits of the standard (may equals is permitted to).

The word can is used for statements of possibility and capability, whether material, physical, or causal (can equals is able to).

7. IEEE participation on committees outside the IEEE

7.1 IEEE representatives on ANSI Accredited Standards Committees (ASCs)

7.1.1 General

The IEEE is represented on ASCs in which it has a substantial interest. This provides IEEE an opportunity to have a direct influence on the development of an American National Standard generated by the ASC. Positions have been allotted the IEEE as a substantially interested standards-developing organization.

7.1.2 Assignment of positions

The positions allotted to the IEEE are assigned by the IEEE-SA Standards Board to IEEE Societies having a substantial interest in the work of an ASC. The Societies reassign the positions to their substantially interested Technical Committees (TCs). In making these recommendations to ASCs where the IEEE is the secretariat and responsible for balance, the IEEE Societies shall attempt to achieve overall balance within the ASC through the selection of appropriate IEEE delegates.

7.1.3 Appointment of IEEE representatives

IEEE representatives on ASCs are appointed by the IEEE-SA Standards Board from nominations submitted by the appropriate Society or SCC that provides technical instruction to the representative.

7.1.4 Instructions to IEEE representatives on ASCs

7.1.4.1 Source of instructions

IEEE representatives and their alternates shall utilize the expertise of the members of their sponsoring group or TC to develop an IEEE position on proposed standards being considered by their ASC. They shall report at meetings of their Sponsor on the activities of their ASC, either in person or by a written report to be included in the minutes of the meeting, to inform the members of the work of the standards committee. They shall solicit comments and suggestions from interested members of their Sponsor in order to establish their position on projects under consideration, and to identify substantially interested members to whom they can turn for advice and recommendations on short notice. They shall work with the chair and the IEEE-SA Standards Board liaison representative of their Sponsor to ensure that they act in accordance with the consensus within the Sponsor. In the absence of instructions, they shall use their best judgment based on their experience as a member of their Sponsor to support the position with which they believe the membership would agree. All ballot actions taken by IEEE representatives shall be reported to the sponsoring committee. On all policy matters coming before this committee, the representative shall solicit instructions from the IEEE-SA Standards Board.

7.1.5 Coordination within the IEEE

Where there are two or more representatives, the IEEE-SA Standards Board will appoint a head of delegation, generally from the TC having the primary interest in the ASC. The head of delegation is responsible for supervising the work of the IEEE delegation, particularly the coordination of the positions of the representatives and alternates based on the instructions from their respective Sponsors. A unified position shall be developed to be supported unanimously by the IEEE delegation. In the case of letter ballots, various methods may be used to secure the unanimous vote:

a) Each representative and alternate may send his or her completed ballot to the head of delegation who mails it in when a unanimous vote has been obtained.

- b) Each representative and alternate notifies the head of delegation how he or she intends to vote, or sends a copy of his or her executed ballot. The head of delegation notifies them to mail their ballots when the vote is unanimous.
- c) The head of delegation sends his or her recommended vote with reasons to the other members of the delegation with a deadline for returning objections. If no objections are received within the time limit, the head of delegation directs the members to execute their ballots in accordance with the recommendation.

Unanimity is required within the IEEE delegation because the members represent IEEE and not their individual Sponsors. Positions are assigned to the Sponsors in order to provide a recognized spokesperson from the Sponsor to facilitate coordination within the IEEE delegation. Therefore, if a representative on an ASC determines that a project within the committee might be of interest to an unrepresented Society or TC, he or she should notify the organization (generally through its IEEE-SA Standards Board liaison representative) and furnish requested information. Normally, temporary interest can be handled by an existing representative, but if the organization wishes the assignment of a position on the ASC, it should make a request to the Secretary of the IEEE-SA Standards Board and submit a nominee.

7.1.6 Balloting on IEEE standards in an ASC

When an ASC ballots on an IEEE standard for adoption as an American National Standard, the IEEE delegation shall support the adoption of the IEEE standard without change, and vote in the affirmative on the ballot. If there are objections to the IEEE standard, the IEEE delegation shall point out that proposed changes require prior approval by the proprietary Sponsor. The IEEE delegation provides the liaison between the ASC and the IEEE Sponsor to resolve the objections. If resolution results in substantial changes, the revision shall be submitted to the IEEE-SA Standards Board for approval as a revision.

7.2 IEEE Category D Liaisons with the International Electrotechnical Commission (IEC)

7.2.1 Definition of a Category D Liaison

Category D Liaisons only apply to the International Electrotechnical Commission (IEC).

The ISO/IEC Directives defines Category D Liaisons as organizations that make a technical contribution to and participate actively in the work of an IEC working group, maintenance team, or project team.

7.2.2 General Requirements for the Establishment of an IEEE Category D Liaison

The IEEE Committee requesting the Category D Liaison shall be multinational in objectives and standards development activities, with individual or entity membership, and may be permanent or transient in nature.

The IEEE Committee shall have a sufficient degree of representation within its defined area of competence; within a sector or subsector of the relevant technical or industrial field.

The IEEE Committee shall be willing to make a contribution, in the form of comments to drafts, to the IEC as appropriate.

In order to be effective, the liaison relationship shall operate in both directions.

7.2.3 Establishing a Category D Liaison

The IEEE Committee Chair shall work with appropriate IEEE-SA staff to draft a letter to the Secretary of

the relevant IEC Technical Committee/Subcommittee requesting a Category D liaison between the two groups. The letter shall include a rationale for the liaison relationship, as well as an indication of how the IEEE Committee meets the general requirements given in Clause 7.2.2.

Once approval for a Category D Liaison has been granted by the IEC, the request for an IEEE Category D Liaison shall be forwarded to the IEEE-SA Standards Board for approval consideration.

7.2.4 Appointment of IEEE Category D Liaison Representatives

Once approval for a Category D Liaison has been granted by the IEEE-SA Standards Board, the IEEE Committee holding the liaison relationship shall appoint a representative and notify the appropriate IEEE-SA staff with the name and contact information of the representative.

7.2.5 Participation on an IEC Working Group/Maintenance Team/Project Team

A Category D Liaison representative has the right to participate and vote as a member at the level of an IEC Technical Committee/Subcommittee working group, maintenance team, or project team. This expert acts as the official representative of the IEEE Committee from which he or she is appointed.

Participation at the IEC Technical Committee/Subcommittee level is by country representation only. Category D liaisons may not participate in the work at the IEC Technical Committee/Subcommittee level, which means they cannot participate in IEC Technical Committee/Subcommittee meetings and may not propose new work items, other than Publicly Available Specifications.

7.2.6 Responsibilities of a Category D Liaison

A Category D Linison provides coordination and communication between the IEEE and the IEC on matters of mutual interest.

The Category D Liaison develops the formal position of the IEEE Committee on IEC standards under development in a working group, maintenance team, or project team.

The Category D Liaison is responsible for protecting the intellectual property rights of IEEE standards and IEC standards. If the Category D Liaison wishes to introduce an IEEE document to an IEC Working Group for its consideration, the appropriate IEEE copyright information shall be on the document. If the IEC Working Group wishes to adopt the document whole or in part, the Category D Liaison shall contact the IEEE-SA Manager, Standards Intellectual Property.

The Category D Liaison assists the IEEE and the IEC in identifying possible candidates for submission as Dual Logo documents.

The Category D Liaison assists the IEEE in identifying future collaborative work, which may include documents that previously were either

- a) Developed jointly with the IEC, or
- b) Adopted in part by the IEC, or
- c) Adopted whole by the IEC.

The appropriate IEEE-SA staff shall be copied on all correspondence between the Category D Liaison and the IEC.

7.2.7 Annual Reconfirmation of Category D Liaisons

Every year, the appropriate IEEE-SA staff shall review the IEEE Category D Liaison list to verify which relationships remain active. The list of active Category D Liaisons shall then be placed on the March IEEE-SA Standards Board agenda for reconfirmation.

8. Publication

8.1 Standards

Upon approval by the IEEE-SA Standards Board, the standard shall be published as an IEEE standard. The Sponsor shall be notified of the approval in writing. Balloters with unresolved negative ballot comments shall be informed in writing of the approval and of their right to appeal.

8.1.1 Errata

An erratum shall be prepared when an editorial error is found in an approved IEEE standard that represents a deviation from the standard as approved by the IEEE-SA Standards Board and that could result in misinterpretation of the standard. The date of the erratum and a statement that the erratum represents an editorial correction only shall appear.

8.1.2 Amendments and corrigenda

Amendments and corrigenda are independent projects and are processed with separate PARs and balloted independently in accordance with the requirements of these procedures, including submission to the IEEE-SA Standards Board.

All amendments and corrigenda shall follow the style conventions for indicating changes defined in the *IEEE Standards Style Manual* (see clause 21 and annex C of that document).

Sponsor ballots of amendments and corrigenda shall also include access to the approved base standard and any approved amendments and corrigenda in order to provide sufficient information to the ballot group.

Up to three amendments can be approved before the standard shall be revised, unless the base standard has been approved or reaffirmed within the past three years. In the latter case, multiple amendments may be added until the base standard is three years old or three years have elapsed since the most recent reaffirmation of the standard. After the three-year period, RevCom shall defer consideration of additional amendments or corrigenda until a revision or a two-year extension request is approved by the IEEE-SA Standards Board. The standard shall not be reaffirmed if three or more amendments to the base standard exist

If, for any extenuating circumstances, an exception to these rules is required, the Sponsor shall take its request for a two-year extension to RevCom. A project plan outlining the rationale for the request, as well as a schedule for the revision, also shall be submitted. RevCom will review the request and make a recommendation to the IEEE-SA Standards Board.

During the two-year extension period, Sponsors can submit additional amendments and corrigenda for approval consideration. However, after this period, RevCom shall defer consideration of additional amendments or corrigenda until a revision is approved by the IEEE-SA Standards Board.

Since the schedule for a standard's maintenance is based upon the approval date of the base standard, an amendment or a corrigendum may have been available for less than five years when it is subject to a maintenance action. Rules concerning the procedures for updating amendments are covered in clause 9.

8.1.3 Normative annexes

Normative annexes are official parts of the standard that are placed after the body of the standard for reasons of convenience or to create a hierarchical distinction. They are official (substantive) parts of the

standard. A normative annex shall be referred to as such (Annex A, Annex B, etc.) in its title, the table of contents, and the text.

8.1.4 Informative annexes

Informative annex texts shall be submitted with the proposed standard.

Informative annexes are included in a standard for information only and are not normative (substantive) parts of the standard. Standards writers should carefully consider the nature of material placed in informative annexes. The working group should also understand that informative annex material *is* considered part of the balloted document and, as such, shall be submitted to the IEEE-SA Standards Board for approval.

8.2 Publication of drafts

Drafts of standards under development are normally distributed to members of the group involved in their generation (working group, subcommittee, etc.) for comment and letter ballot. The normal method for generating valid comments is to conduct a letter ballot of the working group or subcommittee.

All drafts, no matter how broad their circulation, shall be marked on the cover and elsewhere with the appropriate copyright and legal statements as defined in Clause 6.

When using the approved IEEE standards designation on a draft standard, the designation shall be structured, at a minimum, as "IEEE Pxxx/DXX," where "xxx" represents the specific designation and "XX" represents the specific draft version of that document. The date of the draft shall also be included. Any additional information (such as the draft chapters) may be included at the discretion of the working group. The draft designation shall appear on each page of the draft in the same location for the sake of continuity (for example, the upper right corner, the bottom right corner, etc.).

In projects of broad interest, it is sometimes useful to collect a broader spectrum of comments than that available within the working entity involved in the development of the draft. Although the practice is deprecated by the IEEE-SA Standards Board, a small number of IEEE committees publish such drafts for distribution either as separate documents or in Society Transactions. Publication, including electronic, hard copy, or other forms of distribution, shall be carefully controlled to avoid misunderstandings regarding the status of and legal responsibility for such documents (N.B. these documents must not be mistakenly regarded as IEEE standards). The following conditions shall be met for such publication:

- a) The document shall be marked according to Clause 6.
- b) The draft can be authorized for publication only by the IEEE Standards Department. Committees wishing to have their drafts published and distributed shall have their Sponsor contact the IEEE Standards Department.

A preferred alternative to this procedure is to process the document as a trial-use standard (see 5.7).

9. Maintenance of IEEE standards

Sponsors are required to undertake a maintenance action on a standard within five years of its IEEE-SA Standards Board approval date. Subsequent maintenance actions on active standards are required within five years of the IEEE-SA Standards Board approval date of the previous maintenance action. For standards with amendments or corrigenda, the maintenance schedule for all components of the standard is based on the schedule for the base document. Standards that meet the criteria for stabilization (see 1.2) can be transferred to the stabilized standards process, where the document is subject to the requirement of maintenance action every ten years.

A maintenance action on an active standard can be an approved PAR for revision; an initiated reaffirmation ballot; an initiated Sponsor withdrawal ballot; or a request to stabilize. If the Sponsor does not undertake a maintenance action by the end of a standard's five-year maintenance cycle, or ten-year maintenance cycle for stabilization, the RevCom Administrator shall notify the Sponsor that the standard will be submitted to RevCom with a default recommendation of withdrawal. RevCom or the IEEE-SA Standards Board may decide to alter the default recommendation.

9.1 Reaffirmation

Standards that contain no identified significant obsolete or erroneous information may be submitted by the Sponsor for reaffirmation when accompanied by a ballot indicating approval by at least 75% of the interested and affected parties. When the Sponsor ballots a standard for reaffirmation, the entire standard, including approved amendments, corrigenda, and known errata, is subject to review by its balloters. Objections may indicate the need to revise the standard rather than to reaffirm it.

If any approved amendments, corrigenda, or known errata are omitted during a reaffirmation ballot, a recirculation shall be required to present them to the balloting group.

Sponsors shall not conduct a reaffirmation ballot for standards with three or more amendments. In such situations, the Sponsor shall revise the standard instead (see 8.1.2).

9.1.1 Reaffirmation ballot

The ballot shall provide three choices:

- a) Approve (Affirmative). This means, in the opinion of the voter, that the standard contains no significant obsolete or erroneous information and is useful in its current form. This vote may be accompanied by comments suggesting corrections and improvements. Action on such comments is left to the discretion of the Sponsor in future revisions.
- b) Do Not Approve (Negative). This vote shall be accompanied by identification of either
 - The specific contents that are obsolete or erroneous, along with reasons for the claim, or
 - Identification of the specific topics to be added, along with justification why their omission is detrimental to the utility of the standard.
- c) Abstain. This vote shall be treated in the same manner as a regular ballot (see 5.4.3.1).

9.1.2 Resolution of reaffirmation comments, objections, and negative votes

The Sponsor shall review all ballots received and shall respond to the negative balloter stating either that the information in the document is not obsolete and/or his or her comment may be considered in the next revision.

All unresolved negative ballots, together with the reasons of the negative voters and the rebuttal by the members conducting the resolution of the ballot, shall be submitted to the members of the Sponsor balloting group, providing each member an opportunity to change his or her ballot. Names of the unresolved negative balloters are to be included with their negative comments in the recirculation of negative comments.

Comments accompanying affirmative votes that advocate changes in the technical meaning of the document may be considered for a future revision of the standard.

9.2 Revision

The Sponsor shall initiate revision of a standard whenever any of the material in the standard (including all amendments, corrigenda, etc.) becomes obsolete or incorrect, or if three or more amendments to a base standard exist three years after its approval or most recent reaffirmation. The Sponsor may initiate revision of a standard when new material becomes available and normal evaluation of need and feasibility indicates revision is warranted. The procedure for revising a standard is the same as for developing a new standard. A revision shall encompass the cumulative scope of the project (including all approved amendments and corrigenda).

In a revision, balloters may register objections to any part of the standard, as the revision process opens the entire document to comment. (The amendment process shall be used when new material and possibly corrections of a limited scope are proposed.)

The draft revision document submitted to the IEEE-SA Standards Board shall be a complete version of the revised document. A complete document shall include both the changed and the unchanged text, with balloted changes incorporated into the document.

When a standard is revised, its approved amendments and corrigenda shall be withdrawn as separate documents. Existing amendments and corrigenda shall either be integrated into the base document or eliminated as indicated in the PAR or determined by the Sponsor balloting process.

9.3 Stabilized standards

A standard meeting the criteria for stabilization (see 1.2) is eligible for stabilization if the standard has been reaffirmed at least once, and at least ten years have passed since the initial approval (in instances where no subsequent changes were made to the standard), or last revision or amendment of the standard.

An initial stabilization ballot is required before the standard can be submitted to the IEEE-SA Standards Board for approval as a stabilized standard. The ballot shall meet all the criteria of 5.4 and shall be conducted so that balloters can confirm that the standard meets the criteria for stabilization. Prior to the initial stabilization ballot, a Mandatory Editorial Coordination review of the document to ensure eligibility for stabilization is required.

If the stabilization ballot is completed successfully, the Sponsor will be able to submit a request for stabilization and applicable ballot results to RevCom, which will make a recommendation to the IEEE-SA Standards Board. Upon approval, notification shall be made informing interested parties of the stabilization action. Stabilized standards are required to be confirmed by stabilization ballot on a routine ten-year cycle.

Recommendations to change the status of a stabilized standard may be submitted at any time by any materially affected and interested party. Any recommendations that are submitted should include a rationale

as to why a revision or withdrawal is required. However, a recommendation shall not be dismissed due to the fact that the recommendation does not necessarily suggest a specific revision or change to the standard. All recommendations shall be submitted or confirmed in writing to the Secretary of the IEEE-SA Standards Board, who shall forward the request to the appropriate Sponsor.

If a recommendation is made at any time to revise or withdraw a stabilized standard, then that recommendation shall be considered by a designated group identified by the Sponsor within a maximum of 60 days from receipt. The submitter of such a recommendation shall be responded to in writing by the Sponsor within 60 days of the receipt of the recommendation and advised of the decision relative to the maintenance status of the standard. A copy for IEEE records shall be forwarded to the Secretary of the IEEE-SA Standards Board, together with a list of the members of the designated group that considered the recommendations.

If the Sponsor is unable to reach consensus on a stabilization response, the Sponsor can respond to the requestor that the recommendation will be forwarded for consideration during the next stabilization ballot. Such stabilization ballot shall then be initiated within 60 days of the notification to the requestor that the Sponsor was unable to reach consensus. The stabilization ballot shall highlight the requestor's recommendation and the fact that the Sponsor was unable to reach consensus.

If the stabilization recommendation requires an interpretation, the interpretation process shall be used to develop a response.

If maintenance of a stabilized standard is justified, a revision project shall be initiated. The stabilized standard shall be superseded upon IEEE-SA Standards Board approval of the active, revision standard.

9.4 Withdrawal

Standards that are no longer useful or contain significant obsolete or erroneous information should be recommended for withdrawal by the Sponsor. A recommendation for withdrawal shall be supported by a ballot by the Sponsor (see 5.4) with a 50% return and at least a 75% approval.

When the Sponsor fails to show any action to revise, reaffirm, withdraw, or stabilize an active IEEE standard at the end of its maintenance cycle, the Secretary of the IEEE-SA Standards Board shall, upon the recommendation of the IEEE-SA Standards Board, send a 30-day ballot to the members of the IEEE-SA Standards Board on the question of withdrawing the standard. Notice of the proposed withdrawal shall be sent to all liaison representatives. Withdrawals shall be approved by a ballot of the IEEE-SA Standards Board with at least a 50% return and 100% approval.

A standard remains in effect until it is officially withdrawn by the IEEE-SA Standards Board. When a standard is withdrawn, its amendments and corrigenda are also withdrawn. After a standard is withdrawn, the Sponsor is no longer obligated to respond to interpretation requests concerning it.

10. Maintenance and modification of the IEEE-SA Standards Board Operations Manual

Proposed modifications to this manual may be submitted to the Secretary of the IEEE-SA Standards Board by members of the IEEE-SA Standards Board and any of its committees. This manual will be maintained by the IEEE Standards Department Staff, reviewed by ProCom, and approved by the IEEE-SA Standards Board.

This document shall be reviewed by legal counsel.

10.1 Interpretations of the IEEE-SA Standards Board Operations Manual

Requests for interpretations of this document shall be directed to the IEEE-SA Standards Board. The Secretary of the IEEE-SA Standards Board shall respond to the request within 30 days of receipt. Such response shall indicate either an interpretation or a specified time limit when such an interpretation will be forthcoming. The time limit shall be no longer than is reasonable to allow consideration of and recommendations on the issue by, for example, the Procedures Committee of the IEEE-SA Standards Board.