

# **PROCEDURE MANUAL**

DETAILING SEMI<sup>®</sup> STANDARDS PROCESSES AND PRACTICES

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## 1 Introduction

### 1.1 Purpose and Scope of This Procedure Manual

1.1.1 *Purpose* — SEMI Standards Program (hereinafter referred to as Program) activities are global in nature, so it is useful to have common documented processes and practices that allow SEMI Standards Program Members (hereinafter referred to as Program Members) from culturally diverse geographical areas to implement these activities smoothly. For this purpose, this *Procedure Manual: Detailing SEMI® Standards Processes and Practices* (hereinafter referred to as *Procedure Manual*) is authorized under § 5.5.5.2 of the *Regulations: Governing SEMI® Standards Program* (hereinafter referred to as *Regulations*).

1.1.2 *Scope* — The scope of this *Procedure Manual* is to provide clear procedures consistent with the requirements of the *Regulations*, particularly on specific activities not defined there. This *Procedure Manual* is intended to be used by all SEMI Standards staff (hereinafter referred to as Standards staff, Standards Headquarters [HQ] staff, or Standards regional staff as appropriate) and Program Members worldwide in conjunction with the *Regulations*.

1.1.2.1 The *Regulations* derive from several sources, including:

- US antitrust laws;
- definitions of the characteristics of accredited, consensus standards development organizations (SDOs); and
- legal liability of SEMI as an organization, of the individual participants in the international standards development process, and of their employers.

1.1.2.2 The *Regulations* were designed as a minimum set of rules to facilitate discussions between competitors and their customers. In certain areas, especially intellectual property (IP), Safety Guidelines, and definition of organizational units of the Program, the language in the *Regulations* has been selected in close consultation with legal advisors. The guidance provided in these areas by the *Regulations* is complete. Neither Standards staff nor Program Members should attempt to expand on these areas.

1.1.3 *Format* — All items in this *Procedure Manual* that refer to the *Regulations* cite the *Regulations* section or paragraph number(s). Text from the *Regulations* may be quoted “only when reference is not sufficient” (refer to *Regulations* ¶ 5.5.5.2.1). Quoted text is enclosed in double quotation marks as shown above.

1.1.4 *Order of Precedence* — If there is a conflict between this *Procedure Manual* and the *Regulations*, the *Regulations* take precedence (refer to *Regulations* ¶ 1.7).

1.1.5 *Revision* — The International Standards Committee (ISC) Subcommittee on the Regulations and Standards staff are responsible for developing, maintaining, and revising this *Procedure Manual* (refer to *Regulations* § 5.5.5).

1.1.5.1 Any Program Member may suggest revisions to this *Procedure Manual*. Suggestions for revisions should be referred to Standards staff and the ISC Subcommittee on the Regulations for consideration.

1.1.6 *Public Distribution* — This *Procedure Manual* is published by Standards headquarters (HQ) staff on the SEMI Standards Web site.

1.1.7 *Effective Date* — This *Procedure Manual* is effective 30 days after public distribution.

1.1.8 *Official Language and Translations* — The official version of this *Procedure Manual* is the English language version, which takes precedence over versions in any other language (refer to *Regulations* ¶ 5.5.5.2.2). Each SEMI regional office may prepare translated versions. All translations of this *Procedure Manual* should have revision control numbers and reference the English version from which they were translated.

1.1.9 *Maintenance* — The official version of this *Procedure Manual* is maintained by Standards HQ staff. All translated versions are maintained by the SEMI regional office that commissioned the translation.

1.1.10 *Supporting Materials* — As a method of promoting knowledge and thorough use of the *Regulations* and this *Procedure Manual* to Program Members, handbooks and other supporting materials may be issued. The appropriate form of handbooks, etc. may be influenced by each geographical area’s language and culture. The content of these materials may be developed in each of these areas, but shall be consistent with the *Regulations* and this *Procedure Manual*.

## 1.2 Terminology Used in This Procedure Manual

### 1.2.1 Acronyms

1.2.1.1 *A&R* — Audit and Review

1.2.1.2 *A&R SC* — Subcommittee on Audits and Reviews (refer to § 2.14.1; *Regulations* § 5.5.4)

1.2.1.3 *ANS* — American National Standard

1.2.1.4 *ANSI* — American National Standard Institute

1.2.1.5 *ASTM* — ASTM International

1.2.1.6 *BoD* — Board of Directors (refer to *Regulations* ¶ 1.3)

1.2.1.7 *CER* — TC Chapter Express Report (refer to § 4.4.1)

1.2.1.8 *CFG* — TC Chapter Formation Group (refer to *Regulations* § 6.3)

1.2.1.9 *DIN* — Deutsches Institut für Normung e.V.

1.2.1.10 *FPD* — flat panel display

1.2.1.11 *GCS* — Global Coordinating Subcommittee (refer to *Regulations* § 5.7.6)

1.2.1.12 *HQ* — headquarters

1.2.1.13 *IEC* — International Electrotechnical Commission

1.2.1.14 *ISC* — International Standards Committee (refer to *Regulations* § 5.5)

1.2.1.15 *ISO* — International Organization for Standardization

1.2.1.16 *JSA* — Japanese Standards Association

1.2.1.17 *JEITA* — Japan Electronics and Information Technology Industries Association

1.2.1.18 *LED* — light emitting diode

1.2.1.19 *MSDS* — material safety data sheet

1.2.1.20 *MEMS* — micro electro-mechanical systems

1.2.1.21 *MR* — minority report (refer to § 2.15.1; *Regulations* § 9.10)

1.2.1.22 *MSA* — measurement systems analysis

1.2.1.23 *PCR* — Publication Change Request (refer to § 2.16.4.2)

1.2.1.24 *PIP* — Publication Improvement Proposal (refer to § 2.16.4.1)

1.2.1.25 *ROI* — return on investment

1.2.1.26 *RSC* — Regional Standards Committee (refer to *Regulations* § 5.6)

1.2.1.27 *SDO* — standards development organization (refer to *Regulations* ¶ 1.5.4)

1.2.1.28 *SI* — Système International d'Unités (or International System of Units, in English)

1.2.1.29 *SNARF* — Standards New Activity Report Form (refer to § 2.1.2, Appendix 1)

1.2.1.30 *STEP* — Standards Technical Education Program

1.2.1.31 *GTC* — global technical committee (refer to *Regulations* § 2.2)

NOTE 1: This acronym is not used in 'TC Member' and 'TC Chapter'.

1.2.1.32 *TF* — task force (refer to *Regulations* ¶ 5.7.4.2)

1.2.1.33 *TFOF* — Task Force Organization Form (refer to § 6.4.2.3, Appendix 2)

1.2.1.34 *WSDL* — web services definition language

1.2.1.35 *XML* — extensible markup language

1.2.2 *Definitions Contained in the Regulations* — Please refer to the *Regulations* for definitions of the following terms:

1.2.2.1 *Terms Related to SEMI Standards Documents (hereinafter referred to as Standards Documents)*

- Appendix (refer to *Regulations* ¶ 4.2.8)
- Auxiliary Information (refer to *Regulations* ¶ 4.2.4)
- Classification (refer to *Regulations* ¶ 4.2.25.1)
- Complementary File (refer to *Regulations* § 4.2.7)
- Current (refer to *Regulations* § 4.2.19)
- Document (refer to *Regulations* ¶ 4.2.1)
- Standards Document (refer to *Regulations* ¶ 4.2.2)
- Draft (refer to *Regulations* § 4.2.15)
- Full-consensus (refer to *Regulations* ¶ 4.2.17)
- Guide (refer to *Regulations* ¶ 4.2.25.2)
- Inactive (refer to *Regulations* § 4.2.20)
- Miscellaneous (refer to *Regulations* ¶ 4.2.25.3)
- Practice (refer to *Regulations* ¶ 4.2.25.4)
- Preliminary (refer to *Regulations* § 4.2.16)
- Primary Standard (refer to *Regulations* ¶ 4.2.12)
- Related Information (refer to *Regulations* § 4.2.9)
- Removed (refer to *Regulations* § 4.2.24)
- Replaced (refer to *Regulations* § 4.2.21)
- Safety Guideline (refer to *Regulations* ¶ 4.2.6)
- Specification (refer to *Regulations* ¶ 4.2.25.5)
- Standard (refer to *Regulations* § 4.2.5)
- Standards Document (refer to *Regulations* § 4.2.2)
- State (refer to *Regulations* § 4.2.14)
- Status (refer to *Regulations* ¶ 4.2.18)
- Subordinate Standard (refer to *Regulations* § 4.2.13)
- Subtype (refer to *Regulations* ¶ 4.2.25)
- Superseded (refer to *Regulations* § 4.2.22)
- Supplementary Material (refer to *Regulations* ¶ 4.2.10)
- TC Chapter Formation Group (refer to *Regulations* ¶ 6.3.1)
- Terminology (refer to *Regulations* ¶ 4.2.25.6)
- Test Method (refer to *Regulations* ¶ 4.2.25.7)
- Type (refer to *Regulations* ¶ 4.2.3)

- Various Materials (refer to *Regulations* ¶ 4.2.11)
- Withdrawn (refer to *Regulations* § 4.2.23)

#### 1.2.2.2 *Terms Related to Letter Ballots and Voting*

- Abstain (refer to *Regulations* ¶ 9.1.5)
- Abstain with Comment (refer to *Regulations* ¶ 9.1.6)
- Accept (refer to *Regulations* ¶ 9.1.7)
- Accept with Comment (refer to *Regulations* ¶ 9.1.8)
- Comment (refer to *Regulations* ¶ 9.1.9)
- Intercommittee Ballot (refer to *Regulations* ¶ 9.1.2)
- Letter Ballot (refer to *Regulations* ¶ 9.1.1)
- Minority Report (refer to *Regulations* ¶ 9.1.11)
- Negative (refer to *Regulations* ¶ 9.1.10)
- Originating TC Chapter (refer to *Regulations* ¶ 9.1.3)
- Reject (refer to *Regulations* ¶ 9.1.12)
- Responsible TC Chapter (refer to *Regulations* ¶ 9.1.4)
- Standards Document Development Project (refer to *Regulations* ¶ 5.7.7.2.1)
- Standards Document Development Project Period (refer to *Regulations* ¶ 8.3.1)
- Vote (refer to *Regulations* ¶ 9.1.13)
- Voter (refer to *Regulations* ¶ 9.1.14)
- Voting Interest (refer to *Regulations* § 3.2.1)

#### 1.2.2.3 *Specific Terms Related to Ratification Ballots*

- Advisory Global Technical Committee (Advisory GTC, refer to *Regulations* ¶ 10.1.3)
- Approve (refer to *Regulations* ¶ 10.1.4)
- Disapprove (refer to *Regulations* ¶ 10.1.5)
- Primary Global Technical Committee (Primary GTC, refer to *Regulations* ¶ 10.1.2)
- Ratification Ballot (refer to *Regulations* ¶ 10.1.1)

#### 1.2.2.4 *Terms Related to SEMI Standards Organization*

- Interest Category (refer to *Regulations* § 3.3)
- Locale (refer to *Regulations* ¶ 5.2.1)
- Official Virtual TC Chapter Meeting (refer to *Regulations* ¶ 7.4.1.2)
- Region (refer to *Regulations* ¶ 5.2.2)
- TC Chapter (refer to *Regulations* ¶ 2.2)
- TC Member (refer to *Regulations* ¶ 2.2)
- GTC membership (refer to *Regulations* ¶ 2.2)
- Virtual Meeting (refer to *Regulations* ¶ 7.4.1.1)

### 1.2.3 Definitions

1.2.3.1 *Informational Ballot, n.* — an informal ballot issued to gather opinions from a broad audience (including from other global technical committees [GTCs] if appropriate) on a proposal or proposals to create a SEMI Standard or Safety Guideline or revise one or more SEMI Standards or Safety Guidelines.

1.2.3.1.1 *Discussion* — Informational Ballots are issued by TFs, are not subject to an official TC Chapter review, and do not result in the implementation of the balloted proposal or proposals in other than a Draft Document.

1.2.3.2 *Line Item, n.* — a change or set of related changes that only affects a specific aspect or portion of one or more published SEMI Standard or Safety Guidelines, which is proposed by a Line-Item Ballot.

1.2.3.3 *Line-Item Ballot, n.* — a special kind of revision Letter Ballot that proposes one or more Line Items.

1.2.3.4 *Simultaneous Major-Revision Letter Ballot, n.* — a special kind of revision Letter Ballot that proposes revisions to more than one Standards Document.

## 2 SEMI Standards Document Development Project Procedure

2.1 *Overview of Development Procedure* — New Standards Document Development Project for creation and revision of existing Standards Documents takes place as follows:

2.1.1 *Topic Suggestion* — Any person may suggest a topic for standardization (refer to *Regulations* ¶ 5.7.7.2).

2.1.2 *Proposal* — Any Program Member can propose development of a new Standards Document or a revision by submitting a completed Standards New Activity Report Form (SNARF) (refer to § 2.2 and Appendix 1 for an example of the SNARF). SNARFs should be submitted to the cochairs of the appropriate TC Chapter via Standards staff in any SEMI regional office, submitted directly to the cochairs of the TC Chapter, or presented during a meeting of the TC Chapter (refer to *Regulations* § 5.7.7.2).

2.1.3 *Types and States of Standards Documents* — There are three principal Types of Standards Documents, which are Standards, Safety Guidelines, and Auxiliary Information, developed through SEMI Standards activities as shown in Table 1. Also, there are three States characterizing Standards Documents according to their completeness and required level of consensus (refer to *Regulations* ¶¶ 4.2.14 through 4.2.16) as shown in Table 2. Standards have various Subtypes as shown in Table 3. The proposer selects the appropriate Type of Standards Document and Subtype of Standards Document if the chosen Type of the Standards Document is a Standard.

2.1.3.1 *Procedural Differences Based on Type of Standards Document* — Procedures that are required for each Type of Standards Documents differ as shown in Table 1.

**Table 1 Types of Standards Documents and Procedural Requirements**

<i>Types of Standards Documents</i>	<i>Regulations Reference(s)</i>	<i>Brief Description of Necessary Procedure</i>
Standard	§ 4.2.4, §§ 9, 10, 11, and 16	Full-consensus through Letter Ballot (refer to <i>Regulations</i> § 9) and Ratification Ballot (Conditional, refer to <i>Regulations</i> § 10). Also, can be published in Preliminary State (i.e., Preliminary Standard) with two-thirds Vote of a TC Chapter followed by GCS approval.
Safety Guideline	§ 4.2.5, §§ 9, 10, 11, 15, and 16	Full-consensus through Letter Ballot (refer to <i>Regulations</i> § 9) and Ratification Ballot (Conditional, refer to <i>Regulations</i> § 10). Advisory in nature and requires special documentation. Cannot be issued in a Preliminary State.
Auxiliary Information	¶ 4.2.3, § 14	Independently published; containing illustrative, explanatory, or supporting material (e.g., application information, examples) that has been developed according to these <i>Regulations</i> for publication by SEMI (refer to <i>Regulations</i> ¶ 14.3.3).

2.1.3.2 *State of Standards Document Based on Level of Consensus* — States of Standards Documents represent different levels of consensus as described in Table 2.

**Table 2 States of Standards Documents**

<i>State</i>	<i>Applicable Types of Standards Documents</i>	<i>Regulations Reference(s)</i>	<i>Brief Description</i>
Draft	Standard Safety Guideline Auxiliary Information <sup>#1</sup>	§ 4.2.14, § 16	A Standards Document under development.
Preliminary	Standard	§ 4.2.15, § 13, § 16	Approved by a single TC Chapter for publication for information and comment prior to issuing a Letter Ballot for its adoption as a Standard (expiration after a two-year lifetime).
Full-consensus	Standard Safety Guideline	§ 4.2.4, § 4.2.5, ¶ 4.2.16, § 15, § 16	Developed within the consensus principles of SEMI that meets the highest level of approval in the <i>Regulations</i> . For Safety Guidelines, the additional requirements of <i>Regulations</i> § 15 are required, as well.

#1 Auxiliary Information can be published when it fulfills conditions for publication, but is never in the Full-consensus State as it is informational in nature and it is never approved by Letter Ballot.

2.1.3.3 *Subtypes of Standards* — Standards have one or more of the various Subtypes as defined in Table 3.

**Table 3 Subtypes of Standards**

<i>Subtype of Standard</i>	<i>Regulations Reference(s)</i>	<i>Brief Description</i>
Classification	¶ 4.2.24.1	Systematic groupings
Guide	¶ 4.2.24.2	Options or instructions with guidance as to choices
Practice	¶ 4.2.24.4	Definitive procedure that does not produce a test result
Specification	¶ 4.2.24.5	Requirements for a material, product, system, or service
Terminology	¶ 4.2.24.6	Lists of term definitions, acronyms, symbols, etc.
Test Method	¶ 4.2.24.7	Definitive procedure that produces a test result
Miscellaneous	¶ 4.2.24.3	Special Standards Documents such as definitions, formats, charts, reference photographs, etc.

2.1.4 *Assignment to a Task Force (TF)* — When a SNARF is approved, it is assigned to a TF. If a suitable TF does not exist, the submitter of the SNARF should also prepare and submit a Task Force Organization Form (TFOF) (refer to § 6.4.2.3). Prior to approval of the SNARF, the submitter of the SNARF may also prepare and submit a TFOF, if a new TF may need to be established, to the cochairs of the appropriate TC Chapter for review along with the SNARF so that it may also be presented at a meeting of the TC Chapter.

2.1.4.1 *Global TF Organization* — If the cochairs of the TC Chapter or the Global Coordinating Subcommittee (GCS) decide that the proposal should be handled through closer international collaboration, it may be useful to organize a global TF (refer to § 6.4.6).

2.1.5 *Development and Drafting of Standards Documents* — During development activities, it is necessary to pay careful attention to the following points:

- appropriateness of scope;
- correlation between the scope as described in the SNARF and areas actually addressed by the Draft Document being developed under the SNARF;

NOTE 2: If the Draft Document deviates significantly from the scope described in the SNARF, refer to ¶ 2.2.6 for conditions to choose a revision of the SNARF or creation of a new SNARF.

- global consensus and exchange of opinions with counterparts in other geographical areas and GTCs;

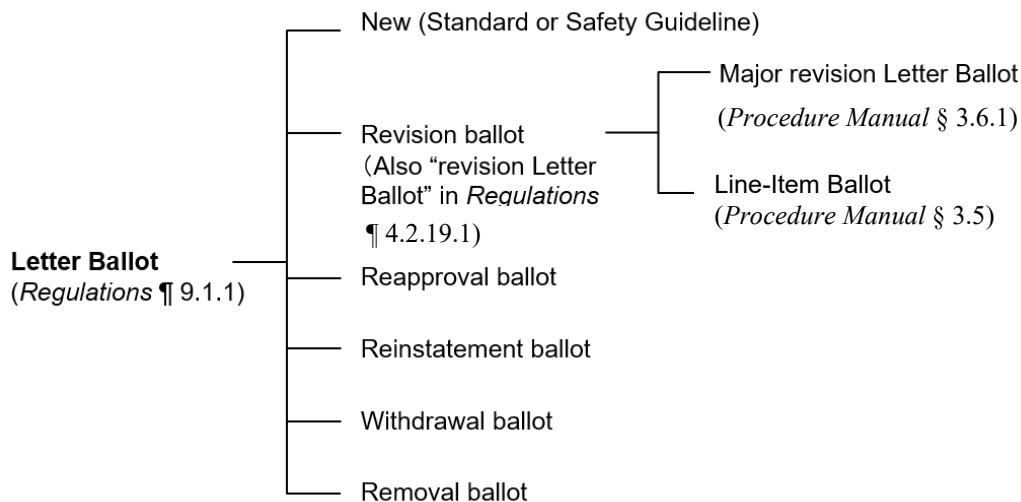
- technical feasibility;
- comparison of various proposals;
- report of activity progress in relation to the Project Period to the TC Chapter;
- consistency with related Standards and Safety Guidelines;
- observance of format/style (refer to *SEMI Standards Style Manual* [hereinafter referred to as *Style Manual*]);

NOTE 3: For example, refer to *Style Manual* Table 4 for correct usage of ‘should’ and ‘shall’ wording to define recommendations versus requirements in Standards.

- IP (i.e., patented technology, Copyrighted Item, third-party trademark) that might be relevant (refer to *Regulations* § 16);
- handling of a Draft Document that is or may become a Safety Guideline (refer to *Regulations* § 15);
- consideration of standards developed by other SDOs; and
- possibility of publishing the Full-consensus Document as an American National Standard (ANS) (refer to *Regulations* § 17).

2.1.6 *Ballot Issuance, Voting, and Tallying* — Ballots are separated into three types, (1) Informational Ballots, (2) Letter Ballots (including Intercommittee Ballots), and (3) Ratification Ballots, depending on whether its purpose is to collect opinions, reach a decision, or validate any technical changes made by a TC Chapter during adjudication, respectively.

NOTE 4: Figure 1 shows actions that are covered by Letter Ballots.



#1 Bold indicates a defined term.

#2 A ‘Letter Ballot’ is referred to as an ‘Intercommittee Ballot’ when it is sent to any GTC other than the one issuing the Letter Ballot. (Refer to *Regulations* ¶ 9.1.2.)

**Figure 1**  
**Ballot Taxonomy**

2.1.6.1 *Issuance of Informational Ballots* — During the development of a Draft Document, a TF can issue an Informational Ballot to gather opinions from a broad audience (refer to § 2.4).

2.1.6.2 *Issuance of Letter Ballots (Including Intercommittee Ballots)* — The purpose of a Letter Ballot and its associated Intercommittee Ballots (if issued) is to confirm global consensus on a finished Draft Document or on an action to reapprove, reinstate, withdraw, or remove an existing Standard or Safety Guideline through the voting

process. Such ballots are issued by a GTC following authorization by a TC Chapter or by approval of the GCS (refer to § 2.7).

**2.1.6.3 Issuance of Ratification Ballots** — The purpose of a Ratification Ballot is to ensure global consensus on technical changes introduced during adjudication by a TC Chapter through the GTC voting process. It is issued by a GTC following approval of a Letter Ballot with technical changes (refer to *Regulations* §§ 9.6.1.4.3 and 10).

**2.1.7 Voting on Letter Ballots** — The types of valid Votes on a Letter Ballot or an associated Intercommittee Ballot are Accept, Reject, and Abstain. Reject Votes shall contain at least one Negative (refer to § 2.8.3.2).

NOTE 5: Accept and Abstain Votes may include Comments (refer to *Regulations* ¶¶ 9.1.6 and 9.1.8). Reject Votes may also contain clearly marked Comments that are not Negatives (refer to *Regulations* ¶ 9.1.9), and this does not change the type of Vote.

**2.1.7.1 Voting Tally Preparation** — Standards HQ staff tallies the Letter Ballot and associated Intercommittee Ballot Votes and forwards the results to Standards regional staff, who submits them to the cochairs of the TC Chapter and the leader(s) of the TF responsible for the Letter Ballot.

NOTE 6: Intercommittee Ballot Votes are not included in return rate percentage for determining the minimum 60% return rate requirement (refer to *Regulations* § 9.3), but are included for calculating accept rate (refer to ¶ 2.11.5.1; *Regulations* ¶ 9.6.2.1.3).

**2.1.7.2 Conditions for Review of Letter Ballots** — For a Letter Ballot to be reviewed by a TC Chapter, the voting return rate shall reach at least 60% of the Voting Interests (refer to § 2.11.1; *Regulations* ¶ 9.6.2.1.1).

**2.1.7.3 Votes Tallied by Voting Interest** — Notifications of SEMI Standards Letter Ballots are sent to all TC Members of the GTC that issued the Letter Ballot. Any of these TC Members may vote, but the Votes from representatives of each Voting Interest (e.g., business entity and all of its affiliates) are generally tallied together as one Vote per Voting Interest. Refer to *Regulations* ¶ 9.4.2 for an explanation of how Voting Interest Votes are tallied when more than one Vote is received from a Voting Interest.

#### **2.1.8 Considering Letter Ballot Results**

**2.1.8.1** Standards staff forwards all of the Negatives and Comments submitted with Votes on a Letter Ballot, including associated Intercommittee Ballot, to the TC Chapter cochairs and TF leaders responsible for the Letter Ballot.

**2.1.8.2 Discussion of Letter Ballot Results by a TF** — The TF responsible for the Letter Ballot discusses all Negatives and Comments received from its Letter Ballot and associated Intercommittee Ballots and makes its recommendation to the TC Chapter for each one. Each Negative from each Reject Vote should be addressed and the response documented (refer to § 2.9.2).

**2.1.8.2.1** When a TF desires to recommend a technical change(s) in order to address a Negative, Comment, or other technical issues in the Draft Document of a Letter Ballot during adjudication, the TF is strongly recommended to prepare the actual text of the technical change(s) in advance and check with the Negative or Comment submitter to determine if the TF recommended technical change resolves the technical issue raised by the Negative or Comment.

**2.1.8.3 Adjudication of Letter Ballot Results by a TC Chapter** — The TC Chapter discusses the Letter Ballot Negatives and Comments taking the recommendation of the TF responsible for the Letter Ballot into consideration. Unless the exception in *Regulations* ¶ 9.8.1 applies, all Negatives accompanying valid Reject votes shall be discussed and the agreed-upon action or response voted on and documented in the TC Chapter meeting minutes (refer to § 2.11.2.1; *Regulations* § 9.6).

**2.1.9 Minority Report (MR)** — Any person who disagrees with the TC Chapter's decision to find a Negative not related or not persuasive, on how a Negative was addressed by a technical change, or on how a technical issue other than one raised by a Negative was resolved by a technical change may submit an MR for that decision, using the template available online, to Standards staff (refer to § 2.15 and *Regulations* § 9.11).

**2.1.10 Voting on Ratification Ballots** — The types of valid Votes on a Ratification Ballot are Approve, Disapprove, and Abstain. Disapprove Votes shall be accompanied with at least one technical reason (refer to *Regulations* § 10.1).

**2.1.10.1** For a Ratification Ballot for technical changes made to multiple Line Items, the technical changes for each Line Item shall be voted on separately.

**2.1.11 Acceptance of Ratification Ballots** — Ratification Ballots are regarded as accepted by satisfying the acceptance conditions in *Regulations* § 10.5.2.

NOTE 7: A Ratification Ballot is not adjudicated, as it is accepted or failed based directly on the Votes. However, TC Chapter chairs are asked to examine the validity of Disapprove Votes when the rate of Voting Interests that voted Disapprove is equal to or greater than 10% after Disapprove Votes without an accompanying technical reason are excluded.

2.1.11.1 The Letter Ballot or the Line Item that was subject to the Ratification Ballot is regarded as approved by the GTC by Ratification Ballot acceptance.

#### 2.1.12 *Procedural Review and Appeal*

2.1.12.1 *ISC A&R SC Procedural Review* — After a Standards Document has been reviewed and approved by a TC Chapter of the appropriate GTC, the procedure by which it was approved is reviewed by the ISC A&R SC (hereinafter referred to as procedural review) using the Audit and Review (A&R) Form for conformance to the *Regulations* (refer to § 2.14.1; *Regulations* § 11).

2.1.12.2 *Appeal* — Any person who considers themselves adversely affected by the development, interpretation, or use of a Standards Document or Documents may submit a written appeal (refer to § 2.15.2; *Regulations* ¶ 12.1).

2.1.13 *Publication* — All SEMI Standards, Safety Guidelines, and Auxiliary Information are published only through SEMI (refer to § 2.16; *Regulations* ¶¶ 1.5.5 and 4.1). The content of any Standards Document shall not be included in any non-SEMI Standards document unless permission is granted by SEMI.

2.1.14 *Review and Revision* — “At a minimum, the Originating TC Chapter shall review its Standards or Safety Guidelines and decide whether to ballot the Standards or Safety Guidelines for reapproval, revision, replacement, or withdrawal by the end of the fifth year after their latest publication or reapproval dates” (refer to § 2.17; *Regulations* § 8.9).

NOTE 8: If the TC Chapter decides to take no action, the Standard or Safety Guideline will be given Inactive Status (refer to *Regulations* § 4.2.20).

## 2.2 *Initiating a New Activity*

2.2.1 Selection of topics for a Standards Document Development Project is one of the most critical factors for success of the Program. *Regulations* § 5.7.7.2 mandates that anyone may suggest a topic for standardization. It is essential for the health of the Program that worthwhile activities be selected. Such activities lead to Standards Documents that:

- fill an important precompetitive industry need,
- are dynamic and demanding,
- result from true consensus of actively involved Program Members,
- avoid over specification,
- foster innovation, and
- encourage competition.

2.2.2 Anyone may provide suggestions for standardization topics or improvements to existing Standards Documents, which should be directed either to any SEMI regional office or to the co-chairs of an appropriate TC Chapter (refer to *Regulations* § 5.7.7.2); preferably well in advance of the TC Chapter meeting where the suggestion will be considered. For editorial improvement suggestions, refer to § 2.16.3.

2.2.3 A SNARF is required for development of a new Standards Document (refer to ¶ 2.1.2) or any action on an existing Standards Document (refer to ¶ 3.4.2). This is done by a Program Member completing and submitting a SNARF. The procedure for approval of a SNARF is different depending on whether the approval takes place at a meeting of the TC Chapter or between such meetings.

2.2.4 *Preparation of the SNARF* — The SNARF should be completed and approved as soon as possible after the idea for a new Standards Document Development Project has been conceived. At least one full ballot cycle should occur between the approval of the SNARF for the new Standards Document Development Project and the issuance of the initial Letter Ballot on the Standards Document.

2.2.4.1 Obtain an electronic copy of the blank SNARF from Standards staff or the SEMI Standards Web site.

2.2.4.2 Complete the SNARF. Elements of the SNARF are as follows:

- title or topic of potential Standards Document. For revisions, reapprovals, reinstatements, withdrawals, or removals, also include Designation Number and Publication Date Code of the Standard or Safety Guideline if available (if not available, include the Standards Document number). For new Standards Documents, specify the Type (if a Safety Guideline or Auxiliary Information) and Subtype of a Standard if the selected Types of Standards Documents is Standard: Classification, Guide, Miscellaneous, Practice, Specification, Terminology, or Test Method; Ensure that the proposed Document title in the ‘SNARF for’ section complies with the title requirements in Appendix 3, Table A3-1;

NOTE 9: SNARFs may be submitted and approved for new, revised, reapproved, or reinstated Standards or Safety Guidelines that have been approved by the TC Chapter, but not yet published (i.e., no new Publication Date Code exists yet).

- GTC;
- Originating TC Chapter;
- TF in which the work is to be carried out. If an appropriate TF does not exist, submit a TFOF at the same time that you (i.e., the submitter) submit the SNARF (refer to §§ 6.4.2 and 6.4.6.10.1);
- submitter’s name, employer, telephone number, and email address;
- date of submission (for revisions to existing SNARFs, also the date of revision);
- rationale, including a description of the industry requirement or problem that will be addressed by the potential Standards Document or revision, reapproval, reinstatement, withdrawal, or removal of existing Standards Document; estimated effect on the industry; and estimated technical difficulty of this activity. Indicate the potential users and what benefits they will receive if the Standard or Safety Guideline is implemented, and if possible, quantify the financial benefits;
- scope of the work. Describe here the areas to be covered by the potential Standards Document or by revision. Leave this section blank if the SNARF is for reapproval, reinstatement, withdrawal, or removal of an existing Standard or Safety Guideline;
- projected timetable for the work, including kick-off meeting, first Draft Document, Informational Ballot, and Letter Ballot;
- internal liaisons. List here other GTCs, TC Chapters, subcommittees, or TFs that should be kept informed about the progress of the Standards Document Development Project. These groups may be in any Region or Locale. It is not necessary to include TFs formally linked in a global TF to the TF in which the Standards Document Development Project is to be carried out. However, the TC Chapter should carefully consider and indicate here if there are other TC Chapters that should receive Intercommittee Ballots when a Letter Ballot is issued for the Standard or Safety Guideline;
- external liaisons. List here any planned Type I Liaisons (refer to *Regulations* § 18.3.1) relevant to this Standards Document Development Project;
- safety considerations;
- patented technology that is intended to be used/incorporated and Copyrighted Item that is intended to be incorporated in the Standard Document developed under the SNARF; and
- additional comments or special circumstances that should be considered in reviewing the SNARF.

2.2.4.2.1 If there are problems with completing any section of the SNARF, consult with your TC Chapter cochairs, other TC Members, other Program Members, or Standards staff, as appropriate.

2.2.4.3 *Initial Review* — When the SNARF is complete, it should be submitted to Standards staff. Standards staff should then forward the SNARF to the TC Chapter cochairs, who should review it for appropriateness of topic and clarity of presentation prior to its submission to the TC Chapter or GCS.

2.2.4.3.1 The TC Chapter cochair(s) evaluate(s) whether the SNARF is in the charter and scope of the GTC. If it is not, the cochair(s) shall put the SNARF on hold until the discrepancy is resolved by one of the following actions:

- requiring the submitter to revise the SNARF to be within the charter and scope of the GTC,

- extending the GTC's charter and scope (refer to *Regulations* § 5.7.2.4),

NOTE 10: Be aware that not having a sufficient number of interested TC Members may cause voting response rate problems.

- asking the submitter to submit the SNARF to another GTC that is more suitable for the subject, or
- forming a new GTC (refer to *Regulations* § 6).

2.2.4.3.1.1 If forming a new GTC is the required action and the Standards Document Development Project is time sensitive, Standards staff may recommend a TF be temporarily hosted by an existing TC Chapter of a GTC, with the approval of the GCS and the host TC Chapter. This hosting TC Chapter shall not approve a SNARF for this activity. If the formation of the new GTC is not completed within one year, the Standards Document Development Project shall be abandoned unless it is extended by the ISC.

2.2.4.3.1.2 If it is impossible to resolve the discrepancy between the proposed SNARF and the GTC's charter and scope, the SNARF shall not be approved.

2.2.4.3.2 The TC Chapter cochair(s) evaluate(s) whether the SNARF satisfies criteria described in § 2.2.4.2.

2.2.4.3.2.1 The TC Chapter cochair(s) may accept the SNARF as written or send it back to the submitter for revision.

2.2.4.3.3 The TC Chapter cochair(s) also determine(s) if a suitable TF exists to carry out the new activity.

2.2.4.3.3.1 If a suitable TF exists, it may begin work on the new activity immediately upon approval of the SNARF. If a suitable TF does not exist, the TC Chapter cochair(s) should ask the submitter to complete and submit a TFOF along with the SNARF (refer to §§ 6.4.2 and 6.4.6.10.1).

2.2.5 *TC Member Review* — A submitted SNARF for a new, or for a major revision (refer to § 3.6) to an existing, Standard or Safety Guideline is made available to all members of the TC Chapter's parent GTC for two weeks for their review and comment, with particular emphasis on the following:

- technical validity of the proposed activity;
- industrial need for the proposed activity;
- estimated effect on the industry;
- estimated technical difficulty of the activity;
- appropriateness of the scope and differentiation of the proposed activity from related or similar activities;
- appropriateness of the cooperative and liaison activity listed in the SNARF; and
- appropriateness and feasibility of the proposed timetable.

2.2.5.1 Standards staff will forward comments received from TC Members to the SNARF submitter(s), appropriate TF leaders and TC Chapter cochair(s) who will revise the SNARF as appropriate prior to presenting it for approval.

2.2.6 *Conditions to Choose Revision of a SNARF or Creation of a New SNARF* — The SNARF should be revised if the Draft Document deviates technically from the scope described in the SNARF or changes in the 'Intellectual Property Considerations' section, however in the following cases a new SNARF is required and the existing SNARF shall be automatically cancelled:

- expected result of activity changes from Line-Item revision(s) to a major revision, or
- scope change beyond modification of existing scope items (i.e., deleting existing or adding new scope items), or
- change of ballot type (i.e., reapproval to revision or vice versa), or
- introduction of new Line Item(s) (refer to ¶ 2.2.7.6.1).

2.2.7 *Approval of the SNARF* — After appropriate review, SNARFs may either be approved by a TC Chapter during a regularly scheduled meeting or by the GCS between meetings of the TC Chapter.

2.2.7.1 *Approval of a SNARF by a TC Chapter* — When the SNARF has been reviewed per § 2.2.5 prior to a scheduled meeting of the TC Chapter, the proposed SNARF is presented for approval at the next regularly scheduled meeting of the TC Chapter.

2.2.7.2 The TC Chapter may send the SNARF back to the submitter for revision, reject the SNARF, or approve the SNARF. If a representative of the TF is present for the review, the TC Chapter may revise the SNARF during review and approve it with revisions.

2.2.7.2.1 If the SNARF revision is significant, the above process should be repeated until the SNARF is approved or rejected. In lieu of repeating the process, the SNARF can go through GCS approval per § 2.2.7.3.

2.2.7.2.2 The results of this discussion are included in the minutes of the TC Chapter meeting (as an attachment or otherwise) and the new activity is included in the TC Chapter Express Report (CER) of this meeting. The posting of the information about the new activity in the CER is a further opportunity for all Program Members to become aware of the new activity.

2.2.7.2.3 *Courtesy Notification to GCS* — It may be beneficial to have SNARFs that are approved by the TC Chapter also reviewed by the appropriate GCS with particular emphasis on intercommittee and interregional issues. The GCS may also consider appropriateness of topic and clarity of presentation. The GCS should send recommendations to the TC Chapter that approved the SNARF if it finds the SNARF needs to be improved.

2.2.7.2.3.1 If the GCS recommends that the SNARF be revised, the submitter should consider resubmitting the form to the TC Chapter cochair(s) after the revision is complete. The SNARF then repeats the process above until it is approved or ended.

2.2.7.2.3.2 The GCS may recommend to a TC Chapter that it reconsider its approval of this SNARF if the GCS found it not to be within the GTC's charter and scope.

2.2.7.3 *Approval of a SNARF by a GCS* — When the SNARF was submitted at a TC Chapter meeting or submitted between scheduled meetings of the TC Chapter and subsequently reviewed by TC Members per § 2.2.5, Standards regional staff distributes the SNARF to the GCS for review and approval by a simple majority of the voting members.

2.2.7.3.1 The GCS reviews the SNARF with particular emphasis on intercommittee and interregional issues. It may also consider appropriateness of topic and clarity of presentation. The GCS may send the SNARF back to the submitter for revision, reject the SNARF, or approve the SNARF. The record of the GCS deliberations is forwarded to the TC Chapter cochair(s) for inclusion in the minutes of the next TC Chapter meeting.

2.2.7.3.1.1 If the SNARF is returned for revision, the submitter should resubmit the SNARF to the TC Chapter cochair(s) after the revision is complete. The SNARF then repeats the process above until it is approved or rejected.

2.2.7.3.1.2 If the new activity is approved, Standards regional staff notifies the TC Chapter cochair(s), who schedule a discussion of the new activity on the agenda of the next scheduled TC Chapter meeting.

2.2.7.4 *Recording of the SNARF* — Once a SNARF is approved, Standards regional staff enters it in the SNARF database, where it is assigned a Standards Document number. The SNARF is then posted to the SEMI Standards Web site.

2.2.7.4.1 *Assignment of Draft Document Numbers* — Standards Document numbers are assigned to SNARFs by Standards HQ staff and are communicated to the appropriate groups through Standards regional staff. Standards Documents that have been assigned numbers are published in the Standards Document Status Report on the SEMI Standards Web site.

2.2.7.5 After commencement of work on the new activity, the TF is expected to provide reports of the progress of the work, in relation to the expiration date of the Standards Document Development Project Period, to the TC Chapter at each subsequent TC Chapter meeting until the work is ended or the Standards Document is successfully published. These reports shall be included in the minutes of the TC Chapter meeting (as an attachment or otherwise).

2.2.7.6 Upon successful publication of a Standards Document, or end of work on it by the TF, Standards staff retires the Standards Document number and its associated SNARF (refer to § 2.2.7.4), and they are not to be used for further Standards Document Development Projects.

2.2.7.6.1 For a Standards Document with Line Item(s) that passed while others failed, the same SNARF may be used to rebalot only those failed Line Item(s). A new SNARF is required to introduce new Line Item(s).

2.2.8 *Cancellation of a SNARF* — After appropriate review, SNARFs for local TFs may be cancelled by the Originating TC Chapter during a regularly scheduled meeting and SNARFs for global TFs may be cancelled by the

responsible GCS. A SNARF for an existing Standards Document Development Project may be cancelled for the following reasons:

2.2.8.1 Approval of a new SNARF is required for an existing Standards Document Development Project (refer to § 2.2.6).

2.2.8.2 Responsible TF requests that an existing Standards Document Development Project be abandoned (e.g., refer to ¶ 2.11.1.2.1).

2.2.8.3 The Standards Document Development Project Period has exceeded three years without an approved extension (refer to ¶ 2.3.2).

2.2.8.4 A TF is discharged without completing an existing Standards Document Development Project (refer to ¶ 6.4.6.10).

### 2.3 *Standards Document Development Project Period (Refer to Regulations § 8.3)*

2.3.1 Development activity for a Standards Document shall be completed by the TC Chapter within three years after approval of the initial SNARF associated with the development activity. A revision to a SNARF does not impact the project period. Development is considered completed when the resulting Letter Ballot is approved by the TC Chapter per *Regulations* § 9.6.2, if a Letter Ballot is required for the Standards Document approval. Otherwise, development is considered completed when the Standards Document resulting from the SNARF is approved by the TC Chapter.

2.3.1.1 The TF may request an extension of the project period to the Originating TC Chapter if the Standards Document Development Project will not be completed within three years. The TF shall present a summary of its efforts to complete Standards Document development to the Originating TC Chapter along with an explanation of why Standards Document development cannot be completed within three years.

2.3.1.2 If the Originating TC Chapter approves the request, the project period shall be extended for one year from the current expiration date.

2.3.1.3 Additional one-year extensions may be approved as long as acceptable Standards Document development progress is being made.

2.3.1.4 If the Originating TC Chapter rejects the request, the TF shall discontinue the activity defined in the SNARF.

NOTE 11: TFs should take into consideration ballot cycles and TC Chapter meeting schedules when planning Standards Document development, so they can request an extension if necessary.

NOTE 12: The TC Chapter should review the expiration dates for all applicable SNARFs at each TC Chapter meeting.

2.3.2 If the TF does not complete the Standards Document Development Project within three years and does not request an extension prior to that time limit, the SNARF is cancelled and the Standards Document Development Project defined in the SNARF is ended.

EXCEPTION: If an existing Standards Document Development Project's time limit occurs after January of 2020, then the time limit is automatically extended until the end of 2024 or the end of the third year from the date of initial approval on the SNARF, whichever comes later.

### 2.4 *Informational Ballots*

2.4.1 *Informational Ballot* — An Informational Ballot is used to survey the industry to gather general opinions on a Standard or Safety Guideline under development. Once the TF members have decided to issue it as an Informational Ballot (i.e., no TC Chapter approval is required), a TF leader submits it to the Standards staff assigned to the TC Chapter. Informational Ballots are formatted according to the style defined in the *Style Manual*.

2.4.2 *Draft Document Submission Deadline and Informational Ballot Issuance Timing* — Informational Ballots can be issued and announced at any time and are not dependent on Letter Ballot schedules.

2.4.3 *Decision of Informational Ballot Issuance* — Standards HQ staff notifies all TC Members of the GTC to which the TF's TC Chapter belongs of the Informational Ballot. If a global TF belongs to more than one TC Chapter in different GTCs, notification is sent to TC Members of all those GTCs. Notification may also be sent to other GTCs that have an interest in the topic, as specified by the TF responsible for the Informational Ballot.

2.4.4 *Contact Information for Distribution of Comments and Negatives* — A TF leader shall submit, together with the Draft Document, contact names (e.g., leaders, author, technical editor) for distribution of the Informational Ballot Comments and Negatives.

2.4.5 *Voting* — TC Members that receive an Informational Ballot should return their input to help the TF in completing the Draft Document by voting to Accept, to Accept with Comment, to Reject, or to Abstain with Comment. If the TC Member has no input, voting to Abstain from the Informational Ballot is not required. Informational Ballots should have a voting period of no less than 30 days. Votes are submitted via the SEMI Standards Web site.

2.4.6 *Report of Informational Ballot Responses* — Standards HQ staff collects all Comments and Negatives for each Informational Ballot and forwards them to the distribution contacts selected by the TF leader.

2.4.7 *Discussion of Informational Ballot Results in the TF* — The TF considers all Comments and Negatives on the Informational Ballot, uses them at their discretion, and revises the Draft Document accordingly. This consideration does not require formal votes.

2.4.8 *Consideration of Informational Ballot Results in a TC Chapter Meeting* — Although it is not necessary to consider responses to an Informational Ballot in a TC Chapter meeting, a TF leader may do so to get TC Chapter consensus on the Draft Document.

## 2.5 *Letter Ballots and Associated Intercommittee Ballots*

2.5.1 *Recipients of Letter Ballots* — All TC Members of the GTC to which the TC Chapter authorizing the Letter Ballot belongs receive notification of Letter Ballots (refer to *Regulations* ¶ 2.2.1).

2.5.2 *Recipients of Intercommittee Ballots* — TC Members of all other GTCs that include TC Chapters interested in the action receive notification of the associated Intercommittee Ballots. Such interested TC Chapters can be identified explicitly by the Originating TC Chapter initiating the ballot action when the Draft Document is submitted for Letter Ballot, or included by request of one or more interested parties prior to open of voting.

### 2.5.3 *Coordination of Letter Ballot Issuance from a Global TF of Multiple Global Technical Committees*

2.5.3.1 When the Letter Ballot is from a global TF that involves multiple GTCs, the related GCSs determine the TC Chapter of the GTC that authorizes the Letter Ballot and the GTC(s) that receive notification of Intercommittee Ballots.

## 2.6 *Letter and Intercommittee Ballot Preparation*

2.6.1 *Letter Ballots and Intercommittee Ballots* — Letter Ballots and associated Intercommittee Ballots are used to reach a decision by Vote on a completed Draft Document or specific Line Items (refer to § 3.5 for additional instructions on Line-Item Ballots). They are issued by the authority of a TC Chapter.

2.6.1.1 The author or TF leader is responsible to provide all of their TF members with a copy of the Draft Document for review and feedback at appropriate times during the Standards Document Development Project. At the very least, provide the Draft Document to TF members for a week before it is submitted to Standards staff for Letter Ballot preparation (also refer to ¶ 6.4.6.8.1).

2.6.1.2 If the author is not one of the TF leaders, the author should coordinate with the TF leaders on developing the items to submit with the Letter Ballot.

2.6.2 *Items to Submit* — The author or TF leader submits the completed Draft Document or specific Line Items for the Letter Ballot to the appropriate Standards staff together with the following information:

- Standards Document background (refer to *Regulations* § 9.2.5.1.2);
- Standards Document title;
- Standards Document number and revision letter (provided by Standards staff);
- type of ballot action (e.g., creation, revision [Major or Line-Item], reapproval);
- GTC(s) to receive the Letter Ballot and Intercommittee Ballot (refer to § 2.5),
- list of contacts to receive Negatives and Comments (e.g., leader, author, technical editor) on the Letter Ballot,
- for Safety Guidelines, a copy of the Safety Checklist (refer to *Regulations* ¶ 15.3), and

- for revision of Primary Standards, a copy of the Primary Standard Revision Checklist (refer to ¶ 3.8.4.1.3.1).

2.6.3 *Format* — Submit the Draft Document in Microsoft Word-compatible format. Prepare the Draft Document in accordance with the *Style Manual*. To aid in meeting formatting requirements, use the Standards Document template appropriate to the Type of Standards Document being developed. The *Style Manual* and Standards Document templates are available either from Standards staff or from the SEMI Standards Web site. For submitting a Various Materials Draft Document, if applicable, refer to § 3.11.3.1 for special format and style.

2.6.4 *Standards Document Background* — Prepare the background of the Standards Document so that Program Members who are not intimately familiar with the development of the Standards Document can understand the purpose of the Letter Ballot action. A careful, concise background assists in assuring that Reject Votes resulting from incomplete knowledge are minimized (refer to *Regulations* § 9.2.5.1.2).

2.6.4.1 *Contents of Background* — At a minimum, the background shall include the following information:

- background: summary and rationale of the Letter Ballot (e.g., changes proposed in a revision Letter Ballot);
- for a Letter Ballot to revise a Primary Standard, list each of its Subordinate Standards, with an explanation, for which:
  - revisions are proposed;
  - no revisions are proposed, but it will be compatible with the revised Primary Standard (In this case, the Subordinate Standard will be reapproved. Refer to ¶ 3.8.3.4.2.);
  - no revision is proposed and it will not be compatible with the revised Primary Standard (In this case, the Subordinate Standard will become Inactive. Refer to ¶ 3.8.4.1.2.2.); and
  - the Status is already Inactive and it is not subject to voting.
- for a Letter Ballot to revise a Subordinate Standard, provide an explanation that this Subordinate Standard revision is compatible with its Primary Standard and that the Primary Standard will be considered as reapproved.
- for a Letter Ballot to reapprove a Subordinate Standard, provide an explanation that the reapproval will automatically result in its Primary Standard also receiving the same reapproval publication date code as the reapproved Subordinate Standard.
- date, time, and location of the TF review of the responses to the Letter Ballot;
- names of the TF leaders and contact information for the Standards regional staff; and
- date, time, and location of the TC Chapter review of the Letter Ballot (refer to *Regulations* ¶ 9.5).

2.6.4.2 *What Should Not Be Included in Background* — Except for SEMI’s Notice text that calls for information about relevant patented technology, Copyrighted Items, or trademarks that precedes the background, the background shall not include any IP-related information.

2.6.4.3 *Background for Reballoted Draft Documents* — The background for Draft Documents being reballoted after a failure should be very carefully written to reduce the incidence of Reject Votes from individuals who may be unfamiliar with the TC Chapter’s intent or the Draft Document’s development history. The background for Draft Documents being reballoted should include a concise history of prior voting results and TC Chapter actions resulting from review of prior Letter Ballots.

2.6.5 *Deadline for Submission* — Standards HQ staff announces the deadline for submission of Letter Ballot Drafts well in advance of the deadline date. Drafts received by the appropriate Standards staff contact after the deadline may not be included in that ballot cycle.

2.6.6 *Translation of Draft Documents* — “A complete set of the contents of all Letter Ballots shall be in English. Additional sets may be provided in local languages when authorized by the TC Chapter responsible for the Locale” (refer to *Regulations* ¶ 9.2.5). For this reason, Draft Documents prepared in a language other than English shall be translated into English prior to submission for balloting. Usually, TFs and TC Chapters translate their Draft Documents into English themselves.

2.6.7 *Ballot Timing* — Ballot cycles should be chosen so that TFs have sufficient time to review voting results prior to TC Chapter review.

## 2.7 *Letter Ballot Authorization*

2.7.1 *Authorization of Letter Ballot Issuance* — GTCs authorize issuance of Letter Ballots and associated Intercommittee Ballots by vote on a motion in a TC Chapter meeting or by approval of the GCS (refer to *Regulations* ¶ 9.2). This action shall be recorded in the minutes of the TC Chapter meeting at which the vote was taken or of the Originating TC Chapter meeting following GCS authorization.

NOTE 13: “A Letter Ballot to revise a Standard or Safety Guideline may be issued only after the Standard or Safety Guideline being revised is approved and published”, except for Line-Item Letter Ballots under some conditions (refer to *Regulations* ¶ 8.4.2.2).

2.7.1.1 Authorization by the GCS should be accompanied by notice to the appropriate Standards staff outlining the approval procedure used.

### 2.7.1.2 *Determining Which TC Chapter Has Authority to Authorize a Ballot*

2.7.1.2.1 *Proposal from a Specific Region/Locale* — If the Standards Document Development Project clearly originates from a particular Region/Locale, there is no confusion as to the TC Chapter that issues the Letter Ballot. In this case, the Originating TC Chapter is the one to authorize the Letter Ballot.

2.7.1.2.2 *Change of Responsible Region/Locale* — Cochairs of the Originating TC Chapter authorizing a Letter Ballot may ask the GCS to authorize Letter Ballot review by a TC Chapter in a different Region or Locale (i.e., Responsible TC Chapter) when requested prior to issuance the Letter Ballot or if necessary, in a force majeure case that postpones the scheduled TC Chapter meeting. This is an option to facilitate the fastest possible TC Chapter review in cases where a new Standards Document or Standards Document revision is urgently required (refer to *Regulations* ¶¶ 5.7.6.1d and 9.1.4).

### 2.7.1.2.3 *Proposal from a Global TF*

2.7.1.2.3.1 *When the Originating Region or Locale Is Obvious* — When a Draft Document originated by a global TF is the clear responsibility of a particular TC Chapter in a Region or Locale, as agreed by the responsible GCS, the TC Chapter in that Region or Locale authorizes the Letter Ballot.

2.7.1.2.3.2 *When the Originating Region or Locale Is Not Obvious* — When there is no TC Chapter in a Region or Locale with clear responsibility for a Draft Document generated in a global TF, the responsible GCS shall agree on the TC Chapter in a Region or Locale to authorize the Letter Ballot before the Draft Document is submitted for balloting.

2.7.1.2.3.3 *When the Activity Belongs to Multiple Global Technical Committees* — In some cases, elements of a global TF may be established by TC Chapters that are a part of different GTCs. In such cases, the related GCSs should decide which GTC will issue the Letter Ballot and which GTC(s) will receive an Intercommittee Ballot. Then, the related GCS should select the TC Chapter in a Region or Locale that will authorize the Letter Ballot.

2.7.1.2.3.4 *When the Draft Document Is Covered in the Scopes of Multiple Global Technical Committees* — In some cases, the subject of a Draft Document is covered in the scopes of different GTCs. In such cases, the related GCSs should decide which GTC will issue the Letter Ballot and which GTC(s) will receive Intercommittee Ballot. Then, the related GCS should select the TC Chapter in a Region or Locale that will authorize the Letter Ballot.

2.7.1.2.3.5 *Guidance from the RSCs* — In the event that the GCS(s) cannot reach a decision, the appropriate RSCs may be requested to provide guidance.

2.7.1.2.3.6 *Arbitration by the International Standards Committee (ISC)* — If intervention of the RSCs, acting singly or in concert, does not result in a resolution, the issue may be submitted to the ISC for arbitration. In this case, the GCS(s) should submit a report summarizing the origin of the impasse and attempts made to solve it to the ISC.

## 2.8 *Announcement of and Voting on Letter Ballots*

2.8.1 *Announcement of Ballots* — Each ballot cycle, Letter Ballots are announced by Standards HQ staff (refer to *Regulations* ¶ 9.2.2) to all TC Members of GTCs with such ballots open for voting during that cycle. TC Members of GTCs for which Intercommittee Ballots are issued also receive notification of such ballots. Program Members, who are not TC Members of the GTC identified above, may submit Votes, but do not receive notification of Letter Ballots.

2.8.2 *Ballot Cycles* — Ballot cycles are the periods of time during which Letter Ballots may be voted on.

2.8.2.1 *Opening and Closing Dates* — The ballot cycle schedule, which includes the opening and closing dates for each Letter Ballot, is established by Standards HQ staff. Each ballot cycle’s closing date is no less than 30 days after its opening date (refer to *Regulations* ¶ 9.2.3).

2.8.2.1.1 The voting period for a Letter Ballot seeking American National Standards Institute (ANSI) accreditation shall be open for 45 days and shall close no later than 14 days prior to the TC Chapter meeting at which the Letter Ballot shall be reviewed (refer to *Regulations* ¶ 17.3.2.1).

2.8.2.2 *Announcement of Ballot Cycle* — The ballot cycle opening and closing dates shall be included on the main voting page for the ballot cycle (refer to *Regulations* ¶ 9.2.2.1).

2.8.3 *Types of Votes* — There are three valid ways to vote on a Letter Ballot or a specific Line Item: Accept, Reject, or Abstain as shown in Table 4.

**Table 4 Summary of Vote Types**

<i>Type of Vote</i>	<i>Documentation To Be Attached to Letter Ballot Form</i>
Accept (with or without Comments)	None required; Comments optional.
Reject (with Negative[s], and with or without Comments)	Explanation(s) of Reject Vote (i.e., Negative[s]) required; Comments optional.
Abstain (with or without Comments)	None required; Comments optional.

2.8.3.1 *Accept Vote (Including Accept with Comments)* — If you are in agreement with the technical content of the Letter Ballot or the Line Item, vote Accept. If you are in agreement with the technical content of the Letter Ballot or Line Item, but have suggestions for editorial clarifications/corrections or wish to offer related items for future consideration (i.e., new business), vote Accept with Comments to provide your suggestions.

2.8.3.2 *Reject Vote* — If you are not in agreement with any of the technical content of the Letter Ballot or the Line Item, vote Reject. A Reject Vote is also appropriate if you have observed a procedural or *Regulations* violation or otherwise have a serious concern with the proposed Draft Document.

2.8.3.2.1 *Conditions for Reject Votes* — A Reject Vote to the Letter Ballot or a specific Line Item shall be accompanied by at least one Negative (i.e., written explanation for each of your objections). A Reject Vote can contain one or more Negatives (refer to *Regulations* ¶ 9.4.3). A Reject Vote not accompanied by a Negative or for which efforts fail to obtain a missing Negative shall be recorded as not valid (refer to *Regulations* ¶ 9.4.3.1).

2.8.3.2.1.1 Examples of Negatives include (refer to *Regulations* ¶ 9.1.10):

- “technical evidence refuting any part of the item being balloted,
- ambiguity or lack of clarity causing the perception of a technical or procedural error, and
- procedural evidence that these *Regulations* have not been followed.”

2.8.3.2.2 *Negatives* — For each Negative, type all explanations in the space provided on the electronic Letter Ballot form or provide a separate Microsoft Word-compatible attachment containing your Negatives. Clearly indicate the section/paragraph of the Draft Document to which the Negative applies. Whenever possible, provide alternative wording or other suggestions that would resolve your Negative.

2.8.3.2.3 *Comments Attached to Reject Votes* — You have the option to include Comments on one or more sections/paragraphs of a Draft Document and submit Negatives on other sections/paragraphs. In this case, clearly indicate which parts of your response are Comments and which parts are Negatives.

2.8.3.3 *Abstain Vote (Including Abstain with Comments)* — If you are not sufficiently familiar with the topic area or have insufficient interest to provide a technical opinion on the Draft Document, vote Abstain. If you wish to provide editorial clarification/correction on some point or make a general observation on the Draft Document, you may vote Abstain with Comments and include your Comment(s).

## 2.8.4 Submitting a Letter Ballot Return

2.8.4.1 *Electronic Submission via the SEMI Standards Web Site* — After completing the Letter Ballot form, click the ‘Submit’ button on the bottom of the form. A confirmation screen will appear once your Vote has been saved and accepted. Note that a username and password are required to track who has voted.

2.8.4.2 *Submission via Other Forms of Communication* — While it is preferred that interested Program Members use the SEMI Standards Web site for voting, Votes may be cast via email. Please contact the appropriate Standards staff. The appropriate contact may be found on the SEMI Standards Web site.

2.8.5 *Report of Letter Ballot Results* — After the end of the ballot cycle, tallies are recorded by Standards HQ staff and are made available to Standards staff worldwide.

2.8.5.1 The tally consists of two parts for each Letter Ballot: the return rate and the voting results.

2.8.5.1.1 The first part is the return rate for the Letter Ballot (refer to § 2.8.6). For this part, only Votes from TC Members of the GTC issuing the Letter Ballot are included. The return rate is calculated by dividing the number of Voting Interests represented by TC Members of the ballot-issuing GTC (registered prior to the start of the Letter Ballot period) who voted on the Letter Ballot by the total number of Voting Interests represented by TC Members of the ballot-issuing GTC (registered prior to the start of the Letter Ballot period). Votes by Program Members, who are not TC Members of the GTC issuing the Letter Ballot, are not included in this calculation.

### Document ####X

Number of Returns for Original Registered Voting Interests		Original Registered Voting Interests	Return Rate
39		57	68.42%

# of Accepts	# of Rejects	% Accepts	Total Comments	Total Rejects
19	1	95.00%	1	1

**Figure 2**  
**Example of Letter Ballot Results Report**

2.8.5.1.2 The second part is the voting result. For this part all Accept and Reject Votes, regardless of GTC membership status, are tallied by Voting Interest. If there are multiple Votes from a Voting Interest, the Votes are treated as described in the *Regulations* ¶ 9.4.2 and summarized in Table 5.

**Table 5 Precedence of Votes When There Are Multiple Votes from One Voting Interest**

<i>Votes</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>
<i>Reject</i>	≥1	0	0
<i>Accept</i>	≥0	≥1	0
<i>Abstain</i>	≥0	≥0	≥1
<i>Voting Interest Vote tallied as</i>	Reject	Accept	Abstain

2.8.5.2 When the Letter Ballot closes, Standards staff reports the status of the voting on a given Letter Ballot to the TC Chapter cochairs and the TF leaders responsible for that ballot.

2.8.6 *Return Rates and Handling Late Votes* — The Letter Ballot closes on the closing date (i.e., at least 30 days after issuance). A Letter Ballot that has not reached the required 60% return rate by the closing date shall be handled in accordance with *Regulations* ¶ 9.3.2. Letter Ballot returns that arrive after that ballot closes are not counted in the tally, nor handled in discussion. Late returns are provided to the TF leader(s) for discussion under new business.

2.8.6.1 *Reminder for Required Return Rate* — Follow-up efforts are made by Standards regional staff, TC Chapter cochairs, and TF leaders if the return rate does not reach 60% before the Letter Ballot closing date. These efforts continue until the return rate reaches 60% or until the Letter Ballot closing date, whichever comes last.

2.8.7 *Distribution of Negatives and Comments* — Standards regional staff distributes all Negatives and Comments pertaining to a Letter Ballot to the TF leaders responsible for that ballot as well as any contacts (e.g., author, technical editor) designated by the TF leaders.

## 2.9 *Preparation for Letter Ballot Adjudication*

### 2.9.1 *Discussing Letter Ballot Results Prior to a TF Meeting*

2.9.1.1 TF leaders are encouraged to contact the Voters prior to the TF meeting to discuss/negotiate with them on possible resolution, including withdrawal, of their Negatives or Comments.

### 2.9.2 *Discussing Letter Ballot Results in a TF Meeting*

2.9.2.1 *Purpose of Discussion by the TF* — In order to make the TC Chapter discussion more efficient, the TF should handle discussion of the Letter Ballot returns and propose the consensus reached by the TF to the TC Chapter.

2.9.2.2 *Discussion of Voting Responses by the TF* — All Negatives and Comments should be discussed. Note that the exception in *Regulations* ¶ 9.8.1 may apply. If the Letter Ballot did not achieve the required 60% return rate, refer to ¶ 2.11.1.1.

2.9.2.3 *Discussion of Negatives by the TF* — The TF considers each Negative from each Reject Vote and presents to the TC Chapter the consensus reached by the TF on how to handle the Negative. The TF may negotiate before the TC Chapter meeting with the Voter to withdraw the Negative on the basis of a technical negotiation or an editorial change. In the case of withdrawal of a Negative, the Voter shall express their withdrawal to the TC Chapter in writing and the withdrawal shall be announced at the TC Chapter meeting.

EXCEPTION: If the Voter is no longer part of the same Voting Interest (e.g., has left their employer) when the Vote was submitted, only a representative from that Voting Interest may withdraw the Negative.

2.9.2.4 *Discussion Procedures by the TF* — Discussion of Negatives in the TF meeting should be carried out in a way that the resulting recommendations promote efficient adjudication of the Letter Ballot.

2.9.2.4.1 The following steps should be followed in discussing each Negative (refer to §§ 2.9.3, 2.11.3, and 2.11.4 for more details):

2.9.2.4.1.1 The TF should decide if it is related to the Letter Ballot or Line Item and provide the reason if it is decided to be not related.

2.9.2.4.1.2 If it is related, the TF should decide if it is technically persuasive or not technically persuasive.

2.9.2.4.1.3 In case of a technically-persuasive finding, the TF should decide if it may be resolved by a technical change.

2.9.2.4.1.4 In case of a not-technically-persuasive finding, the TF should consider if the issue expressed in the Negative can be resolved by an editorial change.

2.9.2.4.2 If the TF cannot reach consensus on a recommendation, the above decisions shall still be made by the TC Chapter.

2.9.2.5 *Considering Comments in TF* — The TF should consider all Comments attached to either Accept, Abstain, or Reject Votes related to the Letter Ballot, and propose the consensus result to the TC Chapter.

2.9.2.6 *Proposal to TC Chapter* — The TF reports the following to the TC Chapter performing the adjudication:

- recommendations on Negatives,
- withdrawn Negatives,
- treatment of Comments,
- technical and editorial changes resulting from above,
- recommended technical and editorial changes other than the ones resulting from above, and

- lack of consensus on any of the above.

2.9.3 *Fundamentals of Deliberating Negatives and Comments* — The following are the fundamentals for discussing whether Negatives are related and persuasive in a TF or TC Chapter meeting (refer to *Regulations* § 9.6.1).

2.9.3.1 *Relation to Letter Ballot* — Decide whether there is a relationship between the Negative and the Letter Ballot item (refer to *Regulations* § 9.6.1.4.1). One example reason to find a Negative not related is that the Negative proposes a change to content that is neither addressed by nor affected by the Letter Ballot.

2.9.3.2 *Persuasive* — Decide whether the explanation in a Negative is persuasive or not (refer to *Regulations* ¶ 9.6.4 and § 9.6.1.4.2). Some reasons to find a Negative not persuasive are:

- proof is shown contrary to the technical reason in the explanation,
- raised issue is not about the technical aspect of the balloted item and it can be resolved through editorial changes, or
- proof is shown contrary to the procedural reason in the explanation given.

2.9.3.2.1 Negatives are limited to technical issues and other issues covered in the *Regulations* (refer to *Regulations* § 9.1.10). Examples include the following:

- difficult to achieve within the common understanding of the appropriate technical area of expertise,
- creates inconsistencies with other SEMI Standards or Safety Guidelines, or
- Standards Document is not consistent with scope.

2.9.3.3 *Deliberation and Decisions* — Deliberation should be carried out according to the motion and second process described in § 4.2.5.

2.9.3.4 *Confirmation with Reject Voter*

2.9.3.4.1 *Resolution by Negotiation* — Every effort should be made to negotiate a consensus between the Reject Voter and members of the TF or TC Chapter who are in favor (refer to *Regulations* § 9.6.1.3). Negatives that are resolved through negotiation may be withdrawn by the Voter.

2.9.3.4.2 All Negatives that are not resolved through negotiation shall be deliberated at the TC Chapter meeting announced in the Background Statement, unless the Exceptions in *Regulations* ¶ 9.8.1 apply.

2.9.3.5 *Basics of Comment Deliberation* — If the TC Chapter so desires, Comments included with Votes may be handled in the same way as Negatives.

2.9.3.5.1 If a Comment received on a Letter Ballot is perceived to be related and technically persuasive and cannot be resolved with an editorial change, the TC Chapter may make a technical change during adjudication in order to address the technical issue raised by the Comment in a similar manner to addressing a Negative by a technical change (refer to *Regulations* § 9.6.1.4.2.5) or use the Comment to fail that ballot if found by the TC Chapter to be related and technically persuasive.

2.9.3.6 *Reason for Ballot Failure or Technical Change to Standards Document Not Included in Letter Ballot Responses*

2.9.3.6.1 A reason not addressed by the Letter Ballot Vote responses received (i.e., Negatives and Comments) may be used to make a technical change to the Standards Document during adjudication or to fail that ballot if found by the TC Chapter to be related and technically persuasive.

NOTE 14: Making a technical change to the Standards Document during adjudication or failing a Letter Ballot using the methods cited in §§ 2.9.3.5 and 2.9.3.6 is permissible because the TC Chapter should make reasonable efforts to avoid approving technically defective Standards and Safety Guidelines.

2.10 *Withdrawal of Negatives Before or During TC Chapter Meeting*

2.10.1 The responsible TF may ask Reject Voters to withdraw Negatives by suggesting resolution through editorial change or technical negotiation (refer to ¶ 2.9.3.4.1).

2.10.2 Negatives may be withdrawn by the Voter before or during TC Chapter adjudication of the Negative under the following circumstances:

- the Negative can be resolved through editorial changes, or
- the Negative can be resolved through technical negotiations.

2.10.2.1 *Discussion* — In the former case, it is preferable to not have the Negative withdrawn, but instead to find it not persuasive during adjudication because it can be resolved through an editorial change. This procedure helps to assure that the desired change is not overlooked.

### 2.11 *Letter Ballot Review and Approval*

2.11.1 *Necessary Conditions for Letter Ballot Review* — Review of a Letter Ballot in a TC Chapter meeting requires that TC Members representing at least 60% of the Voting Interests in the GTC receiving Letter Ballots have returned Votes by 3 business days before the meeting (refer to *Regulations* § 9.3).

2.11.1.1 If a Letter Ballot does not fulfill this condition, the TF responsible for that ballot or TC Chapter of the GTC issuing that ballot may discuss any Negatives or Comments received, but the TC Chapter shall not review to approve the original Draft Document. The GTC shall reballet it (with or without modifications from the original Letter Ballot) during a future ballot cycle.

2.11.1.2 When there are Negatives that are of concern, it may be beneficial to discuss them in the TC Chapter meeting.

2.11.1.2.1 If, after discussion of any Negatives received, there is any Negative that is concluded to be related and persuasive and that is not addressed by a technical change, the Letter Ballot shall be returned to the responsible TF for further work or abandonment (refer to *Regulations* ¶¶ 9.6.1.4.2.4 and 9.6.1.4.2.5).

### 2.11.2 *Focus of Adjudication*

2.11.2.1 *Negatives and Comments* — Deliberate all Negatives and Comments for Letter Ballots (including Intercommittee Ballots). No distinction is made between Negatives received in response to Letter Ballots or Intercommittee Ballots. (For details on Negatives, refer to § 2.8.3.2.1.)

2.11.2.2 *Withdrawn Negatives* — Negatives withdrawn by the Voter need not be considered in deliberation.

2.11.3 *Adjudication of Negatives by a TC Chapter* — Letter Ballot results shall be adjudicated in a meeting of the Originating TC Chapter of the GTC issuing that ballot and at the scheduled date and location as described in the Background Statement unless the Exceptions apply (refer to *Regulations* § 9.5).

2.11.3.1 *Recommendation from the TF Responsible for the Letter Ballot* — Normally, a TC Chapter uses the recommendation from the TF responsible for the Letter Ballot for adjudication. This is important to make efficient use of time.

2.11.3.1.1 *Start of Discussion* — The presiding TC Chapter cochair requests the leader of the TF responsible for the Letter Ballot, or their representative, to present the recommendations from the TF for each Negative. If there has been no prior discussion of the Negatives by the TF or unresolved Negatives (refer to § 2.9.2.4; *Regulations* ¶ 9.5), the presiding TC Chapter cochair requests discussion in the TC Chapter. The TF should schedule their Letter Ballots to allow ample time after the Letter Ballot closing date and prior to the TC Chapter meeting to consider all Negatives and Comments.

2.11.3.1.2 *Discussion of Negatives* — The discussion is conducted according to the motion and second process described in § 4.2.5. Refer to § 2.9.3 for more details on deliberating Negatives.

2.11.3.1.3 *Precedence of Voting on a Negative* — Any change, including an editorial one, shall not be incorporated to the balloted Standards Document prior to votes to decide whether each Negative of a valid Reject Vote is related or not related to the Letter Ballot item, and then, if it is related, whether it is persuasive or not persuasive as described in ¶¶ 2.11.3.1.3.1 and 2.11.3.1.3.2.

2.11.3.1.3.1 *Vote on Whether Negative Is Related to the Letter Ballot* — After describing the situation, the discussion leader either moves that the Negative be found related or moves that it be found not related to the Letter Ballot or Line Item under consideration. A motion to find a Negative related passes if more than one-third of those voting on the motion vote in favor of it. A motion to find a Negative not related passes if at least two-thirds of those voting on the motion vote in favor of it (refer to *Regulations* ¶ 9.6.1.4.1.1). Note that if the Negative is found to be not related, the

topic of the Negative shall be assigned to a TF or taken up as an item of new business in the current TC Chapter meeting (refer to *Regulations* ¶ 9.6.1.4.1.3).

2.11.3.1.3.2 *Vote to Find Negative Technically Persuasive* — If the Negative is found to be related to the Letter Ballot or Line Item, the discussion leader either moves that the Negative be found persuasive or moves that it be found not persuasive. A motion to find a Negative persuasive passes if greater than one-third of the individuals voting on the motion vote in favor of it (refer to *Regulations* ¶ 9.6.1.4.2). A motion to find a Negative not persuasive passes if at least two-thirds of those voting on the motion vote in favor of it (refer to *Regulations* ¶ 9.6.1.4.5).

2.11.3.1.4 *Find Negative Not Significant* — “If the TC Chapter finds a Negative not persuasive by a vote equal to or greater than 90% of the persons voting on the action, the TC Chapter may choose to term the Negative not significant” (refer to *Regulations* ¶ 9.6.1.4.5.2).

2.11.3.1.5 *Previously Considered Negative* — The TC Chapter shall review all Negatives received on a Letter Ballot, although they might relate to issues upon which the TC Chapter has previously voted to be not persuasive. However, to avoid unnecessary delays, a Negative based on an issue that has been previously dealt with by the TC Chapter may be voted to be not persuasive on the basis of the prior discussion. Of course, the TC Chapter may wish to modify its position if new, technically relevant information is provided by the Voter.

2.11.3.1.6 *When Not Found Related or Technically Persuasive* — If the Negative is found not related or related and not persuasive, the TC Chapter may choose to designate the issue raised by the Negative as a Comment. Then, the discussion continues with regard to other Negatives, if any. If all of the Negatives are found not related or related and not persuasive, deliberation is concluded with that Reject Vote recorded as having no Negatives that are related and persuasive.

2.11.3.1.7 *Finding a Reject Vote Not Valid* — “If all of the Negatives included with a Reject Vote are either withdrawn, determined to be not related, or determined to be not significant, the Reject Vote is not valid” (refer to *Regulations* ¶ 9.4.3.3), and it is not included in the calculations of the approval conditions check (refer to *Regulations* ¶ 9.6.2).

2.11.3.1.8 *Letter Ballot Decisions in TC Chapter Meeting* — If a Negative is found to be persuasive, the discussion leader may recommend to make a technical change to resolve the Negative in accordance with the procedure in *Regulations* § 9.6.1.4.3. Otherwise, they may recommend that the Draft Document and all remaining Negatives and Comments be returned to the TF for additional work and rebalot, as appropriate. The latter fulfills the TC Chapter’s obligations on the Letter Ballot (refer to *Regulations* ¶ 9.6.1.4.2.4). A motion to this effect is not required, since the finding of the Negative to be persuasive is sufficient. However, if for any reason it is preferable to stop any further work on a Draft Document, a motion can be made to this effect.

2.11.3.1.9 *Other Issues* — The discussion leader may also, at their option, bring up any other relevant opinions or comments raised during the voting for the TC Chapter’s consideration. This is particularly important if there are points raised on which the TF wishes the guidance of the TC Chapter before proceeding with reworking of the Draft Document.

2.11.3.2 *Discussion of Comments* — In addition to the consideration of all of the Negatives of all the Reject Votes, the TC Chapter considers Comments returned with Accept, Abstain, or Reject Votes. Although Comments may not have a large impact on the technical aspects of the Draft Document, they should be carefully considered because they often provide editorial suggestions to improve the Draft Document. Refer to § 2.9.3.5 for more details on deliberating Comments.

2.11.3.2.1 *Omission of Discussion of Comments in Case of a Failed Ballot* — If the Draft Document has persuasive Negatives and is to be returned to the TF for additional work, the Comments need not be discussed in the TC Chapter meeting (refer to *Regulations* ¶ 9.6.1.4.2.4).

2.11.3.2.2 *TF Recommendation* — Upon completion of consideration of Negatives (if any) on a Letter Ballot or a Line Item, the responsible TF representative reviews the related Comments and reports on the recommendations of the TF. If there are Comments on which the TF has not reached consensus, these issues are also reported.

2.11.4 *Editorial Changes* — Sometimes, consideration of Comments or Negatives results in editorial changes to the Draft Document. Type 1 and Type 2 editorial changes to address Comments or Negatives that meet the requirements of the *Regulations* (refer to *Regulations* ¶ 8.9.5) are approved by a simple majority vote in the regularly scheduled meeting of the TC Chapter performing the Letter Ballot review. Any editorial changes made to the Draft Document

in response to Comments received shall be presented to the TC Chapter and recorded in the meeting minutes unless the exception in *Regulations* ¶ 9.6.1.4.2.4 applies.

2.11.4.1 *Fundamentals for Deciding on Editorial Changes* — Refer to Table 6 for examples of editorial changes.

NOTE 15: Editorial changes may also be made independently from a Letter Ballot (refer to § 2.16.3 and *Regulations* ¶ 8.9.4).

**Table 6 Types and Examples of Editorial Changes**

<i>Allowed Editorial Changes</i>	<i>Examples of Items That DO NOT Qualify as Editorial Changes</i>
Corrections of obvious misspellings in text, including that of the title and scope of the Standards Document or in figures (Type 1)	Replacement of words by other words that change the meaning in the context of the Standards Document (e.g., ‘must’ or ‘shall’ replaced by ‘should’ or ‘implies’, or vice versa; ‘is’ or ‘are’ replaced by ‘shall’, or vice versa)
Correction of titles in the Related Documents section (Type 1)	Replacement of a document deleted from the Related Documents section with another
Correction of titles of Standards or Safety Guidelines listed in the Referenced Standards and Documents section (Type 2)	Any change to the title or scope of a Standard or Safety Guideline (except to correct an obvious misspelling)
Changes in format or rearrangement of sections in a Standards Document to conform to <i>Style Manual</i> (usually done as part of preparation for a Reapproval Letter Ballot) (Type 1)	Deletion of complete sections or paragraphs
Deletion of apparently redundant sections or paragraphs (Type 2)	
Clarification of information that does not add to, remove from, or otherwise change the technical content of the Standard or Safety Guideline (Type 2)	Addition, deletion, or modification of dimensions, requirements, or criteria unless the TC Chapter finds that it corrects an editorial error that is obvious in the context of the Document
Correction of an editorial error that is obvious in the context of the Standards Document (including Appendices and Complementary Files) and that the proposed change does not change the technical content (Type 2)	
Changes to content in Related Information or Various Materials (Type 2)	Addition or deletion of entire Related Information or Various Materials Addition or deletion of entire Appendices or Complementary Files
Addition of editorial ‘Notes’ as indicated by ‘NOTE X: Text’, where ‘X’ is the Note number, or footnotes (Type 2)	Addition of ‘Notes’ that contain requirements or other criteria
Deletion of Withdrawn, Replaced, or Removed Standards or Safety Guidelines from Related Documents section (Type 2)	Deletion of a Withdrawn, Replaced, or Removed Standard or Safety Guideline from the Referenced Standards and Documents section, when there is any remaining reference to it in the Standard or Safety Guideline
Deletion of Withdrawn, Replaced, or Removed Standards or Safety Guidelines from the Referenced Standards and Documents section if this deletion was overlooked in a revision of the Standards Document that removed all references to it in the rest of the Standards Document (Type 2)	
Replacement of a biased term with an approved, alternative, bias-free term (Type 2), as defined in <i>Style Manual</i> Appendix 5.	Replacement of a biased term with an alternative that is not approved. Removal of a biased term from the purpose, scope, limitations, or any other section that affects the overall Standards Document.

### 2.11.5 *Completion of Letter Ballot Review by the TC Chapter*

2.11.5.1 Verify that the accept rate condition is met and that all Negatives have been withdrawn or deliberated for each Letter Ballot item (refer to *Regulations* § 9.6.2):

2.11.5.2 Perform the safety and IP checks for the entire Standards Document.

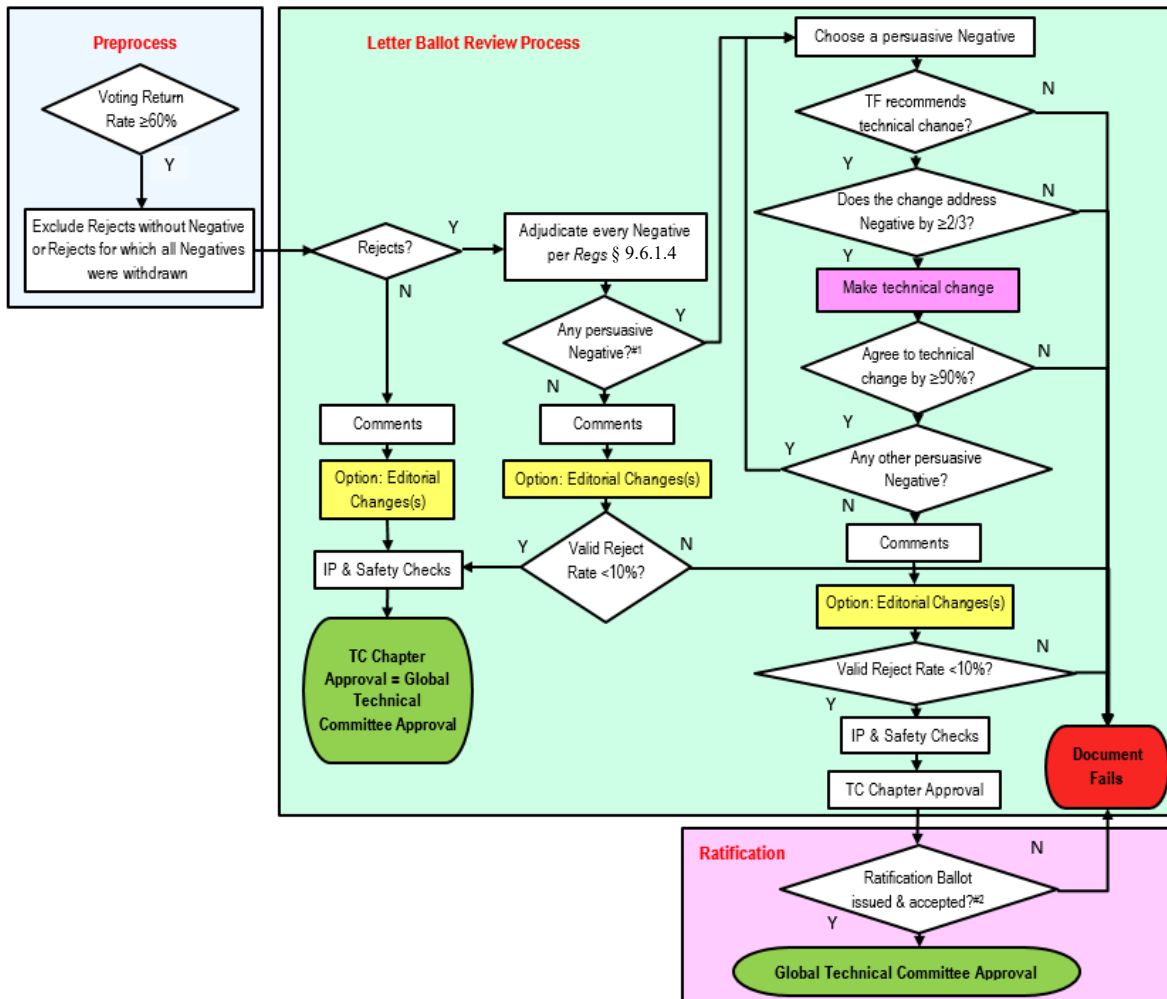
2.11.5.3 For each Letter Ballot item, approve the appropriate action to be taken based on the adjudication of that item.

### 2.11.6 Approval by the GTC

2.11.6.1 A Letter Ballot item that was approved by the TC Chapter without making any technical change to the Standards Document is considered to be approved by the GTC.

2.11.6.2 Where any technical change was made and approved during adjudication, GTC approval of that Letter Ballot item occurs when a Ratification Ballot was issued and accepted (refer to ¶ 2.1.11.1).

NOTE 16: Figure 3 summarizes the flow of the Letter Ballot approval procedure by the TC Chapter and the GTC.



#1 A TC Chapter may use a technical issue other than the one raised by a Negative to fail the Letter Ballot or choose to address the technical issue by a technical change (refer to *Regulations* § 9.6.1.4.2.5).

#2 Refer to *Regulations* § 10.5.2 for the acceptance conditions for a Ratification Ballot.

**Figure 3**  
**Letter Ballot Approval Procedure Flow**

### 2.12 Publication and Report of Letter Ballot Results

2.12.1 When a TC Chapter has finished its review, the TC Chapter cochairs and Standards regional staff report the results of the review in the following manner:

2.12.1.1 *Publication (Release) of Letter Ballot Results in CERs* — Within ten business days after a TC Chapter meeting, Standards regional staff posts a CER, which includes the TC Chapter review results, on the SEMI Standard Web site. For information on procedural review, refer to § 2.14.

2.12.1.2 *A&R Form* — When a Letter Ballot has passed TC Chapter review, Standards regional staff completes an A&R Form (refer to *Regulations* ¶¶ 9.9, 11.2, and § 2.14.2 below).

2.12.1.3 *Report to the ISC A&R Subcommittee* — Standards regional staff will submit a completed A&R Form to Standards HQ staff not later than 28 calendar days after the meeting at which a TC Chapter passed the Letter Ballot. Standards HQ staff will in turn notify and make these forms available to the ISC A&R SC members for their procedural review.

2.12.1.3.1 If a Minority Report is filed (refer to ¶ 2.15.1), and the Standards Document is returned to the TF (refer to *Regulations* ¶ 9.10.3.1.1), the procedural review decision to pass the Standards Document shall be nullified.

### 2.13 *Ratification Ballot Preparation and Submission*

2.13.1 The TF responsible for the Letter Ballot requiring a Ratification Ballot should prepare the Ratification Ballot.

2.13.2 *Contents of Background* — At a minimum, the background should include the following information:

- list all of TC Chapter-approved technical changes for the intended final published version and rationale;
- date, time, and location of the TF review of the responses to the Ratification Ballot;
- contact information for the TF leaders and the Standards regional staff contact; and
- date, time, and location of the TC Chapter meeting at which all of the technical reasons provided with Disapprove Vote(s) will be discussed to determine a new course of action regardless of acceptance or failure of this Ratification Ballot.

2.13.2.1 *What Should Not Be Included in Background* — Except for SEMI’s Notice text that calls for information about relevant patented technology, Copyrighted Items, or trademarks, the background shall not include any IP-related information.

2.13.3 The Ratification Ballot shall include:

- “A copy of the Draft Document showing the intended final published version.” (refer to *Regulations* ¶ 10.4.5.4.1), and
- “A copy of the Draft Document incorporating any editorial changes approved during adjudication of the Letter Ballot by the TC Chapter with revision markup showing only the intended technical changes.” (refer to *Regulations* ¶ 10.4.5.4.2).

2.13.4 The Ratification Ballot shall be submitted by the TF to Standards staff within two calendar weeks after the TC Chapter approval of the Letter Ballot for which the Ratification Ballot is issued.

2.13.5 The Ratification Ballot should be issued in the earliest available voting cycle.

### 2.14 *Procedural Review*

2.14.1 *ISC A&R Subcommittee Responsibility* — The ISC A&R SC determines whether the TC Chapter followed the process defined herein and in the *Regulations* in authorizing, preparing, and conducting a Letter Ballot and the following Ratification Ballot if issued, if the TC Chapter followed proper procedure for adjudicating the Letter Ballot, and whether the TC chapter performed the required safety and IP checks. This determination is referred to as procedural review. Procedural review is also done for other actions by a TC Chapter (refer to *Regulations* ¶ 11.1).

2.14.2 *A&R Forms* — To assist the members of the ISC A&R SC in their procedural review, the appropriate Standards staff fills out the A&R Form appropriate for the type of TC Chapter action taken. (A&R Forms for reporting of Letter Ballot review by a TC Chapter are available on the SEMI Standards Web site home page.)

NOTE 17: Only A&R Forms for approved Letter Ballots or Line-Item Ballots with at least one approved Line Item are forwarded to the ISC A&R SC for procedural review. In the latter case, the adjudication record for each Line Item on the ballot is included. A&R Forms for failed ballots can serve as a resource for the responsible TF in any rework effort.

2.14.2.1 The completed A&R Form for a Letter Ballot should include:

- the as-cast tally after close of the voting period—Standards staff may certify to the TC Chapter that the Letter Ballot returns meet the requirements of the Regulations;
- the final approval conditions after TC Chapter review;
- all Negatives for each Reject Vote and TC Chapter actions in response to these Negatives—Negatives addressed by technical changes and withdrawn Negatives are to be included as well;
- TC Chapter decisions concerning the significance of a Negative (90% rule);
- TC Chapter decisions concerning the validity of a Reject Vote (other 90% rule);
- Comments on the Letter Ballot and result of the TC Chapter review of these Comments;
- list of TC Chapter-approved editorial changes—each change includes a statement of the text as balloted and the text as approved during ballot review, both with sufficient surrounding text to establish the context;
- safety check (refer to *Regulations* § 8.7) and, when the balloted Standards Document is found to be a Safety Guideline, whether the annotated Safety Checklist accompanied the corresponding Letter Ballots (refer to *Regulations* ¶ 15.1.2);
- IP check (refer to *Regulations* § 8.8);
- TC Chapter approval for sending the Letter Balloted or Line Item to procedural review; and
- TC Chapter voting records for all actions described above, including the names and parent organization affiliation of persons making and seconding all motions.

NOTE 18: It is recommended that the A&R Form (refer to ¶ 2.14.2) be used throughout all of the TC Chapter review process of the Letter Ballot to avoid creating transcription and other administrative errors.

2.14.2.2 The completed A&R Form for a Ratification Ballot shall include the minimum information defined in *Regulations* ¶ 10.7.

2.14.2.3 In addition to the A&R Forms provided above, Standards HQ staff also provides the ISC A&R voting form as well as other information requested by the ISC A&R SC.

2.14.3 *ISC A&R SC Voting Procedure* — The above material is provided in Web-based or email form for rapid access and response by voting members. Voting choices are limited to accept or reject (which shall include written justification). Any abstention or failure to vote is tallied as a reject vote. As with all other votes in the ISC and its subcommittees, the members vote as individual “responsible managers and not as representatives of their employers” (refer to *Regulations* ¶ 5.5.6.1).

2.14.3.1 *Approval* — Publication is approved by a simple majority of the full voting membership of the ISC A&R SC voting to accept (refer to *Regulations* ¶ 5.5.4.4).

EXCEPTION: Publication approval for the letter-balloted Standards Document as the result of a procedural review is nullified when the Standards Document is returned to the TF based on an MR, the Ratification Ballot does not meet the acceptance condition, or additional procedural review on the Ratification Ballot results in disapproval.

2.14.3.2 *Procedural Review Voting Period* — The ISC A&R SC will have two calendar weeks to review the Standards Documents in the A&R Form and to vote for either acceptance or rejection. Discussions are strongly encouraged during this time. ISC A&R SC members can change their vote on individual Letter Ballots, Line Items, or Ratification Ballots as a result of discussions during the voting period, with only their last decision being official.

2.14.3.2.1 The ISC A&R SC chair can extend the voting period up to two calendar weeks to facilitate discussion between members and obtain any necessary clarification from TC Chapter cochairs or Standards staff.

2.14.3.3 *Suspension* — If necessary material is found lacking, the ISC A&R SC chair will communicate the problem to Standards HQ staff, and voting for the Letter Ballot, Line Item, or Ratification Ballots is automatically suspended until the problem is resolved or for a time period not to exceed two calendar weeks.

2.14.3.3.1 Upon notification of the problem, Standards HQ staff shall communicate the problem to Standards regional staff (and, if necessary, the TC Chapter cochair(s)), and obtain any corrections or additional relevant information required.

2.14.3.3.2 If corrections or additional relevant information are insufficient or unavailable, the TC Chapter cochair(s) may choose to withdraw the Letter Ballot or Line Item from procedural review and take corrective action at the next meeting of the TC Chapter.

2.14.3.3.3 Letter Ballots or Line Items that are suspended due to issues that are not promptly resolved may encounter publication delays of up to four months.

2.14.3.3.4 If a Ratification Ballot is found to be incorrect due to incorrect Background or copies of the Draft Document, it shall be ruled invalid and a corrected version rebaloted at the next ballot cycle.

2.14.3.3.5 If corrections or additional relevant information are still insufficient or unavailable for a Ratification Ballot by four calendar weeks from notification of the problem per ¶¶ 2.14.3.3 and 2.14.3.3.1, the Ratification Ballot shall be regarded as failing the procedural review.

2.14.3.4 *Report* — Results of ISC A&R SC procedural reviews shall be provided to the ISC, to the RSCs, and to all TC Chapter cochairs of the GTC issuing the Letter Ballot. Standards HQ staff will in turn post these reports to the SEMI Standards Web site.

2.14.3.4.1 When a procedural review uncovers difficulties, the ISC A&R SC is encouraged to agree on and provide recommendations to RSCs and to GTCs to aid in improving their practices.

## 2.15 *Minority Report and Appeal*

2.15.1 *Minority Report (MR)* — Any person not in agreement with a TC Chapter's decision to find a Negative not related or not persuasive, on how a Negative was addressed by a technical change, or on how a technical issue other than one raised by a Negative was addressed by a technical change may submit an MR to Standards staff. This report shall be submitted within two calendar weeks of Letter Ballot adjudication results being made publicly available (typically in a CER), and shall contain supporting information for the disagreement.

2.15.1.1 *MR Process* — Figure 4 below illustrates the process for an MR. Refer to *Regulations* § 9.10 for an explanation of the steps in this process.



2.15.2.1 *Appeal Process* — Refer to *Regulations* § 12.

2.15.2.2 *Appeal Form Template* — Appeals should be submitted using the A&R Appeal Form Template available from Standards staff.

## 2.16 *Publication*

2.16.1 *Limitations on Publication* — Standards Documents and related materials shall be released for publication through SEMI (refer to *Regulations* ¶¶ 1.5.5 and 4.1).

2.16.2 *Submission of Standards Documents for Publication* — Standards Documents intended for publication through SEMI, such as Standards, Safety Guidelines, Preliminary Standards, or Auxiliary Information, shall be approved by a TC Chapter and subsequently by the ISC A&R SC.

2.16.3 *Correction of Published Standards Documents* — Any person who believes that there is an error in a published Standards Document can propose a correction.

2.16.3.1 *Type 1 Editorial Changes* — Type 1 editorial changes (refer to ¶ 2.11.4.1 and *Regulations* § 8.9.5) can be corrected in published Standards Documents without balloting or TC Chapter deliberation by submitting a Publication Improvement Proposal (PIP) form, available on the SEMI Standards Web site, either to Standards staff or to the Originating TC Chapter cochair. The PIP requires approval by the Standards Publication Manager and at least one Originating TC Chapter cochair. For corrections of this type, an IP check, safety check, and procedural review are not required (refer to *Regulations* ¶¶ 8.9.4 and 8.9.5.2). Refer to *Regulations* ¶ 8.9.5.1 for the required addition of an editorial-corrections superscript suffix.

2.16.3.2 *Type 2 Editorial Changes* — Type 2 editorial changes (refer to ¶ 2.11.4.1 and *Regulations* § 8.9.5) may be proposed by submitting a Publication Change Request (PCR) form, available on the SEMI Standards Web site, either to Standards staff or directly to the TC Chapter. These editorial changes made outside of the balloting process to a published Standards Document require approval by the Originating TC Chapter. For corrections of this type, an IP check, safety check, and procedural review are required (refer to *Regulations* ¶¶ 5.5.4.5d and 8.9.5.2). Refer to *Regulations* ¶ 8.9.5.1 for the required addition of an editorial-corrections superscript suffix. For proposed changes that cannot be demonstrated to be editorial in nature, refer to ¶ 2.16.4.3.

2.16.3.3 *Noneditorial Technical Changes* — Noneditorial technical changes may be proposed by submitting a SNARF, available on the SEMI Standards Web site (refer to § 2.2). These changes require a Letter Ballot (refer to *Regulations* § 8.4.2).

2.16.4 *Publication Interval* — Approved new or revised Standards Documents are posted to the SEMI Standards Web site and to the SEMIViews Web site as soon as they have been prepared for publication.

2.16.4.1 These files, posted on the SEMI Standards Web site and the SEMIViews Web site, are copyrighted IP of SEMI and are protected from user editing.

2.16.5 *Handling of Supplementary Materials* — Supplementary Materials (i.e., Related Information, Various Materials, Auxiliary Information) may or may not be a part of a Standard or Safety Guideline (but is not official content), may or may not accompany a Standard or Safety Guideline during the balloting process, and may or may not be published with a Standard or Safety Guideline (refer to *Regulations* § 13).

2.16.6 *Publication in Local Languages* — Standards, Safety Guidelines, and other Standards Documents that have been approved for publication may be translated by SEMI into other languages than English as a convenience for users in different geographical areas (refer to *Regulations* ¶ 4.5).

2.16.6.1 *Translation Review* — Translation is arranged by the appropriate SEMI regional office. It is desirable that the TC Chapter that uses the language of the translation, and is part of the GTC that originated the Standards Document, should review the translation.

2.16.6.2 *Precedence of English Standards Document* — “If differences should exist between the English version of a Standards Document and a version in any other language, the English text is the authoritative version” (refer to *Regulations* ¶ 4.5).

2.16.6.3 *Translation Heading* — “Any Standards Document that has been translated into a language other than English shall contain a heading in English and in the language of the translation that the translated copy of the Standards Document is a REFERENCE COPY ONLY and that the English original is the official, authoritative version” (refer to *Regulations* ¶ 4.5.1).

## 2.17 *Review of Standards and Safety Guidelines*

2.17.1 *Frequency and Option of Review* — “Standards and Safety Guidelines should be reviewed regularly by the Originating TC Chapter and recommended for the appropriate action. At a minimum, the Originating TC Chapter shall review its Standards or Safety Guidelines and decide whether to ballot the Standards or Safety Guidelines for reapproval, revision, replacement, or withdrawal by the end of the fifth year after their latest publication or reapproval dates. If the TC Chapter decides to take no action, the Standard or Safety Guideline will be given Inactive Status” (refer to *Regulations* §§ 4.2.19 and 8.9.1).

### 2.17.2 *Failure to Keep Current Status*

2.17.2.1 If the Originating TC Chapter chose to issue a reapproval, withdrawal, or removal Letter Ballot, but is not able to complete the balloting and subsequent TC Chapter review by the end of the sixth year after the latest publication or reapproval date (or the Letter Ballot fails the subsequent procedural review), the Standard or Safety Guideline will be given Inactive Status (refer to *Regulations* ¶ 8.9.1.1).

2.17.2.2 If the Originating TC Chapter chose to revise or replace the Standard or Safety Guideline, but does not issue the revision or replacement Letter Ballot by the end of the sixth year after the latest publication or reapproval date, does not review and approve a Letter Ballot for reapproval by the end of the sixth year after the latest publication or reapproval date, or discontinues the revision or replacement activity, the Standard or Safety Guideline will be given Inactive Status (refer to *Regulations* ¶ 8.9.1.2).

2.17.2.2.1 Examples for the discontinuation of the revision or replacement activity are:

- failure to issue a revision Letter Ballot at least once per year after the initial revision or replacement Letter Ballot, and
- failure of the TF to report on its revision or replacement activity to the parent GTC at each scheduled meeting of its relevant TC Chapter after the latest publication or reapproval date.

2.17.3 *Transfer of Responsibility to Maintain a Standards Document* — Transfer of responsibility for a Standards Document typically requires formal approval of both the Originating TC Chapter and the destination TC Chapter. If the destination TC Chapter is part of a different GTC than the Originating TC Chapter, approval from the GCSs of each GTC is also strongly recommended.

2.17.3.1 If the Originating TC Chapter does not exist or is unknown, the responsibility for the Standards Document is assigned to an existing TC Chapter of the GTC. If more than one TC Chapter exists, the GCS shall decide which specific TC Chapter will become the Originating TC Chapter.

2.17.4 *Standard or Safety Guideline Status* — Table 7 shows the different Statuses a Standard or Safety Guideline can have (refer to *Regulations* ¶ 4.2.17).

2.17.4.1 Preliminary Standards can only be Current or Withdrawn.

2.17.4.2 A Withdrawn Standard or Safety Guideline shall not be returned to Current Status.

2.17.4.3 A Withdrawn Standard or Safety Guideline retains its last published designation number and receives a designation date indicating the year and month it was changed to Withdrawn Status as well as a State indicator describing the year of withdrawal (refer to § 3.1).

2.17.4.4 Withdrawn Standards and Safety Guidelines will be available in the ‘Withdrawn Standards’ section of the SEMI Standards Web site.

**Table 7 Statuses of Standards and Safety Guidelines**

<i>Status of Standards and Safety Guidelines</i>	<i>Regulations Reference</i>	<i>Brief Description</i>
Current	§ 4.2.18	Supported by a GTC.
Inactive	§ 4.2.19	NOT currently supported by the GTC, but still available and continues to be valid.
Replaced	§ 4.2.20	Discontinued with replacement, but still available.
Superseded	§ 4.2.21	A newer version of the same Standards and Safety Guidelines is Current or Inactive, but still available.
Withdrawn	§ 4.2.22	Discontinued without replacement, but still available.
Removed	§ 4.2.23	Discontinued and no longer available due to technical flaws or legal issues.

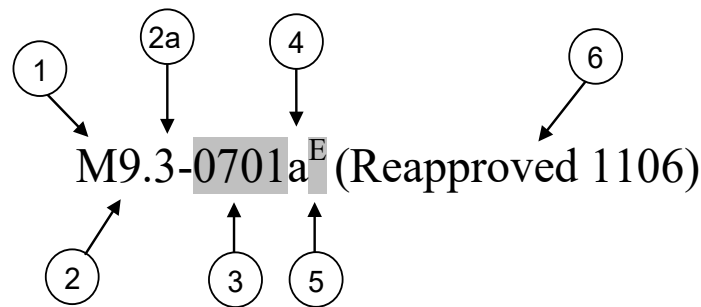
### 3 Additional Standards Documents Provisions

#### 3.1 Standards Documents Designations

3.1.1 Designations for Standards, Safety Guidelines, and Auxiliary Information are assigned by Standards HQ staff.

3.1.2 The designation typically consists of three parts; shown as 1, 2, and 3 in Figure 5 and Table 8:

- an initial letter or letters (referred to as the Designation Letter[s]) assigned by primary technical area covered in accordance with Table 9;
- a serial number (referred to as the Designation Number) assigned in sequence as Standards Documents in the primary technical area are published (followed by a dash); and
- a Publication Date Code consisting of the two-digit year (before the December 1996 edition) or a four-digit month-year (December 1996 edition and later) showing when the latest edition of the Standards Document was first published.



**Figure 5**  
Designations for Standards and Safety Guidelines

**Table 8 Parts of a Standard or Safety Guideline Designation**

#	Part	Explanation	Examples
1	Designation Letter(s)	Indicates the primary technical area of the Standard or Safety Guideline. Refer to Table 9.	C, D, MF
2	Designation Number	Sequentially assigned for each Standard or Safety Guideline approved for a given primary technical area	1, 2, ..., 54, ..., 144, ..., n
2a	Subordinate Standard Number	Assigned only for Subordinate Standards. Sequentially assigned for each Subordinate Standard for a given Primary Standard. Separated from the Designation Number by a decimal point.	.1, .2, ..., .9
3	Publication Date Code	Indicates the year (yy) or month and year (mmyy) of official publication. Separated from the Designation Number or Subordinate Standard Number by a hyphen.	-96, -0301
4	Delayed Revision suffix	Indicates that the Standards Document was technically modified, but no immediately effective changes were made to the official Standard or Safety Guideline (i.e., Delayed Revision sections were added to the Standards Document)	a, b, c
5	Editorial Corrections superscript suffix	Indicates that editorial corrections have been made since the most recent technical revision to the Standard or Safety Guideline ( <sup>E</sup> indicates 1 time, <sup>E2</sup> indicates 2 times, etc.).	E, E2
6	Special Conditions	Indicates that the State of a Standard or Safety Guideline is not Full-consensus, or that the most recent approved action on the Standard was not a revision or replacement.	(Preliminary), (Reapproved mmyy), (Withdrawn mmyy)

3.1.3 Note that certain Standards Documents have Designation Letters different from those indicated in Table 9. The Designation Letters are assigned when the Standards Document is first approved for publication. In some cases, modifications of the GTC structure have resulted in the Standards Document being assigned to a different GTC or primary technical area, but the Designation Letter remains the same as originally assigned. As this may cause confusion in the user community, the Originating TC Chapter may wish to replace such a Standards Document with a new one. Refer to APPENDIX 4 for a special procedure to approve change of the Designation Letter and to issue a Line-Item Letter Ballot to replace such a Standards Document with a new one having limited changes that align it with the new Designation Letter and with the new primary technical area.

3.1.4 Documents transferred from other SDOs may not perfectly follow the conventions described above. In the case of the Silicon Materials and Process Control Standards, which were transferred from ASTM International (ASTM), the Designation Numbers are the same as the numbers the standards had while they were ASTM standards.

**Table 9 Standards Document Designation Letters**

<i>Designation Letter(s)</i>	<i>Primary Technical Area of Standards Documents</i>
3D	Three-dimensional Stacked Integrated Circuits, Three-dimensional Packaging and Integration
A	Automation Technology, Automated Test Equipment
AUX	Auxiliary Information; published independently
C	Process Chemicals and Gases
D	Flat Panel Display (FPD)
E	Equipment Hardware and Software, Metrics
F	Facilities
FH	Flexible Hybrid Electronics
G	Packaging
HB	High-Brightness Light-Emitting Diode
M	Materials
ME, MF	Silicon Materials and Process Control (usually transferred from ASTM)
MS	Micro Electro-Mechanical Systems (MEMS)
P	Micropatterning
PV	Photovoltaic
S	Environmental, Health, and Safety
T	Traceability

### 3.2 Sections Found in Standards and Safety Guidelines

3.2.1 Different Standard Subtypes and Safety Guidelines include different sections according to the purpose of the Standard and Safety Guideline. Table 10 lists sections that are mandatory (M), optional (O), or prohibited (P) in each Standard Subtype and Safety Guideline. This list is not restrictive; other sections may be included in appropriate locations to meet the requirements of specific Standards Documents.

3.2.2 For more details on the contents of these sections, refer to Appendix 3.

### 3.3 Restrictions on Contents of Sections

3.3.1 No section of a Standard or Safety Guideline shall contain a list of section and/or subsection numbers and/or their headings (e.g., similar to a Table of Contents).

3.3.1.1 For existing Standards and Safety Guidelines that currently contain a list of section and/or subsection numbers and/or their headings in any section, that content shall be either:

3.3.1.1.1 Removed and added as a Table of Contents during its next revision, reapproval, or reinstatement Letter Ballot (refer to *Style Manual* Table 1, 1-31), or

3.3.1.1.2 Removed during its next revision.

NOTE 19: The replacement of a list of section and/or subsection numbers and/or their headings in any section (e.g., Scope) with a Table of Contents per *Style Manual* Table 1, 1-31 is one of the allowed editorial changes, which is considered as an editorial change of Type 1, during reapproval provided that no additional technical content contained within it is changed or deleted (refer to *Regulations* ¶ 8.4.3.1). If it is just removed from the purpose, scope, limitations, or any other section that affects the overall Standards Document, it requires a major revision and cannot be removed as a Line Item (refer to ¶ 3.6.1).

3.3.2 Any new Standard or Safety Guideline shall not contain restricted biased terms (refer to *Regulations* ¶ 4.6). Refer to *Style Manual* Appendix 5 for a list of these terms and approved, alternative, bias-free terms.

3.3.2.1 For an existing Standard or Safety Guideline that currently contains restricted biased terms in any section, that content shall be replaced with an approved, alternative, bias-free term or rewritten to eliminate the biased term during its next revision, reapproval, or reinstatement Letter Ballot (refer to *Style Manual* Table 4, 4-7).

3.3.2.1.1 The direct replacement of these restricted biased terms in any section (e.g., Scope) with an approved, alternative, bias-free term per *Style Manual* Table 4, 4-7 is an allowed Type 2 editorial change using a Revision Letter Ballot or by TC Chapter consideration of a PCR Form per ¶ 2.16.4.2. If the term is just removed from the purpose, scope, limitations, or any other section that affects the overall Standards Document, it requires a major revision and cannot be removed in a Line Item (refer to ¶ 3.6.1).

3.3.3 All sections of a Standard or Safety Guideline should avoid using biased terms (refer to *Regulations* ¶ 4.6). These terms should be replaced with approved, alternative, bias-free terms (refer to *Style Manual* Appendix 5) or rewritten to eliminate them whenever possible (refer to *Style Manual* Table 4, 4-7).

3.3.3.1 For an existing Standard or Safety Guideline that currently contains biased terms to be avoided in any section, those terms should be replaced with approved, alternative, bias-free terms or rewritten to eliminate the biased term to be avoided during its next revision, reapproval, or reinstatement Letter Ballot (refer to *Style Manual* Table 4, 4-7).

3.3.3.1.1 The direct replacement of these biased terms to be avoided in any section (e.g., Scope) with an approved, alternative, bias-free term per *Style Manual* Table 4, 4-7 is an allowed Type 2 editorial change using a Revision Letter Ballot or by TC Chapter consideration of a PCR Form per ¶ 2.16.4.2. If this term is just removed from the purpose, scope, limitations, or any other section that affects the overall Standards Document, it requires a major revision and cannot be removed in a Line Item (refer to ¶ 3.6.1).

3.3.4 Conformance criteria for a Standard (e.g., ‘shall’ provisions) or Safety Guideline (e.g., ‘should’ provisions) shall not be included in the Purpose, Scope, Limitations, Terminology, or Related Information sections; Notes; any type of footnotes; or examples.

3.3.4.1 Notes are not an official part of Standards and Safety Guidelines. They are intended as supplementary information that is useful, but not essential to Standards and Safety Guidelines.

3.3.4.1.1 For Standards and Safety Guidelines that include Notes, the Notes Notice (refer to *Style Manual* Table 8, Notes Notice) shall be included in the Standards Documents prior to their Purpose section.

3.3.4.1.2 References to Related Information sections in the main body or Appendices should clearly indicate the nature of the references as useful unofficial information, such as examples, or place the references in Notes.

**Table 10 Table of Contents and Section Contents**

<i>Standard Types/Sections</i>	<i>Classification</i>	<i>Guide</i>	<i>Practice</i>	<i>Specification</i>	<i>Terminology</i>	<i>Test Method</i>	<i>Safety Guideline</i>
<i>Table of Contents</i> <sup>#1</sup>	O <sup>#5</sup>	O	O	O	O	O	O
Purpose	M <sup>#5</sup>	M	M	M	M	M	M
Scope	M	M	M	M	M	M	M
Limitations	O	O	O	O	O	O	O
Referenced Standards and Documents	M	M	M	M	M	M	M
Terminology <sup>#4</sup>	M	M	M	M	M	M	M
Related Documents	O	O	O	O	O	O	O
Basis of Classification	M						
Classification	M						
Test Methods	O			M/O <sup>#2</sup>			
‘Application Specific’ <sup>#3</sup>		M					M
Summary of Practice			M				
Apparatus			O			O	
Reagents and Materials			O			O	
Safety Precautions			O			O	
Test Specimens			O			O	
Procedure			M	O <sup>#2</sup>		M	

<i>Standard Types/Sections</i>	<i>Classification</i>	<i>Guide</i>	<i>Practice</i>	<i>Specification</i>	<i>Terminology</i>	<i>Test Method</i>	<i>Safety Guideline</i>
Calculations						M	
Interpretation of Results			O				
Report			O			M	
Ordering Information				O			
Requirements		P#5		M			P
Sampling				O			
Certification				O			
Product Labeling				O			
Packing and Package Labeling				O			
Abbreviations and Acronyms					O		
Definitions					O		
Symbols					O		
Summary of Test Method						M	
Preparation of Apparatus						O	
Calibration and Standardization						O	
Precision and Bias						O	

#1 The optional Table of Contents is not an official section of the Standards Document. It is located after the title and before the Purpose section (refer to *Style Manual*, 1-30).

#2 Mandatory for materials-related Specifications unless a comparable Procedure section is provided; optional for other Specifications.

#3 For Application Specific sections in Guides, refer to Appendix 3, Table A3-1, A3-14 for special instructions.

#4 The Terminology section is not mandatory if no term or acronym is defined.

#5 M is mandatory, O is optional, and P is prohibited.

### 3.4 Types of Letter Ballot Actions

3.4.1 Because the Standards Document Development Project is global, consensus on a Draft Document is confirmed using a Letter Ballot issuance, voting, and approval process. This section describes how the decision is made using the Letter Ballot. The Letter Ballot is used for final technical approval of a Draft Document. The Informational Ballot is used to collect opinions in earlier development stages, and is not used for final technical approval.

3.4.1.1 The Letter Ballot's main title shall comply with the approved title in the SNARF and Appendix 3, Table A3-1, A3-1.

3.4.2 *Types of Letter Ballot Actions* — The following seven types of actions require a Letter Ballot (refer to *Regulations* § 8.4):

- creation of a new Standard or Safety Guideline (including replacement of an existing Standard or Safety Guideline with a new Standard or Safety Guideline, or approval of a Preliminary Standard as a Full-consensus Standard);
- revision of one or more published Standards or Safety Guidelines (including revision or addition of one or more Appendices or Complementary Files, revision or addition of Related Information section or Various Materials, and revision or addition of one or more Subordinate Standards to an existing Primary Standard);
- reapproval of a published Standard or Safety Guideline;
- reinstatement of an Inactive Standard or Safety Guideline;
- withdrawal of a published Standard or Safety Guideline;
- removal of a published Standard or Safety Guideline; or
- Publication of an existing Standard or Safety Guideline as an ANS.

3.4.2.1 *Creation of a New Standard or Safety Guideline* — For balloting of a new Standard or Safety Guideline, identify the action in the Letter Ballot’s main title as ‘New Standard: <Title>’ or ‘New Safety Guideline: <Title>.’

3.4.2.1.1 *Replacement of an Existing Standard or Safety Guideline with a New Standard or Safety Guideline* — If a new Standard or Safety Guideline replaces one or more published Standard(s) or Safety Guideline(s), a prominent Notice about this is required on the Background Statement of the Letter Ballot (refer to *Regulations* ¶ 8.4.1.1). If the Letter Ballot action is successful, the Replaced Standard(s) or Safety Guideline(s) is (are) automatically moved to the Replaced Standards section on the SEMI Standards Web site at the time the new Standard or Safety Guideline is published (refer to *Regulations* ¶ 8.10.2). Therefore, a separate Letter Ballot to change the Status of the Replaced Standard(s) or Safety Guideline(s) is not required.

3.4.2.2 *Revision of a Published Standard or Safety Guideline* — For the revision of a Standard or Safety Guideline, identify the action in the Letter Ballot’s main title as ‘Revision of <Designation> <Title>.’ For revisions of multiple Standards or Safety Guidelines, include the designations and titles of each Standard or Safety Guideline to be revised in the Letter Ballot’s main title.

3.4.2.2.1 *Identification of the Nature of the Revision* — For a revision, “the parts of the Standard or Safety Guideline being revised shall be clearly identified in the Letter Ballot” (refer to *Regulations* ¶ 8.4.2.1). If the title is to be revised, both the old and new titles are listed in the main title of the Letter Ballot, as follows: ‘Revision to SEMI <Designation>: <Old Title>, with title change to <New Title>.’ If many sections are being revised in a single Letter Ballot, it is useful to title that ballot as ‘General revision of <Designation> <Title>.’ For Line-Item Ballots, title that ballot as ‘Line-Item revisions to <Designation> <Title>’ (refer to § 3.5). When specific, limited revisions are being made, it is useful to identify the nature of the revision in a subtitle to the main title of the Letter Ballot, especially if a series of revisions to the Standard or Safety Guideline is being carried out over some period of time. For example: ‘Revision to add material on ...,’ ‘Revision to modify the requirements for ...,’ ‘Revision to delete material on ....’

3.4.2.2.2 *Addition of Appendices or Complementary Files* — Addition of Appendices or Complementary Files to an existing Standard or Safety Guideline is considered to be a revision to the existing Standard or Safety Guideline. For this addition, identify the action in the Letter Ballot’s main title as ‘Revision to add new <Appendix> <Title of Appendix> to <Designation> <Title>’ or ‘Revision to add new <Complementary File> <Title of Complementary File> to <Designation> <Title>.’

3.4.2.2.3 *Addition of Related Information Section or Various Materials* — Addition of Related Information or Various Materials as a part of an existing Standard or Safety Guideline is considered to be a revision to the existing Standard or Safety Guideline. For this addition, identify the action in the Letter Ballot’s main title as ‘Revision to add new <Related Information or Various Materials> <Title of Related Information or Various Materials> to <Designation> <Title>.’

NOTE 20: Addition, revision, or deletion of Related Information or Various Materials may be done without Letter Ballot.

3.4.2.2.4 *Addition of a Subordinate Standard* — Addition of a Subordinate Standard to an existing Primary Standard is considered to be a revision to the existing Primary Standard. For this addition, identify the action in the Letter Ballot’s main title as ‘Revision to add a new Subordinate Standard <Title of Subordinate Standard> to <Designation> <Title>.’

3.4.2.3 *Reapproval of an Existing Standard or Safety Guideline* — For reapproval of an existing Standard or Safety Guideline without technical change, identify the Letter Ballot action as ‘Reapproval of <Designation> <Title>.’

3.4.2.3.1 Only Type 1 editorial changes may be incorporated in a reapproval Letter Ballot or made by a TC Chapter during adjudication of the reapproval Letter Ballot. If deemed necessary by the TC Chapter, any Type 2 editorial change shall be initiated by a revision Letter Ballot or by TC Chapter consideration of a PCR form per ¶ 2.16.4.2.

3.4.2.3.2 A reapproval Letter Ballot shall not be conducted as part of a Line-Item Ballot.

3.4.2.3.3 *Contents of a Reapproval Letter Ballot*

3.4.2.3.3.1 Include an explanation of why the Standard or Safety Guideline is being balloted for reapproval. Also include a Note in the background and on the SEMI Standard Web site voting webpage that access to the Standard or Safety Guideline is available upon request from Standards staff.

NOTE 21: At a minimum, a reapproval Letter Ballot should include the Purpose, Scope, Limitations, and Terminology sections, along with the full text of any paragraph in which editorial updates are being made.

3.4.2.3.3.1.1 Voter requests for access to the full Standard or Safety Guideline shall be made at least three business days before the voting deadline. If the Standard or Safety Guideline is not available for this reason, the Voter shall not use this as justification for rejecting the Letter Ballot (i.e., those Negatives will be not related).

3.4.2.4 *Reinstatement of an Inactive Standard or Safety Guideline* — For reinstatement of an Inactive Standard or Safety Guideline, identify the Letter Ballot action as ‘Reinstatement of <Designation> <Title>’ (refer to *Regulations* § 4.2.19).

3.4.2.4.1 No technical change shall be included in a reinstatement Letter Ballot or implemented during the adjudication of a reinstatement Letter Ballot.

3.4.2.4.2 Limited editorial changes (i.e., corrections of obvious misspellings; formatting changes to comply with the *Style Manual*; corrections of capitalization, the use of italics, incorrect spacing), which would be editorial changes of Type 1, may be incorporated in a reinstatement Letter Ballot or made by a TC Chapter during adjudication of the reinstatement Letter Ballot. All other editorial changes should be initiated by a revision Letter Ballot.

NOTE 22: Because a reinstatement Letter Ballot is issued on a Standard or Safety Guideline that is in Inactive status at the time of Letter Ballot review, editorial changes by a PIP form per ¶ 2.16.4.1, PCR form per ¶ 2.16.4.2, or by other TC Chapter consideration are not allowed until the reinstatement Letter Ballot passes A&R Review and the Standard or Safety Guideline returns to Current Status.

3.4.2.4.3 *Contents of a Reinstatement Letter Ballot*

3.4.2.4.3.1 Include an explanation of why the Standard or Safety Guideline is being balloted for reinstatement. Also include a Notice in the Background Statement and on the SEMI Standard Web site voting webpage that access to the Standard or Safety Guideline is available upon request from Standards staff.

NOTE 23: At a minimum, a reinstatement Letter Ballot should include the purpose, scope, limitations, and terminology sections, along with the full text of any paragraph in which editorial updates are being made.

3.4.2.4.3.1.1 Voter requests for access to the full Standard or Safety Guideline shall be made at least three business days before the voting deadline. If the Standard or Safety Guideline is not available for this reason, the Voter shall not use this as justification for rejecting the Letter Ballot (i.e., those Negatives will be not related).

3.4.2.4.4 *Revision or Replacement of an Inactive Standard or Safety Guideline* — For revision of an Inactive Standard or Safety Guideline with technical change, refer to ¶ 3.4.2.2. For replacement of an Inactive Standard or Safety Guideline, refer to ¶ 3.4.2.1.1 (refer to *Regulations* ¶ 4.2.19.4).

NOTE 24: It is highly recommended to revise or replace rather than reinstate an Inactive Standard or Safety Guideline if the Standard or Safety Guideline became Inactive due to a failure of a reapproval, revision, or replacement Letter Ballot.

3.4.2.5 *Withdrawal of an Existing Standard or Safety Guideline* — For withdrawal of an existing Standard or Safety Guideline, identify the Letter Ballot action as ‘Withdrawal of <Designation> <Title>.’

3.4.2.6 *Removal of an Existing Standard or Safety Guideline* — For removal of an existing Standard or Safety Guideline, identify the Letter Ballot action as ‘Removal of <Designation> <Title>.’

3.4.2.7 *Publication of an Existing Standard or Safety Guideline as an ANS* — For publication of an existing Standard or Safety Guideline as an ANS, identify the Letter Ballot action as ‘Publication of <Standard Designation> <Title> as an American National Standard.’

### 3.5 *Line-Item Ballots*

3.5.1 *Purpose* — Line-Item revision Letter Ballots are issued for the following purposes to:

- facilitate rapid publication of corrections—because each Line Item is balloted and discussed separately, each Line Item can be advanced toward publication independently of the progress of any other Line Item (refer to *Regulations* ¶ 8.4.2.2 Exception);
- reduce the volume of materials reviewed by Voters—requesting Voters to review the whole Standards Document(s) when only minor revisions are involved can be inefficient; and
- focus on the revisions intended by the TF—if a Program Member finds other parts of the Standards Document(s) to be in need of revision, these Comments shall be treated as a new revision activity (refer to ¶ 3.5.4.2).

### 3.5.2 Limitations on Line-Item Ballots

3.5.2.1 *New Standards or Safety Guidelines* — Standards or Safety Guidelines shall not be created using Line-Item Ballots.

3.5.2.2 *Published Standards or Safety Guidelines* — Line-Item Ballots are only permitted on revisions to already published identified portions of Standards or Safety Guidelines.

NOTE 25: Refer to *Regulations* § 8.4.2.2.

NOTE 26: Editorial changes to an identified portion in an existing Line-Item Ballot may be made independently from a Letter Ballot (refer to *Regulations* § 8.9.4) or during adjudication of the Line-Item Ballot (refer to § 2.11.4).

3.5.2.3 *Number of Line Items* — The maximum number of permitted Line Items to a Standard or Safety Guideline in a ballot cycle is ten. These ten Line Items may be in a single Line-Item Ballot or distributed across multiple Line-Item Ballots (e.g., four in one Line-Item Ballot and six in a second Line-Item Ballot within the same ballot cycle).

3.5.2.4 *Contradictory Line Items* — A Line Item that involves information or procedures that contradict those of another Line Item in the same Line-Item Ballot or another Line-Item Ballot in the same ballot cycle is not permitted. For instance, multiple line items proposed as options from which one is to be selected are not permitted. Also, a Line Item that changes one or more preceding Line Item(s) in the same ballot cycle is not permitted.

3.5.2.5 *Contingent Line Items* — Changes that depend on each other shall be grouped together into a single Line Item. Contingent Line Items are not allowed. For instance, a relationship described as ‘Line Item 2 is dependent on the passing of Line Item 1’ is not permitted.

3.5.2.6 *Other Limitations* — Use Line Items only to make small, specific changes that do not affect any section of the Standard(s) or Safety Guideline(s) not included in the Line Item. The use of Line Items is not permitted for major revisions to published Standards or Safety Guidelines; these shall be balloted as a single unit. (Refer to § 3.6 for major revisions.)

3.5.2.7 *Line-Item Ballot Revisions to Multiple Standards or Safety Guidelines* — Refer to § 3.7.

### 3.5.3 Structure of a Line-Item Ballot

3.5.3.1 *Contents of Line Item* — Clearly show what changes are proposed in each Line Item. Include an explanation for each Line Item in the required background (refer to *Regulations* ¶¶ 9.2.5.1.2). If the material subject to a Line Item cannot be readily distinguished from the background, the explanation for it may be placed before that Line Item.

3.5.3.2 *Noncontroversial Revisions* — Although they may be otherwise unrelated, it is also appropriate to group revisions that are expected to be broadly endorsed by the GTC membership into a single Line Item in order to avoid unnecessary proliferation of Line Items. For example, group all Type 2 editorial changes into a single Line Item.

3.5.3.3 *Reference Material* — When preparing a Line-Item Ballot, it is highly recommended that the entire Standard or Safety Guideline, marked to show the changes in the Line Item(s) using underline and strikeout, be included with that ballot so that each Voter determines how the revision(s) in the Line Item(s) fit into the context of the entire Standard or Safety Guideline.

3.5.3.3.1 At a minimum, a Line-Item Ballot should include the purpose, scope, limitations (if present), and terminology (if present) sections, along with the full text of any section to which revisions are being balloted.

EXCEPTION: For Terminology Standards, it is not necessary to include the full terminology section(s) in a Line-Item Ballot.

3.5.4 *Treatment of Line-Item Ballots* — Each Line Item shall be treated as a single unit and cannot be further subdivided when being considered (refer to *Regulations* ¶¶ 9.1.10.1 and 9.6.1.4.2.5.1). It is not permissible to assert that any part of a Line Item has been ‘approved’ by the TC Chapter, even if the TC Chapter believes that it has reached consensus on this part.

3.5.4.1 *Reviews of Line-Item Ballots* — Each Line Item is treated as a separate balloted item. Therefore, Votes, tallies, TC Chapter Line-Item Ballot reviews, and procedural reviews are carried out separately for each Line Item except the IP check (refer to *Regulations* § 8.8), which shall be performed for the whole Standard or Safety Guideline.

3.5.4.2 *Parts of a Standards Document Not Included in the Line-Item Ballot(s)* — Parts of the Standards Document not specifically identified in the Line Items are not subject to Negatives in Reject Votes or any Comments. The TC

Chapter can determine that any Comment or Negative that refers to material not included in the Line-Item Ballot(s) is ‘not related,’ but is required to either assign a not-related Negative to a TF or place it on the agenda of the current TC Chapter meeting for consideration as new business (refer to *Regulations* § 9.6.1.4.1).

### 3.6 Major Revisions

3.6.1 Major revisions are substantial changes to the text of published Standards or Safety Guidelines for the purpose of updating the Standard or Safety Guideline, modifying its application, clarifying the language, or correcting errors. As a practical matter, a major revision is one that:

- requires more than ten Line Items, or
- involves technical revisions to the title (including change of Standard’s Subtype), purpose, scope, limitations, or any other section that affects the overall Standards Document.

NOTE 27: Revision to or addition of a paragraph in the terminology section might affect the overall Standards Document, or part of the Standards Document outside of the paragraph to be revised by Line Items. In the former case, a major-revision Letter Ballot of the entire Standards Document is appropriate. In the latter case, the part of the Standards Document that is the subject of the Line-Item Ballot should be reconsidered.

#### 3.6.1.1 Formatting for Major Revisions

3.6.1.1.1 All parts of a Standards Document in a major revision of a published Standard or Safety Guideline are subject to Negatives in Reject Votes and/or any Comments. Thus, the entire proposed Standards Document shall be presented in the Letter Ballot.

3.6.1.1.2 The Draft Document shall be presented with underline and strikethrough markups or with no markups for the changes included, as appropriate. The choice shall be stated in the background. The choice of an unmarked Draft Document is appropriate when the use of underlines and strikethroughs would be excessive.

EXCEPTION: If both markup and unmarked Draft Document versions are presented, the markup version takes precedence unless the background states that the unmarked version takes precedence. Therefore, voters shall vote based on the version that takes precedence.

3.6.1.2 *Major Revision vs. Line Item* — To resolve whether a revision to a published Standard(s) or Safety Guideline(s) is a ‘major revision’ or can be balloted as multiple Line Items, TC Chapter cochairs and TF leaders should review the purpose and scope of the Standard(s) or Safety Guideline(s) being revised and the nature and extent of the revisions themselves. If the proper resolution is not obvious, the Letter Ballot should be issued as a major revision.

### 3.7 Revision of Multiple Related Standards or Safety Guidelines

3.7.1 *Limitations* — On occasion, it is necessary to modify related content of two or more Standards or Safety Guidelines at the same time. Ballots of this type should only be issued when the changes to one Standards Document require changes to another Standards Document or Documents.

3.7.1.1 *Relationship To Be Established* — When several Standards Documents are being modified in the same Letter Ballot, the background shall clearly show the relationship between the revisions being made to each Standards Document.

3.7.1.2 *Standards Document Number Assignment* — The revisions shall be balloted together under a single Standards Document number.

#### 3.7.2 Line-Item Revision to Multiple Standards or Safety Guidelines

3.7.2.1 Every Line Item shall refer to or be relevant to the entire set of Standards or Safety Guidelines

NOTE 28: ‘Refer to’ means the Line-Item changes the Standards Document, while ‘be relevant to’ means that a particular Line Item does not require changes in the Standard Document, but the Standard Document already contains technical content(s) compatible with the proposed changes by the particular Line Item.

3.7.2.1.1 A Line-Item that is not relevant to the entire set shall be balloted separately under a different Standards Document number.

EXCEPTION: Editorial changes to any of the Standard Documents balloted together can be balloted together as long as the total number of the Line Items does not exceed the maximum number of Line Items defined in ¶ 3.5.2.3.

### 3.7.3 *Simultaneous Major Revision(s) to Multiple Standards or Safety Guidelines*

3.7.3.1 When a simultaneous revision to two or more Standards or Safety Guidelines is necessary to maintain technical integrity of the Standards or Safety Guidelines and such simultaneous revision involves changes that require a major revision per § 3.6 for any of the Standards or Safety Guidelines under revision, a Simultaneous Major-Revision Letter Ballot shall be used.

3.7.3.2 A Simultaneous Major-Revision Letter Ballot is voted on as a single balloted item and passes or fails the Letter Ballot review as a whole.

3.7.3.3 Standards or Safety Guidelines shall not be created using Simultaneous Major-Revision Ballots.

EXCEPTION: A Simultaneous Major-Revision Letter Ballot may be issued for a Primary Standard and a proposed new Subordinate Standard per § 3.8.4.1.2.2.

### 3.8 *Primary Standards and Subordinate Standards*

3.8.1 Subordinate Standards are a group of Standards relying on another Standard, which is named the Primary Standard, to state the common concepts or criteria across the group (refer to *Regulations* ¶ 4.2.12 and § 4.2.13).

NOTE 29: If only one Subordinate Standard is conceivable for a Primary Standard, it is not appropriate to apply a 'Primary-Subordinate' Standards structure.

3.8.2 *Applicability of Subordinate Standard* — A Primary Standard shall be a published Standard or a Standard under development that meets the requirements of *Regulations* § 4.2.5, conforms to the required sections found in § 3.2, and has been or is to be approved in accordance with *Regulations* §§ 9, 10, 11, and 14.

NOTE 30: Preliminary Standards are not Standards for the purpose of this section. Safety Guidelines are also excluded because these Standards Documents are not Standards according to the *Regulations*.

3.8.3 *General Rules for Subordinate Standards* — It is highly recommended to construct Standards that describe a family of products (e.g., silicon wafers, grades of chemicals) using tables or a series of similar sections in a single Standard as much as possible. This 'Primary-Subordinate' Standards structure should only be used if there is no other way to present the information clearly or when it is necessary to address multiple similar, but noninterchangeable, options for a technical aspect of a product or method.

NOTE 31: The *Regulations* forbid multiple similar, but noninterchangeable, products to be included in one Specification Standard without approval of the GCS, RSC, and ISC (refer to *Regulations* § 1.5.8).

3.8.3.1 A Subordinate Standard can refer to, but not restate, the common parts of the Primary Standard from which it inherits common concepts or criteria.

3.8.3.2 A Subordinate Standard requires its own purpose and scope sections to define its distinction from the Primary Standard and to specify the technical area that the Standard covers and may or may not contain all of the required sections to conform to the required sections found in § 3.2.

3.8.3.3 A Subordinate Standard shall only be published under:

- the latest revision of a Primary Standard, and
- a Primary Standard for which its Status is Current.

3.8.3.4 Refer to § 3.1.2 for Subordinate Standard designations.

EXCEPTION: Some older Standards Documents are Primary Standards, but have Designation Numbers in the format used by Subordinate Standards. For example, many gas Specifications are Primary Standards, but have Designation Numbers with the format C3.xx. Standards Documents of this type can be reliably identified by the fact that they are published independently on the SEMI Standards Web site.

NOTE 32: Publishing Standards as Primary Standards with Designation Numbers in the format used by Subordinate Standards is no longer allowed. Refer to ¶ 3.8.4.4.1.

3.8.3.4.1 The Publication Date Code of a Primary Standard itself is changed by one of the following:

- addition, replacement, or withdrawal of a Subordinate Standard that is dependent on the Primary Standard or
- revision to the Primary Standard itself.

NOTE 33: As the Primary Standard's Publication Date Code changes due to any of the reasons mentioned above, a Notice should be included in the Primary Standard as well as its abstract (on the SEMI Standards Web site) providing information on which reason(s) cited in ¶ 3.8.3.4.1 caused the change of the Publication Date Code.

3.8.3.4.2 If the Publication Date Code of a Primary Standard is changed due to a revision of the Primary Standard, all of its Subordinate Standards that were not revised in the same revision and have Current Status after that revision retain their Publication Date Code, but shall be considered to be reapproved and shall be given the (Reapproved mmyy) designation.

### 3.8.4 Revisions on 'Primary-Subordinate' Standard Structure

#### 3.8.4.1 Revision of Primary Standards

3.8.4.1.1 *Preparation of Letter Ballot* — When a revision of a Primary Standard is deemed necessary by the TC Chapter, all the Current Subordinate Standards that are dependent on the Primary Standard subject to the revision proposal shall be assessed for need of revision. Include the results of this assessment in the background (refer to ¶ 2.6.4.1). Revision text for the Subordinate Standards that are assessed to need revision should be prepared in parallel to the Primary Standard revision preparation.

3.8.4.1.2 A major or line-item revision of Primary Standards should be performed in accordance with standard procedure except its Letter Ballot shall include all the Current Subordinate Standards that are dependent on the Primary Standard under revision regardless of whether each Subordinate Standard is subject to revision or not. All such Subordinate Standards are subject to voting during revision of the Primary Standard.

NOTE 34: Subordinate Standards that are Inactive are not included in the Letter Ballot.

3.8.4.1.2.1 A Line-Item Letter Ballot should be used when interdependent revisions are proposed for Primary and Subordinate Standards as such changes are included into the same Line-Item. Refer to § 3.7.

3.8.4.1.2.2 A Simultaneous Major-Revision Ballot shall be used for revision of a Primary Standard with a proposed new Subordinate Standard. Refer to § 3.7.3. All other provisions of § 3.8.4 shall apply.

3.8.4.1.2.3 Any Subordinate Standard for which no revision is proposed and it will not be compatible with the revised Primary Standard shall become Inactive upon approval of the Letter Ballot and receive the Inactive Notice prior to the publication of the revised Primary Standard, unless an action in support of such Subordinate Standard is taken during ballot adjudication.

3.8.4.1.2.4 The text of Subordinate Standards with no proposed changes will not be included in the revision Letter Ballot, but access to these Subordinate Standards will be available upon request. Voter requests for access to Subordinate Standards shall be made at least three business days before the voting deadline. If the Subordinate Standard is not available for this reason, the Voter shall not use this as justification for rejecting the Letter Ballot (i.e., those Negatives will be not related).

3.8.4.1.3 *Primary Standard Revision Checklist Required* — A copy of the Primary Standard Revision Checklist shall be included at the end of the Background Statement.

3.8.4.1.3.1 *Contents of Primary Standard Revision Checklist* — The annotated Primary Standard Revision Checklist shall contain:

- title of the Primary Standard;
- name of the TF that developed or revised the Primary Standard;
- name of the preparer of the Primary Standard Revision Checklist;
- affirmation that the following have been confirmed:
  - The background conforms to the requirements of ¶ 2.6.4.1.
  - All of the Current Subordinate Standards that are dependent on the Primary Standard are listed in the ballot, along with one of the following for each:
    - the revision text that is being revised.
    - a statement that no revision is required.

- a statement that no revision is planned and that it will be made Inactive.

#### 3.8.4.2 *Other Status Changes of Primary Standards*

3.8.4.2.1 If a Primary Standard becomes Inactive, all the Subordinate Standards dependent on it become Inactive.

3.8.4.2.2 Withdrawal of a Primary Standard is not allowed if it has any Current or Inactive Subordinate Standards. However, withdrawal of a Primary Standard and all of its dependent Subordinate Standards may be proposed by a single Letter Ballot.

3.8.4.2.2.1 Withdrawal of a Subordinate Standard is allowed if withdrawal of the particular Subordinate Standard is deemed adequate and necessary as per *Regulations* § 4.2.23.

3.8.4.2.3 Removal of a Primary Standard shall include removal of all of its Subordinate Standards.

3.8.4.3 *Independent Revision of a Subordinate Standard* — Revision of a Subordinate Standard can be done independently if the proposed revision does not contradict the Primary Standard. Revision of any Subordinate Standard causes the Primary Standard to be considered as reapproved and it shall be given the (Reapproved mmyy) designation.

3.8.4.3.1 Revision of a Subordinate Standard should be reflected in the Revision Record (refer to § 3.8.4.3.2).

#### 3.8.4.3.2 *Revision Records of Subordinate Standards*

3.8.4.3.2.1 Revision records for a Primary Standard should include Revision Records of all of its Subordinate Standards. In addition to the details of revisions to the Primary Standard, it includes a dated cross-reference to the Revision Record of each Subordinate Standard whenever that Subordinate Standard is revised. The primary Revision Record thus provides a complete audit trail for all changes to the 'Primary-Subordinate' Standard structure, but does not include the details of changes in the Subordinate Standards.

NOTE 35: Adding an entry to the Primary Standard's Revision Record related to revision of a Subordinate Standard is not a revision of the Primary Standard.

3.8.4.3.2.2 Revision records for each Subordinate Standard should include its own Revision Record to describe the detail of each change for every revision and findings of 'Revision need assessment.'

#### 3.8.4.3.3 *Cross Reference*

3.8.4.3.3.1 A list of all the Subordinate Standards relying on a Primary Standard should be included in the Primary Standard.

NOTE 36: A change in the cross-reference list is not a revision of the Primary Standard.

#### 3.8.4.4 *Process for When a Subordinate Standard Is Published as an Independent Standard*

3.8.4.4.1 Requests may be made, in a SNARF, to the TC Chapter to publish a Subordinate Standard independently as a new Standard per ¶ 3.4.2.1.1. If the TC Chapter approves the request, a Letter Ballot for replacement is necessary. Refer to ¶ 3.8.4.4.3 for the changes required to the Subordinate and Primary designations.

3.8.4.4.2 When a replacement Letter Ballot is issued to replace a Subordinate Standard with a new independently published Standard, the TC Chapter shall confirm that the Standard is technically sound and complete (e.g., includes all of the mandatory sections per § 3.2).

3.8.4.4.3 When a former Subordinate Standard is published independently, the Designation Number will change and the Subordinate Standard Number will be removed from the list of Subordinate Standards in the Primary Standard, resulting in a change to the Publication Date Code used by its Primary Standard.

### 3.9 *Preliminary Standards*

3.9.1 A Preliminary Standard (refer to *Regulations* §§ 4.2.15 and 13) is a Standard that is required urgently by the industry and therefore cannot wait the usual time necessary for Letter Ballot approval procedures prior to publication. A Preliminary Standard is not intended to serve in the place of a Full-consensus Standard. TC Chapters are encouraged to proceed with the process of issuing a Letter Ballot simultaneously with the action to approve a Preliminary Standard or as soon as possible thereafter.

3.9.2 *Conditions for Creating a Preliminary Standard* — Prior to publication, a Preliminary Standard shall have the approval of the TC Chapter, the GCS, and the ISC A&R SC (refer to *Regulations* ¶ 13.1.1). Safety Guidelines cannot be published as Preliminary Standards (refer to *Regulations* ¶ 15.1.4).

3.9.3 *Basis for Preliminary Standards* — The TF announces its intention to submit a Draft Document for approval as a Preliminary Standard at the TC Chapter meeting prior to the TC Chapter meeting at which the vote on the proposal will take place. Creation of the Draft Document for a Preliminary Standard needs to fulfill SEMI's 'consensus principles' (e.g., *Regulations* ¶¶ 1.3, 1.4, 1.5.3). Because there is no formal Letter Ballot, it is strongly recommended that one or more of the following optional activities take place prior to the TC Chapter meeting at which the vote on the potential Preliminary Standard takes place.

3.9.3.1 *Issuance of Informational Ballot* — If there is time, post and announce an Informational Ballot approximately 90 days before the TC Chapter meeting.

3.9.3.2 *Distribution of White Paper* — After the Informational Ballot, the TF submits the finished Draft Document and an explanatory background to Standards staff to be sent to the TC Members of the GTC as a white paper. These should go out approximately 30 days before the TC Chapter meeting.

3.9.3.3 *Distribution to Selected Members* — If neither of the above recommendations is feasible due to deadlines, the potential Preliminary Standard should go out to selected TC Members and/or Program Members, based on their expertise and their knowledge of the industry.

### 3.9.4 *Approval by TC Chapter*

3.9.4.1 *Inclusion in Agenda of TC Chapter* — After being informed by the TF responsible for the Letter Ballot of the intention to submit a Draft Document for approval as a Preliminary Standard, the TC Chapter includes the proposal as an item on the agenda of its next meeting.

3.9.4.2 *Submission of Draft Document* — The potential Preliminary Standard shall be presented in its final version at the TC Chapter meeting at the time of the scheduled vote.

3.9.4.3 *Approval* — As a result of the vote, the Draft Document is approved as a Preliminary Standard by the TC Chapter if at least two-thirds of the persons (or Voting Interests, if called for) voting on the issue vote in favor of the action (refer to *Regulations* ¶ 13.1.1a).

3.9.5 *Approval by a GCS* — As soon as possible after a TC Chapter approves a Preliminary Standard, Standards staff requests the approval of the GCS for that GTC (refer to *Regulations* ¶ 13.1.1b). The GCS members should be given ten days to reach a consensus on the issue. A simple majority is needed for approval. A record of the decision process and results should be included with the minutes of the next Originating TC Chapter meeting of the GTC.

3.9.6 *Approval by the ISC A&R SC* — Publication approval for a Preliminary Standard is given by the ISC A&R SC in the same way as for a Standard or Safety Guideline approved by Letter Ballot. The process and results of approval by the GCS shall be included in the report to the ISC A&R SC (refer to *Regulations* ¶ 13.1.1c).

### 3.9.7 *Limitations and Expiration*

3.9.7.1 A Preliminary Standard cannot replace a Full-consensus Standard or Safety Guideline (refer to *Regulations* ¶ 13.2).

3.9.7.2 Refer to *Regulations* §§ 13.4 and 13.5 for details on expiration and extension of Preliminary Standards.

### 3.10 *Complementary Files*

3.10.1 *Format of Complementary File* — A Complementary File may be published in any format, except .pdf, appropriate for its use. The file may be useable by a software application (e.g., extensible markup language [XML] schema files). The formatting and style should follow the rules prescribed in the *Style Manual* whenever possible or practical.

3.10.2 *Publication of Complementary File* — A Complementary File is published separately as a stand-alone Standards Document. Publication of a Complementary File occurs together with Standard or Safety Guideline of which it is an official part. It is not included as a part of the Standard or Safety Guideline in all media (e.g., SEMIViews) in which SEMI Standards are supplied to the public, but is published on the SEMI Standards Web site. Depending on the circumstances of each case, a Complementary File Standards Document may be available for downloading without charge or a fee may be required. Addition of or a change to a Complementary File associated

with its published Standard or Safety Guideline constitutes a revision of the Standard or Safety Guideline, so the Publication Date Code is modified accordingly.

### 3.11 *Supplementary Materials*

3.11.1 *Summary* — The characteristics of Related Information, Various Materials, and Auxiliary Information are summarized in Table 11 (refer to *Regulations* § 14).

**Table 11 Related Information, Various Materials, and Auxiliary Information at a Glance**

<i>Type</i>	<i>Related Information</i>	<i>Various Materials</i>	<i>Auxiliary Information</i>
<i>Publication Style</i>	Published with its Standard or Safety Guideline	Published separately from its Standard or Safety Guideline	Not published with a Standard or Safety Guideline (i.e., stand-alone Standards Document)
<i>Relation to Standard or Safety Guideline</i>	Not an official part of its Standard or Safety Guideline	Not official content of its Standard or Safety Guideline, but a part by reference	Not a Standard or Safety Guideline, nor a precursor to a future Standard or Safety Guideline
<i>Technical Approval Process</i>	a) Letter Ballot, or; b) 2/3 majority vote in TC Chapter meeting	a) Letter Ballot, or; b) 2/3 majority vote in TC Chapter meeting	2/3 majority vote in TC Chapter meeting
<i>Subsequent Approval</i>	In case of a) above: Not Required; in case of b) above: simple majority vote by GCS	In case of a) above: Not Required; in case of b) above: simple majority vote by GCS	Simple majority vote by GCS
<i>Procedural Review</i>	ISC A&R SC	ISC A&R SC	ISC A&R SC
<i>Format</i>	Follow <i>Style Manual</i>	Any appropriate format is acceptable; may be active files (e.g., Excel files that include macros)	Microsoft Word or PowerPoint preferred; any format that can be easily converted to Adobe PDF is acceptable
<i>Cover Page</i>	Not required	Not required	Title, designation, publication date, authors (with affiliation) or group issuing the Standards Document
<i>Foreword</i>	Not required	Not required	Purpose of Auxiliary Information; when, where, and by whom developed; intended use; and method of publication approval
<i>Required Notice</i>	Not an official part of Standard or Safety Guideline; source of information; authority for publication (refer to <i>Style Manual</i> Table 8, Related Information Notice)	Not an official part of Standard or Safety Guideline; source of information; authority for publication	Statement that Auxiliary Information is neither a Standard or Safety Guideline, nor a precursor of a future Standard or Safety Guideline; no SEMI endorsement of content
<i>Disclaimer</i>	As normally included with a Standard or Safety Guideline (refer to <i>Regulations</i> ¶ 4.6)	As normally included with a Standard or Safety Guideline (refer to <i>Regulations</i> ¶ 4.6)	Custom; shall be worked out with Standards staff in advance of approval

NOTE 37: Appendices are no longer considered a category of Supplementary Materials because they are an official part of a Standard or Safety Guideline and always accompany the Standard or Safety Guideline to which they belong through the letter balloting process.

NOTE 38: XML schema and web services definition language (WSDL) files that are an official part of a Standard or Safety Guideline are no longer considered a category of Supplementary Materials and are now Complementary Files because they are an official part of a Standard or Safety Guideline and always accompany the Standard or Safety Guideline to which they belong through the letter balloting process. However, XML schema and WSDL files that are not an official part of a Standard or Safety

Guideline are considered a category of Supplementary Materials, referred to as Various Materials, and may or may not accompany the Standard or Safety Guideline to which they belong through the letter balloting process. A Various Material file accompanies the Standard or Safety Guideline to which it belongs through the letter balloting process if it was developed or revised with the Standard or Safety Guideline, but also may be approved by a vote of the TC Chapter if developed separately (refer to *Regulations* § 8.4.2.3).

### 3.11.2 *Related Information*

3.11.2.1 *Format of Related Information Sections* — The format of Related Information sections shall follow the rules prescribed in the *Style Manual*.

3.11.2.2 *Publication of Related Information Sections* — Publication of Related Information occurs together with the applicable Standard or Safety Guideline. It is also included as a part of the Standard or Safety Guideline in all media in which SEMI Standards are supplied to the public. Addition of or a change to a Related Information section in a published Standard or Safety Guideline constitutes a revision of the Standard or Safety Guideline, so the Publication Date Code is modified accordingly.

3.11.2.3 *Removal* — Refer to *Regulations* ¶ 14.4.1.

### 3.11.3 *Various Materials*

3.11.3.1 *Format of Various Materials* — A Various Materials file may be published in any format, except .pdf, appropriate for its use. The file may be useable by a software application (e.g., Excel files that include macros). The formatting and style should follow the rules prescribed in the *Style Manual* whenever possible or practical.

3.11.3.2 *Publication of Various Materials* — Various Materials is published separately as a stand-alone Standards Document. Publication of Various Materials occurs together with the applicable Standard or Safety Guideline. It is not included as a part of the Standard or Safety Guideline in all media (e.g., SEMIViews) in which SEMI Standards are supplied to the public, but is published on the SEMI Standards Web site. Depending on the circumstances of each case, the Various Materials Standards Documents may be available for downloading without charge or a fee may be required. Addition of or a change to a Various Materials associated with a published Standard or Safety Guideline constitutes a revision of the Standard or Safety Guideline, so the Publication Date Code is modified accordingly.

3.11.3.3 *Removal* — Refer to *Regulations* ¶ 14.4.1.

3.11.4 *Auxiliary Information* — Auxiliary Information is published separately as a stand-alone Standards Document. Examples are proceedings of a workshop conducted by the TC Chapter or a report prepared by a Program or other group that contains nonproprietary information deemed by the TC Chapter to be of general use to the industry. Auxiliary Information shall be generated by an identifiable, responsible organization or individual. Generally, material that is to be revised frequently is not appropriate for publication as Auxiliary Information; instead, it should be attached to TC Chapter minutes. SEMI takes no responsibility for the content of this type of information and provides no endorsement of the content.

3.11.4.1 Auxiliary Information is never to be construed as an official or adopted Standard or Safety Guideline. Also, the material included in this type of Auxiliary Information is specifically identified as not being the precursor to a Standard or Safety Guideline. This means that, except for the case where work-in-progress is being described in workshop proceedings, there is no intent to attempt to develop industry consensus leading to a Standard or Safety Guideline around the information in the Auxiliary Information. To develop industry consensus on any topic, the regular consensus-building processes leading to balloting and publication of a Standard or Safety Guideline should be used.

#### 3.11.4.2 *Requirements for Submission of Auxiliary Information*

3.11.4.2.1 *File Format* — It is preferred that this Standards Document be provided in Microsoft Word, but other formats may be acceptable if approved by Standards staff in advance of submission. The information may be provided in any format that can be easily converted to Adobe PDF format. Microsoft Word and PowerPoint are preferred formats.

3.11.4.2.2 *Contents* — Because this type of Auxiliary Information is developed outside the formal SEMI Standards development process, it is essential that it be clearly identified. The package to be presented to the TC Chapter for approval shall be developed in consultation with Standards staff in order to ensure that the necessary cover page, foreword, and disclaimers are prepared. The cover page, foreword, and disclaimers shall accompany the Auxiliary Information through the TC Chapter and GCS review process.

3.11.4.2.3 *Cover Page* — The cover page is prepared by Standards staff. Among other things, it contains the:

- title of the Auxiliary Information,
- designation,
- date of publication, and
- names and affiliations of the authors or identification of the group issuing this Auxiliary Information.

3.11.4.2.4 *Foreword* — The foreword contains:

- the purpose of the Auxiliary Information;
- when, where, and by whom the Auxiliary Information was developed;
- the intended use of the Auxiliary Information; and
- the manner in which publication was approved.

Note that the foreword contains the same information included in the required Notice in Related Information published with a Standard or Safety Guideline except for its intended use, and thus satisfies the requirements of *Regulations* ¶ 14.2.

3.11.4.2.5 *Disclaimers* — It is particularly important to develop the proper disclaimers when the Auxiliary Information is developed outside the formal Program GTC structure. Such disclaimers shall satisfy the needs of both SEMI and the preparing group; they may have to be cleared through SEMI legal counsel. The disclaimer also includes a copyright Notice, acceptable to both SEMI and the group issuing the Auxiliary Information; this copyright Notice may also be repeated in the footer of each page of the Auxiliary Information.

3.11.4.2.6 *Additional Information* — Standards staff shall be advised of the origin of the Auxiliary Information, and supplied with both a single specific contact from each contributing organization that may have a copyright interest in the published Auxiliary Information, and a description of any planned companion Standards Documents.

### 3.11.4.3 *Approval Process*

3.11.4.3.1 *Advance Notice to Global Technical Committee Members* — The following should be distributed 30 days or more in advance of the TC Chapter meeting at which the Auxiliary Information is to be considered for publication:

- a complete copy of the Auxiliary Information including the proposed cover page, foreword, and disclaimers; and
- a Notice indicating the time and location of the TC Chapter meeting at which approval to publish is to be considered.

3.11.4.3.2 *TC Chapter Vote* — Publication of Auxiliary Information shall be approved by a two-thirds vote in favor at a scheduled TC Chapter meeting (refer to *Regulations* ¶ 14.3.3). Any comments or rejections raised at the TC Chapter meeting shall be considered carefully.

3.11.4.3.3 *Subsequent Approvals Required for Publication of Auxiliary Information* — To ensure global awareness, the responsible GCS shall review and approve Auxiliary Information approved by the TC Chapter. To ensure proper procedural conduct, the ISC A&R SC shall perform a procedural review and approve the TC Chapter and GCS actions (refer to *Regulations* ¶ 14.3.3).

3.11.4.4 *Publication* — Auxiliary Information Standards Documents are posted only as locked PDF files to the SEMI Standards Web site (refer to § 2.16.4.3) and do not appear in other media. Standards staff does not provide any editorial services for Auxiliary Information Standards Documents and does not modify the text in any way. Except for the addition of a cover page, foreword, copyright Notice, and suitable disclaimers, the Auxiliary Information Standards Documents are posted in the form provided by the originator(s). Auxiliary Information Standards Documents are designated as AUX##-mmyy, where ## is a sequential number assigned by Standards HQ staff and mmyy is the code for the month and year of posting on the SEMI Standards Web site. Depending on the circumstances of each case, the Auxiliary Information Standards Documents may be available for downloading without charge or a fee may be required.

3.11.4.5 *Use* — The use of Auxiliary Information Standards Documents is controlled by the standard SEMI Web download license agreement (available for viewing on the SEMI Standards Web site) as modified by the disclaimer

statement in each Auxiliary Information. In general, permission is granted for Auxiliary Information Standards Documents to be reproduced and distributed for one or more particular specified purposes provided that

- the Auxiliary Information Standards Documents are maintained in its original form, and
- the foreword and disclaimer pages accompany the Auxiliary Information Standards Documents at all times.

The user should refer to the disclaimer page in each Auxiliary Information Standards Document for specific limitations.

3.11.4.6 *Removal* — Refer to *Regulations* ¶ 14.4.2.

3.11.5 *SEMI-Maintained Auxiliary Information* — Like Auxiliary Information without modifier, this type of Auxiliary Information Standards Document is published as a stand-alone Standards Document. However, this type of Auxiliary Information is maintained by Standards staff. AUX001 (Vendor ID List) is an example of a SEMI-maintained Auxiliary Information.

3.11.5.1 SEMI-maintained Auxiliary Information is never to be construed as an official or adopted Standard or Safety Guideline. However, it often contains information that will be used as a reference by one or more existing Standards or Safety Guidelines. For example, AUX001 contains substrate vendor identification codes that may be used in conjunction with one or more Standards or Safety Guideline that apply to substrates. Typically, the need for such a reference source is the reason behind the creation of a SEMI-maintained Auxiliary Information Standards Document.

3.11.5.2 *Approval Process* — The approval process is the same as for independently originated Auxiliary Information. However, agreement from Standards HQ staff to maintain this Standards Document is also required.

3.11.5.3 *Revision* — Due to the type of content it contains, SEMI-maintained Auxiliary Information is often revised through direct contact with Standards staff. Usually, direction for submitting revisions will be included in the Standards Document itself.

### 3.12 *Terminology Letter Ballots and Standards*

3.12.1 *Standards Containing Only Terminology* — Terminology Standards (refer to *Regulations* ¶ 4.2.24.6) are collections of terms and explanations of symbols, abbreviations, or acronyms (hereinafter referred to as definitions) formally defined for general use within Standards and Safety Guidelines. Each definition is usually independent of any other in the Standards Document.

3.12.2 *Treatment of Terminology Standards Letter Ballots* — Each definition in a Letter Ballot of a Terminology Standard may be reviewed independently as if each definition were issued as a Line Item. A definition that receives a Negative or Comment that is found to be persuasive may be removed from the balloted Draft Document without affecting the acceptability of the remaining portions of that Standard. A Negative on any part of a Terminology Standard other than the definitions shall be considered in the usual manner.

3.12.3 *Definitions Taken Unchanged from Published Standards or Safety Guidelines* — Definitions from existing published Standards or Safety Guidelines may be included, without change, in a Terminology Standard as editorial additions, which would be regarded as Type 2 editorial changes (refer to ¶ 2.16.3.2) to the Terminology Standard. Such a definition shall include a reference to its source Standards Document (e.g., SEMI M1).

NOTE 39: Consistency of definitions in Standards and Safety Guidelines is very desirable. It is recommended that the *SEMI International Standards Compilation of Terms* (hereinafter referred to as *Compilation of Terms*) be consulted prior to Letter Ballot submission.

3.12.3.1 If a Reject Vote or Comment is submitted on such a definition, it should be treated as not related and becomes new business.

3.12.3.2 Any change proposed to a previously published definition shall be made first in the published Standards Document(s) from which the term was taken. Correction of the definition in the Terminology Standard is then an editorial change, which would be an editorial change of Type 2.

3.12.4 *Report of Actions Taken by the TC Chapter* — The A&R Form shall include all elements normally required and, in addition, a list of all definitions removed from the balloted Standards Document prior to TC Chapter approval. The list shall cite the reasons for removal of each such definition.

### 3.13 Revisions with Deferred Effective Dates

3.13.1 *Purpose of Deferred Effective Dates* — There may be special reasons why a TC Chapter may wish to revise a Standard or Safety Guideline, but delay the effective date of the revision until a later time. The procedure described starting in § 3.13.3 is suitable for this purpose.

3.13.2 *Precautions* — Care shall be taken to assure the following:

- parts of the published Standard or Safety Guideline that are currently effective can be easily distinguished from parts of the published Standard or Safety Guideline that are not currently effective;
- parts of the published Standard or Safety Guideline that are not currently effective are clearly labeled with the date upon which they will become effective;
- parts of the published Standard or Safety Guideline that will be replaced by a revision that has been approved by Letter Ballot procedure are clearly labeled; and
- whether or not revisions that have been approved, but are not in effect, may optionally be used is clearly indicated.

3.13.3 *Procedure for Deferred Effective Dates* — A new Standard or Safety Guideline or a revision of a published Standard or Safety Guideline that contains material that is to have a deferred effective date shall abide by the following:

3.13.3.1 A revision Letter Ballot without Line Items, or revision material within any single Line Item, shall have the same effective date, regardless of whether that date is immediate or deferred.

3.13.3.2 The scope and rationale of the changes will be clearly documented in the background of the Letter Ballot.

3.13.3.3 The effective dates and whether optional implementation prior to those dates is permitted will be clearly documented within the Letter Ballot itself. The effective date and permissibility of optional implementation are considered technically substantive portions of the proposed changes and, as such, are valid bases for a Vote of Reject on the balloted changes.

3.13.3.4 Standards or Safety Guidelines that contain revisions that are not to take immediate effect shall include Notices immediately preceding the first section of the Standard or Safety Guideline and preceding each part of the Standard or Safety Guideline that is to be replaced by revised information, introducing the delayed revision material. Refer to the *Style Manual* for the exact wording of these Notices.

3.13.3.5 Material that is to become effective at a later date shall be placed in one or more Delayed Revision sections dedicated solely to this purpose. These sections shall follow all other Related Information sections.

3.13.3.5.1 If there are two or more effective dates for the revisions, revisions with different effective dates cannot be included in the same Delayed Revision section.

3.13.3.5.2 In general, the Delayed Revision sections should be ordered by the date of approval with one Delayed Revision section per Line Item. However, unpublished sections, having the same effective date, may be grouped into fewer Delayed Revision sections during final Standards Document preparation for publication, if it improves the readability of the material.

NOTE 40: Revisions to Delayed Revision sections are strongly discouraged.

3.13.3.5.3 Delayed Revision sections shall contain a Notice following the title, explaining the conditions of applicability. Refer to the *Style Manual* for the exact wording of the Notice.

3.13.3.5.4 Within each Delayed Revision section, revisions shall be organized to match the order in which they will appear in the Standard or Safety Guideline, and be grouped by their subsection in which they would appear. Each group of revisions shall have a subsection title in the following format:

**Revision to [Section/Figure/Table] [number] — [Optional/Not Optional] Before Effective Date**

### 3.13.4 *Publication Designation and Process*

3.13.4.1 At the effective date of each revision, the revisions are incorporated by Standards staff into the Standard or Safety Guideline, and the Standard or Safety Guideline receives a new Publication Date Code.

3.13.4.2 If there are no immediately effective revisions, the Publication Date Code following the Standard's or Safety Guideline's designation does not change, but a new lowercase suffix letter is added to the code (e.g., SEMI S2-0303a).

If multiple revisions with deferred effective dates are published prior to the first effective date, the suffix letter will change in alphabetical sequence. This sequence is eliminated by a changed Publication Date Code and shall restart after that date (e.g., SEMI S2-0303a, SEMI S2-0303b, SEMI S2-1104, SEMI S2-1104a) (refer to § 3.1).

### 3.14 *Revision Record*

3.14.1 *Purpose of the Revision Record* — The Revision Record is a recommended final page of every SEMI Standard, and Safety Guideline. An entry in the Revision Record is recommended each time one of these Standards Documents is changed, by Letter Ballot action or editorially, in such a way that the Publication Date Code is changed. This provides the start of an audit trail that meets the requirements of International Organization for Standardization's (ISO) standard ISO 9000 and similar widely used document revision control practices.

3.14.2 *Elements of the Revision Record Table* — Each entry shall contain the following items:

- *cycle* — Date of change (e.g., 0309);
- *authorization* — Source of change (e.g., Letter Ballot xxxx, PIP, PCR, Standards staff action);
- *section/paragraph numbers* — Where the change occurred; and
- *description* — A concise description of the change(s) (e.g., editorial correction, periodic technical review without change, general revision, added sections/paragraphs x.xx, y.yy, and z.zz).

3.14.3 *Responsibility for Entries* — Information required for an entry should be added to the background by the responsible TF and TC Chapter at the time of its Letter Ballot submission. If the information is not provided in the background, Standards staff is authorized to add basic entries to the Revision Record. These actions are considered to be editorial. Adding or correcting an entry to the Revision Record is not, of itself, reason to add another entry to it.

3.14.4 *Corrections to Entries* — If an error is noticed in an entry on the Revision Record at any time, corrective information should be provided to Standards staff for action.

3.14.5 *Protection from Reject Votes* — Negatives of Reject Votes based on errors in the Revision Record will render those Negatives not related. It is not technical information in the same sense as the other contents of a Standards Document, and thus a technical objection cannot be raised against it. Refer to ¶ 3.14.4 for correction procedure.

3.14.6 *Required Notice* — Refer to the *Style Manual* Table 8, Revision Record Notice for the required Notice. It shall appear under the Revision Record title and before any other text.

### 3.15 *Notices*

3.15.1 Notices contain required official information and are included as part of all Standards Documents and Background Statements of ballots.

3.15.1.1 Many Notices are required for inclusion (e.g., refer to *Regulations* ¶¶ 9.2.5.1.1 and 16.3.6.2) while others are optional as defined in the *Regulations*, *Procedure Manual*, and *Style Manual*.

3.15.2 All Notices are supplied and maintained only by Standards HQ staff and are not subject to revision by other Standards staff or Program Members.

3.15.2.1 The official text of Notices is mostly defined in the *Style Manual* § 10, but others are defined in the *Regulations*. Required Notices (i.e., Notices either directly defined in the *Regulations* or Notices required by the *Regulations* and defined in the *Style Manual*) shall not be altered or replaced with a Notice recommended by other Standard staff or Program Members per ¶ 3.15.2.2.

3.15.2.2 Other Standards staff or Program Members can recommend the use of a new Notice in a Standards Document. Incorporation of such a Notice that does not overlap or contradict with the required Notices may be allowed if a written approval is received from Standards HQ staff prior to balloting or TC Chapter approving the incorporation for Standards Documents (e.g., Auxiliary Information) approved without balloting.

3.15.3 Standards HQ staff shall insert and update Notices as needed during formatting for publication.

3.15.4 Notices are not subject to Negatives or Comments during balloting (i.e., unrelated).

## 4 TC Chapter Meetings

### 4.1 Prior to a TC Chapter Meeting

4.1.1 *Scheduling a TC Chapter Meeting* — A TC Chapter meeting is usually scheduled by Standards staff during the regular Standards meetings of each Region and Locale.

4.1.1.1 A TC Chapter may hold meetings regularly according to prior agreement among the TC Members. Furthermore, by approval from the TC Chapter cochairs, an ad hoc meeting may be held upon request from the TC Members or Standards staff.

4.1.1.2 In the absence of a regular meeting schedule, the TC Chapter cochairs make the decision to hold a meeting. The TC Chapter cochairs suggest a meeting date to Standards staff. This request includes the following information:

- name of TC Chapter,
- number of physical attendees expected (for meeting room size needs),
- date of meeting,
- meeting time and length,
- meeting agenda,
- setup needed (e.g., classroom, theater, Virtual Meeting capability), and
- audiovisual requirements (e.g., computer, overhead projector, screen).

4.1.1.3 Standards staff notifies the TC Chapter cochairs of the final schedule for the meeting and provides Virtual Meeting contact information, if appropriate.

4.1.2 *Announcement of Meetings* — Standards staff posts the TC Chapter meetings on the SEMI Standards Web site that is open to the public. For nonregular meetings, the TC Chapter cochairs of the meetings may request Standards staff's cooperation in distributing a meeting notice.

4.1.2.1 *Additional Notice of Meeting* — Standards staff sends a meeting notice to all the TC Members of the GTC to which the TC Chapter belongs. The method of distribution is decided by the SEMI regional office.

4.1.2.2 *Timing of Notification* — For TC Chapter meetings intended to review Letter Ballots or decide on TC Chapter actions (e.g., approve TFOFs or SNARFS, authorize Letter Ballot issuance), notification shall be posted no later than 30 days prior to that meeting. It is preferable that the notice of any other TC Chapter meeting be posted 30 days prior to the meeting.

NOTE 41: Change of date or location for a TC Chapter Meeting that is specified to do the review in the Background Statement (refer to § 2.6.4) of a Letter Ballot is not allowed except in a force majeure case (refer to *Regulations* ¶ 9.5 and Exceptions).

4.1.3 *Preparation of Agenda* — The TC Chapter cochairs or Standards staff may prepare the agenda.

4.1.3.1 *Prior Distribution of Agenda* — The TC Chapter meeting agenda should be distributed along with the announcement of the meeting by Standards staff to promote preparation, and to help each TC Member judge if their physical attendance or virtual participation is required.

4.1.3.2 *Contents of Agenda* — A basic agenda includes the following elements:

- call to order and self-introduction of participants,
- Required Meeting Elements (i.e., Review of Program Membership Requirement, Review of Antitrust Reminder, Review of Intellectual Property Reminder, and International Effective Meeting Guidelines),
- review and approval of last meeting minutes,
- Standards staff report,
- Letter Ballot review,
- liaison reports (e.g., other Regions and Locales, other organizations),
- TF and subcommittee reports,

- old business,
- new business,
- action item review, and
- next meeting date and time.

4.1.3.2.1 *Agenda for Jointly Held TC Chapter Meetings* — The call to order, Required Meeting Elements, and Standards staff report should precede the remaining agenda elements, which should be listed separately for each TC Chapter.

4.1.3.2.2 *Inclusion of Technical Presentations in TC Chapter Meetings* — A TC Chapter may include technical presentations as part of its meeting in order to share technical information for the following purposes:

- to start Standards Document Development Projects,
- to enlist further participation in ongoing Standards Document Development Projects, and
- to educate Program Members, including its TC Members.

NOTE 42: Planning for workshops, Standards Technical Education Programs (STEPs), or technical presentations independent of a TC Chapter meeting is conducted differently.

EXCEPTION: Presenters of technical presentations are not required to be Program Members. However, unless they are Program Members, they are not allowed to attend any portion of a TC Chapter Standards meeting except for their presentation and any question-and-answer session following the presentation.

4.1.3.2.2.1 *Confidential Material* — Technical presentations shall not include confidential material. TC Chapter meetings are public forums, and content presented during such meetings has therefore been made public.

4.1.3.2.2.1.1 The TC Chapter chair or the Program Member, who is designated by the TC Chapter to contact and invite the presenter of the technical presentation, shall notify the presenter that any information included in the presentation will be regarded to be publicly disclosed. This notification shall be made in advance for the TC Chapter meeting at which the technical presentation is planned.

4.1.3.2.2.2 *Copyrighted Item* — Technical presentations should not include Copyrighted Items if any of the copyright owners would object to the material being made available as an attachment to the TC Chapter meeting minutes. If such Copyrighted Item is essential to the presentation, a version of the presentation that excludes such Copyrighted Item should be made available for inclusion with the TC Chapter meeting minutes. Specific references (e.g., document title, section/paragraph number[s], source information) to the excluded material should be included in its place.

4.1.3.3 *Approval of Agenda* — The TC Chapter cochaIRS give final approval of the agenda (refer to § 4.2.2).

## 4.2 *Conducting a TC Chapter Meeting*

NOTE 43: For additional procedures related to Official Virtual TC Chapter Meetings, refer to § 4.3.

NOTE 44: Based on the requirements of this section, at least four participants are required to conduct a TC Chapter meeting: a presiding chair, a Standards staff (to record attendance and minutes), and participants that represent at least two voting interests (for the motion, second, and voting process; refer to *Regulations* ¶ 7.2.2.1).

4.2.1 *Leading the Meeting* — A TC Chapter cochair leads the meeting. In the event that no cochaIRS will attend the meeting, a cochair may designate another TC Member to chair the meeting or Standards staff can assist in finding a temporary chair.

4.2.1.1 *Presiding Cochair* — Although most TC Chapters have more than one cochair, only one person leads the meeting at any given time. This person is referred to as ‘presiding cochair.’ Note that the presiding cochair does not usually vote on issues brought before the TC Chapter (refer to ¶ 4.2.5.4), and should not express any bias on these issues. Any cochair who wishes to vote on an issue, or does not feel that they can refrain from expressing bias on an issue, should refrain from acting as presiding cochair while the issue is before the TC Chapter.

4.2.2 *Confirmation and Modification of Agenda* — The TC Chapter cochaIRS shall confirm the agenda at the beginning of the meeting, then make modifications as required. If any need arises for addition to the agenda during the meeting, such additional topics may be discussed under new business.

4.2.3 *TC Member Roster and Participant Sign-In List* — Standards staff supplies the TC Chapter with a TC Member roster and blank participant sign-in list for the participants physically present at the meeting.

4.2.3.1 Standards staff records the attendance for all virtual participants in the meeting, including those who are not using the Official Virtual TC Chapter Meeting software application.

4.2.4 *Preparation and Handling of Minutes* — Standards staff is responsible for taking the minutes for all TC Chapter meetings (refer to *Regulations* ¶ 7.8).

4.2.4.1 *Contents of Minutes* — The published meeting minutes should contain the following:

- date/location of meeting,
- all participants (indicating type of the participation),
- record of approval of minutes from previous meeting,
- new and open action items,
- records of Letter Ballot review,
- records of other discussions,
- records of presentations (e.g., liaison reports),
- records of decisions (e.g., passed motions),
- next meeting date if set, and
- (as attachments to the minutes) copies of subcommittee and TF reports.

4.2.4.1.1 *Minutes of Jointly Held TC Chapter Meetings* — The conduct and minutes of each TC Chapter in a jointly held meeting are to be separate and distinct, so that each TC Chapter can publish its CER and minutes without containing nonrelevant information.

4.2.4.1.2 *Records of Subcommittee or TF Meetings* — The subcommittee and TF minutes or a summary report presented at a TC Chapter meeting are attached to the minutes of that meeting.

4.2.4.2 *Translation of Minutes* — For minutes taken in a language other than English by Standards staff, Standards staff is responsible for translation into English.

4.2.5 *Motion and Second Process*

4.2.5.1 *Conduct Procedures* — TC Chapter meetings should be conducted according to the motion and second process.

4.2.5.2 *Discussion Process* — Discussion requiring a concrete conclusion shall proceed as follows.

4.2.5.2.1 *Decision Process* — The presiding cochair of the meeting leads the decision process and confirms that motions are resolved properly. A new motion cannot be addressed until the motion on the floor has been resolved. A motion is resolved when the discussion and the voting are finished on that motion, or the person who made the motion withdraws it.

4.2.5.2.2 *Making a Motion* — The initiator of the motion should signal (e.g., raising hand if physically attending, speaking loudly if participating virtually) to request recognition by the presiding cochair. If selected by the presiding cochair, the initiator should state the motion and reason for the motion clearly using the proper wording ('I move...'). The presiding cochair ensures that there is no other discussion until the motion on the floor is stated.

4.2.5.2.3 *Deciding to Take Up a Motion* — After the motion is stated, the presiding cochair confers with the TC Chapter as to whether the motion should be taken up or not.

NOTE 45: In North America, the generally accepted way of doing this is to request a 'second' or someone to support the motion. In this case, the presiding cochair asks for someone to second the motion and that person's name is recorded in the minutes.

4.2.5.2.4 *Discussion* — The presiding cochair confirms that the TC Chapter is taking up the motion and asks for discussion. Participants in the meeting should raise their hands (or otherwise indicate, especially if participating

virtually) to request permission to speak from the presiding cochair. The presiding cochair ensures that all opinions are heard and that the discussion does not stray from the original motion.

4.2.5.2.5 *Vote* — After discussion has concluded, the presiding cochair confirms again that there are no more opinions, asks for the motion to be repeated, and requests a vote on the motion. When the motion is repeated, the presiding cochair may explain the motion, the reason behind it, and the effects of it passing or failing to confirm the understanding of the participants. Motions may not be grouped together for one vote. Except for the following cases, results of the vote are established by simple majority:

- approving a Preliminary Standard: two-thirds majority (refer to *Regulations* ¶ 13.1.1a),
- approval for publication of nonballoted Related Information, Various Materials, or Auxiliary Information: two-thirds majority (refer to *Regulations* ¶¶ 14.3.1.2, 14.3.2.2, and 14.3.3),
- voting to find a Negative not related or to find a Negative not persuasive: two-thirds majority (refer to *Regulations* ¶¶ 9.6.1.4.1.1 and 9.6.1.4.5),
- voting to find a Negative related or to find a Negative persuasive: greater than one-third vote (refer to ¶ 2.11.3.1.3.1 and *Regulations* ¶ 9.6.1.4.2), and
- voting to find a Negative not persuasive in order for it to be eligible for a finding of not significant: nine-tenths majority (refer to *Regulations* ¶ 9.6.1.4.5.2).
- voting to find a negative related and not persuasive: two-thirds majority (refer to ¶ 2.11.3.1.3.2).

4.2.5.2.6 *Handling Abstentions* — For votes during a TC Chapter meeting, abstentions are not included in the tally of votes.

4.2.5.3 *Voting by Voting Interest* — Refer to *Regulations* § 7.2.2 for when interest voting is required. When interest voting, Standards staff can display the Voting Interest (e.g., employer and parent organization) name, if different, of each participant for verification of voting interest, if necessary, to all participants. Standards staff may also access the Program membership records to determine a participant's parent organization and/or its affiliate. Refer to *Regulations* § 3.2 for more information about Voting Interests.

4.2.5.4 *Voting by Cochairs* — A presiding cochair does not participate in voting, except to break a tie. Cochairs that are not acting as the presiding cochair may participate in voting.

4.2.5.5 *Records of Discussion* — For all resolutions, the following items should be recorded in the minutes:

- contents of motions and names of those who made them (and seconded them, if applicable),
- summary of opinions expressed during discussion,
- number of accept votes and reject votes, and
- results of resolution.

4.2.6 *Recording and Clarification of Decisions* — Decisions, including action items, should be documented and displayed to the participants at the meeting for their confirmation, then included in the meeting minutes.

4.2.7 *Next Meeting Date* — The projected date and time of the next meeting should be agreed upon before closing a meeting if possible and noted in the minutes.

### 4.3 *Official Virtual TC Chapter Meeting Practices*

NOTE 46: This section does not apply until SEMI announces that it has completed the necessary infrastructure for Official Virtual TC Chapter Meetings (refer to *Regulations* ¶ 7.4.2).

#### 4.3.1 *Definitions*

4.3.1.1 *Official Virtual TC Chapter Meeting Session (hereinafter referred to as Session), n.* — The portion of a single Official Virtual TC Chapter Meeting interrupted only by short breaks.

#### 4.3.2 *Duration*

4.3.2.1 A Session should not be conducted for more than 2 hours without a break of at least 10 minutes.

4.3.2.1.1 The maximum duration of all breaks within a Session should not exceed two hours.

4.3.2.2 A Session should not be scheduled to last for more than six hours, including breaks.

4.3.2.3 The total scheduled duration of all Sessions of a single Official Virtual TC Chapter Meeting should not exceed 12 hours.

4.3.2.4 For a single Official Virtual TC Chapter Meeting, the minimum time from the end of the last Session on the first day to the start of the next Session on the following day should be at least 12 hours.

4.3.2.5 The elapsed time from initial call to order to final adjournment of a single Official Virtual TC Chapter Meeting should not exceed 48 hours.

4.3.2.6 If multiple Official Virtual TC Chapter Meetings of a GTC are held, the next one should start at least 24 hours after the final adjournment of the prior one.

#### 4.3.3 *Schedule*

4.3.3.1 An Official Virtual TC Chapter Meeting, including its individual Sessions, should be scheduled to minimize the inconvenience (e.g., nonnormal work hours) for the host Locale and to maximize the number of expected global virtual participants.

4.3.3.2 The order of business, as set by the published agenda, of an Official Virtual TC Chapter Meeting, including its individual Sessions, should be scheduled to minimize the inconvenience for the maximum number of expected global virtual participants outside the host Locale in order for them to more easily participate in the highest priority business activities (e.g., ballot review is a higher priority than SNARF reviews and various group reports).

#### 4.3.4 *Equal Participation*

4.3.4.1 Standards staff and the TC Chapter cochairs are jointly responsible to ensure equality of participation in decision making by virtual participants in an Official Virtual TC Chapter Meeting (refer to *Regulations* ¶ 7.5).

4.3.4.1.1 Any virtual participant, who desires to officially participate (i.e., vote) in the Official Virtual TC Chapter Meeting, shall use the Official Virtual TC Chapter Meeting software application.

4.3.4.2 If this requirement cannot be met, due to temporary infrastructure failure at the physical meeting location as described in the Background Statement of the Letter Ballot or at the location of the Standards staff for a virtual-only Official Virtual TC Chapter Meeting, the Session shall be held in abeyance or adjourned until such time as it can be continued, subject to the limitations of § 4.3.2 and *Regulations* ¶ 9.5.1 and Exception.

#### 4.3.5 *Template-Led, Documented Procedures*

4.3.5.1 Critical information for any vote towards a decision of the TC Chapter shall be shown in a written English form before voting takes place on the motion so that what is voted on can be understood by all of the participants, including global virtual participants and/or those whose first language is not English.

NOTE 47: Translation to a local language may be provided in addition to English.

4.3.5.2 Standardized templates for motions are included in the software application. For example, the appropriate A&R Form is recommended for use throughout all of the Letter Ballot review process.

4.3.5.2.1 Critical information for any vote towards a decision of the TC Chapter shall be displayed and recorded that includes:

- exact wording of the motion,
- who makes the motion and second,
- key discussion points/summary, and
- counts of votes for and against the motion.

NOTE 48: The presiding cochair should request confirmation from the participants that the displayed discussion points/summary adequately reflects the key information during the discussion.

#### 4.3.6 Procedure for Transition

4.3.6.1 *GTC Decision for Whether or Not to Adopt the Official Virtual TC Chapter Meeting* — During the transition period every GTC that has two or more TC Chapters is requested to decide if the GTC adopts the Official Virtual TC Chapter Meeting or not.

4.3.6.1.1 The transition period starts when SEMI officially announces that it has completed the necessary infrastructure for implementation of the Official Virtual TC Chapter Meeting.

4.3.6.1.2 A GTC shall not use the Official Virtual TC Chapter Meeting if at least a two-thirds majority of the TC Chapters under the GTC vote not to adopt the Official Virtual TC Chapter Meeting.

4.3.6.1.2.1 The motion not to adopt the Official Virtual TC Chapter Meeting shall be made by a nonpresiding TC Chapter cochair (if necessary, the presiding chair can designate a TC Member to temporarily preside) at the earliest available TC Chapter meeting of each Locale for the GTC after the transition period starts. Voting is limited to TC Members of the GTC for the TC Chapter.

4.3.6.1.2.2 If a traditional (i.e., face-to-face) meeting cannot be scheduled within six months from the start of the transition period in any of the participating Locales for a force-majeure reason or a TC Chapter only meets annually, a GCS shall issue a special online ballot to the TC Members in which each voter indicates affiliation with one of its TC Chapters and votes to adopt or not to adopt the Official Virtual TC Chapter Meeting.

4.3.6.1.3 The transition period ends for a GTC when all of its TC Chapters have completed a simulation of an Official Virtual TC Chapter Meeting or a GTC has decided not to adopt an Official Virtual TC Chapter Meeting in accordance with § 4.3.6.1.2.

4.3.6.2 *Simulation of the Official Virtual TC Chapter Meeting* — If a GTC adopts the Official Virtual TC Chapter Meeting either by default or by choice, it shall conduct at least one simulation of the Official Virtual TC Chapter Meeting in conjunction with a traditional TC Chapter meeting in each Locale that has a TC Chapter of the GTC.

EXCEPTION: If scheduling of a traditional TC Chapter meeting is not feasible for any of the participating TC Chapters due to the current COVID-19 pandemic, conducting a training session, including simulated use of Official Virtual TC Chapter Meeting infrastructure, is regarded as fulfilling the above requirement.

#### 4.3.6.3 Procedure for Changing the GTC Decision Regarding Adoption of the Official Virtual TC Chapter Meeting

4.3.6.3.1 If a GTC that formerly decided to adopt the Official TC Chapter Meeting desires to reverse the decision after trying the simulation or conducting an Official Virtual TC Chapter Meeting, it may reverse the decision if the following conditions are met;

- the GTC still has two or more TC Chapters,
- a motion to reverse the decision passes at one of its TC Chapter,
- other TC Chapter(s) support the motion so that at least a two-thirds majority of the TC Chapters under the GTC support the reversal of the decision, and
- a motion to support the reversal of the decision passes the GCS.

4.3.6.3.2 If a GTC that formerly decided not to adopt the Official TC Chapter Meeting desires to reverse the decision, it may reverse the decision if the following conditions are met;

- a motion to reverse the decision passes at one of its TC Chapter, and
- other TC Chapter(s) supports the motion so that at least a two-thirds majority of the TC Chapters under the GTC support the reversal of the decision.

4.3.6.3.2.1 When the former decision of not adopting the Official TC Chapter Meeting is reversed by a GTC, ¶ 4.3.6.2 applies.

#### 4.4 After a TC Chapter Meeting

##### 4.4.1 Publishing CERs for Meetings

4.4.1.1 A CER shall be prepared by Standards staff and posted on the SEMI Standards Web site within ten business days of the Locale in which the TC Chapter is established after each meeting.

4.4.1.2 *Contents of CERs* — CERs shall contain the following:

- date/location of physical meeting or the location of the Standards staff for a virtual-only Official Virtual TC Chapter Meeting,
- Letter Ballot review summary,
- record of Letter Ballot review (refer to *Regulations* ¶ 9.9) if a Letter Ballot was passed,
- leadership changes,
- upcoming authorized Letter Ballots, and
- new activities and their respective SNARFs if approved at the TC Chapter meeting.

4.4.1.2.1 CER may also contain:

- next meeting if set, and
- special announcements.

4.4.2 *Publishing Minutes of TC Chapter Meetings*

4.4.2.1 *Approval of Minutes* — The completed minutes taken by Standards staff are forwarded to the TC Chapter cochairs for review and tentative approval.

4.4.2.2 *Distribution of Minutes* — TC Chapter minutes are published on the SEMI Standards Web site and announced to all registered TC Members by email. Standards staff assists such distribution as appropriate.

4.4.2.3 At the next TC Chapter meeting, the TC Chapter votes on formal approval of its minutes.

## 5 Special Considerations for Conduct of International Meetings

5.1 *Conduct of International Meetings* — Meetings for SEMI Standards are often international meetings in which participants are Program Members from multiple Locales. Such meetings should be conducted in accordance with the SEMI International Effective Meeting Guidelines, which are available at all meeting venues and can be obtained from Standards staff or downloaded from the SEMI Standards Web site.

5.1.1 For international meetings, it is also essential to make arrangements for impartial and fair administration of meetings to Program Members from different Locales as much as possible, minimizing the difficulties of communicating in the different languages involved.

5.2 *How Program Members Should Participate* — Participants at all international meetings should comply with the following principles of behavior. Cochairs/coleaders should set an example for the participants by complying with these principles:

- formally welcome any international guests;
- invite all participants to take part in the discussions;
- Virtual Meeting participants should mute their audio lines when not speaking;
- raise one's hand (or otherwise indicate, especially if participating via Virtual Meeting) and wait to be named to express an opinion;
- speak slowly, clearly, and address entire audience to allow all participants to hear and understand;
- avoid words unique to a Locale;
- if an interpreter is used, make appropriate pauses;
- treat each other with respect (e.g., no interrupting, talking over another);
- state ideas concisely; and
- summarize comments with a result or request.

5.3 *Confirmation of Understanding* — The cochairst/coleaders summarize the discussion frequently and confirm that the participants understand the discussion. Confirmation should be made at the following times and at other times as appropriate:

- before and after voting, and
- at the end of the meeting.

5.4 *Summary of Discussion* — For each issue, a summary of the discussion is to be recorded. For TC Chapter meetings, the record shall be made by Standards staff. For all other meetings, the record should be made by a cochair/coleader or by another person appointed by the presiding cochair/coleader. The records are to be displayed by an overhead projector, personal computer/digital projector, and/or Virtual Meeting to all of the participants. The summary usually includes the following items:

- issue,
- background and limitations,
- motions and seconds including name of the person who made the motion and second,
- key points of discussion,
- voting results, and
- action items.

5.4.1 Because it is difficult to summarize the discussion in multiple languages, the summary shall be written in English.

NOTE 49: English-speaking Program Members should use plain English in order to reduce difficulty for Program Members whose primary language is not English.

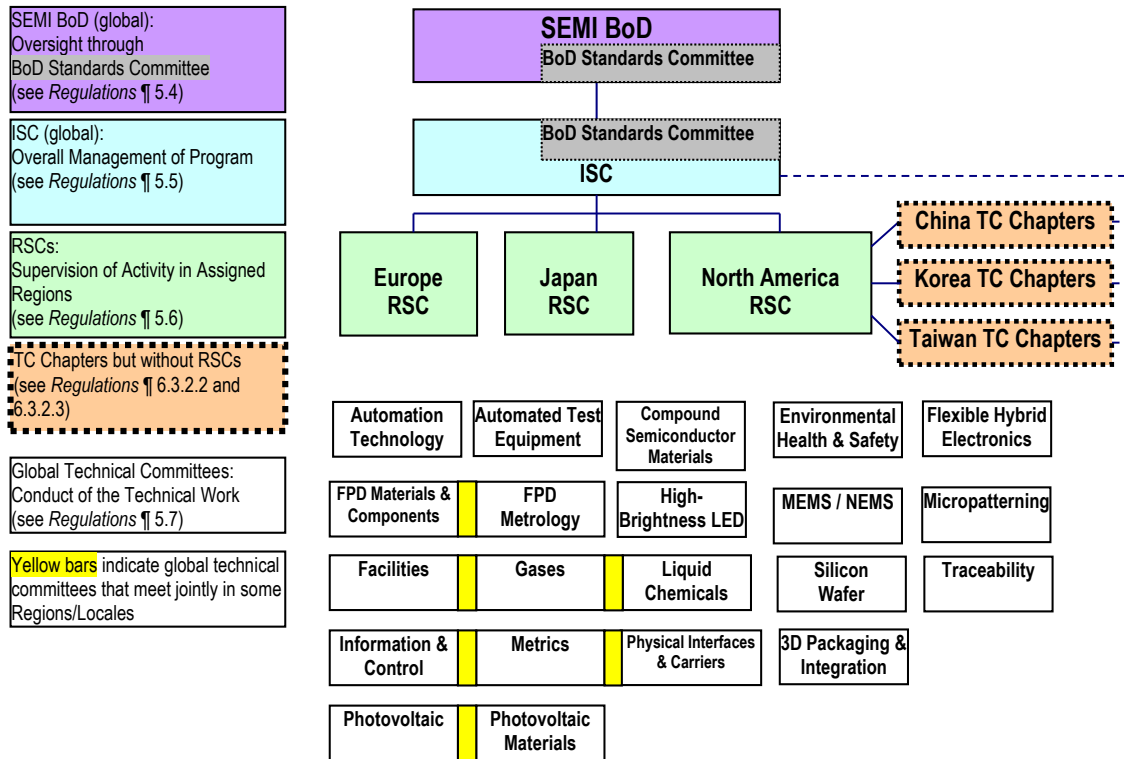
5.5 *Chair Team System* — One method for chairing international meetings is to use a chair team comprised of representatives from the respective Locales. Each cochair is responsible that participants from the Locale represented by him/her understand and participate in the discussions. The chair team should establish prior agreement on how to solve disagreements that might arise among the team.

## 6 Program Organization

### 6.1 Organizational Structure

6.1.1 *General Structure* — The Program has a dual global-regional structure. That is, some groups are designed to be regional in nature, while others are designed to be global. In addition, there are two main layers to the Program: an administrative layer and a technical layer.

6.1.2 *Administrative Structure* — The structure of the administrative layer is hierarchical, as depicted in Figure 6. The SEMI Board of Directors (BoD) established the Program (refer to *Regulations* ¶ 1.2) and also established a BoD Standards Committee that has general oversight of the entire Program (refer to *Regulations* ¶ 5.4). General management of the Program is vested in the ISC (refer to *Regulations* ¶ 5.5.1) composed of both BoD members and Standards volunteer leaders.



**Figure 6**  
**Organizational Structure of the Program**

6.1.2.1 The ISC has established an ISC Subcommittee on the Regulations, which is responsible both for crafting revisions to the *Regulations* and for ensuring that global consensus is achieved in this *Procedure Manual* (refer to *Regulations* § 5.5.5).

6.1.2.2 The ISC has established an ISC Subcommittee on Audits and Reviews (ISC A&R SC), which determines if the procedural requirements of the *Regulations* have been met by Standards Documents approved by TC Chapters (refer to *Regulations* § 5.5.4 and ¶ 11.1). The ISC A&R SC also receives appeals by any person who considers themselves to have been adversely affected by the development, interpretation, or use of SEMI Standards or Safety Guidelines (refer to *Regulations* ¶ 12.1).

6.1.2.3 The ISC has established RSCs (refer to *Regulations* § 5.6) to provide continuing supervision of the Program in their assigned geographical areas.

6.1.2.4 Members of all of these administrative groups do not represent their employers in this capacity, but act as responsible, experienced managers of the Program.

NOTE 50: Some Locales may have technical groups (e.g., TC Chapters), but no accompanying administrative group (i.e., RSC). In these cases, the technical groups report to existing administrative groups in other Regions. Refer to § 6.5 for more information about Standards activities in developing Locales.

6.1.3 *Global Technical Committee Structure* — TC Chapters of GTCs (refer to *Regulations* § 5.7) carry out the technical work of developing Standards Documents. Program Members can work in a variety of GTCs, each of which covers a specific technical area of interest. In these GTCs, the Program Members are concerned with the technical issues surrounding Standards Documents development and are expected to represent the interests of their employers in this regard.

6.1.3.1 GTC membership is global; that is, a TC Member is a member of a GTC without regard to the Region or Locale in which the individual may live or work (refer to § 6.2.4). For convenience in discussing the work, GTCs meet as TC Chapters in various Regions and Locales. Not all GTCs have TC Chapters in all Regions or Locales.

6.1.3.1.1 In some cases, the TC Chapters of multiple GTCs may hold joint meetings as long as each TC Chapter part is distinct (e.g., cochairs, agenda, minutes). Refer to ¶¶ 4.1.3.2.1 and 4.2.4.1.1 for more information.

6.1.3.2 *Global Coordinating Subcommittee* — The cochairs of all of the TC Chapters form the management team responsible for the coordination of activities within a GTCs. This team is referred to as the global coordinating subcommittee (GCS) (refer to *Regulations* ¶ 5.7.6). The members of the GCS have prescribed responsibilities (refer to *Regulations* ¶ 5.7.6.1).

6.1.3.3 *Formal Organizations Within a TC Chapter* — TC Chapters may establish TFs to develop specific Standards or Safety Guidelines or subcommittees to carry out other activities (refer to *Regulations* ¶ 5.7.4). TFs may be local to the TC Chapter Locale or global. TFs local to a TC Chapter are established in accordance with § 6.4.2 and global TFs are established in accordance with § 6.4.6.10.1. Table 12 provides an example of the structure of a single GTC with TC Chapters in each active Locale.

**Table 12 An Example of Global Technical Committee Structure**

A Region				B Region				C Locale								
GCS																
Cochairs				Cochairs				Cochairs								
A TC Chapter				B TC Chapter				C TC Chapter								
D Subcommittee			E Subcommittee							D Subcommittee						
TF 1 <sup>#1</sup>	TF 2 <sup>#1</sup>	TF 3	TF 4 <sup>#1</sup>	TF 5	TF 6	TF 1 <sup>#1</sup>	TF 2 <sup>#1</sup>	TF 4 <sup>#1</sup>	TF 7 <sup>#1</sup>	TF 8	TF 9	TF 1 <sup>#1</sup>	TF 2 <sup>#1</sup>	TF 10	TF 4 <sup>#1</sup>	TF 7 <sup>#1</sup>

#1 Each highlight color denotes a single global TF active in at least two Locales.

6.1.3.4 Formation and disbandment of GTCs and TC Chapters, including those in new Locales, is covered in the *Regulations* § 6.

6.1.3.4.1 *TC Chapter Disbandment Procedure* — Upon notice from Standards staff to voting members of an RSC that a TC Chapter that reports to it has been shown to be inactive and has failed to request disbandment, the responsible RSC shall instigate disbandment.

6.1.3.4.1.1 The TC Members shall be copied on this notice and advised electronically that disbandment is imminent.

6.1.3.4.1.2 Failing Standards staff receipt of a response within 30 days by those advised that at least one specific corrective action will be taken by the TC Chapter by a specified date to correct its inactive status, the responsible RSC shall disband the TC Chapter no later than at its next meeting and Standards staff shall notify the TC Members of the disbandment.

6.1.3.4.1.3 If a response indicates that a corrective action will be taken, the cochairs of the responsible RSC shall:

- determine if the response was submitted on time,
- verify that the proposed action corrects the inactive status within a reasonable time period no later than six months from the receipt of that response, and
- verify that the action was taken or not taken within two weeks per the proposed schedule of the action and notify Standards HQ staff.

6.1.3.4.1.4 If the responsible RSC does not fulfill its obligation stated in ¶ 6.1.3.4.1.2 within one year from the issuance of the notice, or the cochairs of the responsible RSC find any of the conditions stated in ¶ 6.1.3.4.1.3 unsatisfied, the TC Chapter shall be disbanded automatically.

6.1.3.5 Functions of TC Chapter cochairs are defined in the *Regulations* ¶¶ 5.7.5.1 (responsibilities associated with the TC Chapter) and 5.7.6.1 (responsibilities associated with the GCS). It should be emphasized that the primary role of a GCS is international coordination of standards development; to carry out this role, the members of a GCS shall be in excellent communication with each other, with Standards staff, and with local volunteer leaders from all of the applicable Locales. This communication should be facilitated by Standards staff.

6.1.4 *Establishment and Discharge of Informal Groups* — Each organizational group may form informal groups such as teams and planning groups. An informal group belongs to the parent organizational group and reports to it.

6.1.5 *Organization Charts* — A detailed organization chart is maintained by Standards staff (available on the SEMI Standards Web site). This chart shows RSCs, GTCs, TC Chapters, subcommittees, and TFs together with the cochairs/coleaders of each group.

6.1.6 *Establishment and Maintenance of Membership Database* — Standards staff maintains a database of all Program Members. The database includes the following information for each Program Member:

- Name;
- employer and parent organization, if different;
- title;
- address;
- telephone;
- fax;
- email address;
- GTC membership(s);
- Interest Category; and
- Voting Interest.

## 6.2 *Membership*

6.2.1 Anyone can participate in a meeting or submit a Vote on a Letter Ballot in the SEMI Standards development process once they have registered as Program Members. However, in order to receive Letter Ballot and meeting notifications from Standards staff, it is necessary to obtain GTC membership.

6.2.2 *Applying for Membership* — Anyone can become a Program Member by completing the Program membership application form.

6.2.2.1 *Application Availability* — Applications are available as follows:

- on the SEMI Standards Web site,
- on request (by telephone or email) to any SEMI office, or
- in person at a Standards meeting.

### 6.2.2.2 *Completing the Application*

6.2.2.2.1 *Basic Information* — Applicants shall provide valid information for all fields marked as ‘Required.’

6.2.2.2.1.1 The common method for distributing information is email. Program Members shall provide a valid email address to which information can be sent.

6.2.2.2.2 *Types of Membership* — Applicants have the choice of Program membership only, or Program membership and GTC membership. Applicants selecting GTC membership shall then select the GTC(s) of which they want to be TC Members.

6.2.2.2.3 *Copyright Assignment* — An important part of the membership application is the copyright assignment at the end of the application. Be sure to read this assignment carefully and signify your agreement before submitting your application to Standards staff.

6.2.2.2.4 *Confirmation of Registration* — Standards staff enters the membership application form in the database and sends a registration notice to the new Program Member by email. The registration notice includes individual member number, contact information, and GTC membership(s). Be sure to review this information and advise Standards regional staff of any errors or omissions.

6.2.3 *Program Membership* — Program membership is the basic membership for Program activity. Program Members do not receive global-technical-committee-specific information (such as Letter Ballot availability or announcements of meetings).

6.2.3.1 *Ending of Program Membership* — Program membership is ended by either resignation from the Program or change of employer (refer to *Regulations* § 2.3).

#### 6.2.4 *Global Technical Committee Membership*

6.2.4.1 *Selection of Global Technical Committees* — Applicants select the GTC(s) of their choice. Program Members can be members of one or more GTCs. TC Members receive global-technical-committee-specific information for the GTC(s) of which they are TC Members.

6.2.4.2 *Maintenance of Voting Status* — TC Members are required to vote on all Letter Ballots issued to a GTC of which they are TC Members. “GTC membership automatically ends if a TC Member fails to submit Votes in three successive voting cycles in which ballots are issued by the GTC” (refer to *Regulations* ¶¶ 2.5).

6.2.4.3 *Ending of Global Technical Committee Membership* — GTC membership is ended by any of the events specified in *Regulations* ¶¶ 2.3 or 2.5.

6.2.5 *Updates of Membership Information* — Program Members should keep their membership information current by using the SEMI Standards Web site to update their profile to reflect any changes in name, title, mailing address, telephone, fax, email address, GTC membership status, or Interest Category. If the profile update page is inoperative or inaccessible, Program Members can also notify the appropriate Standards regional staff.

NOTE 51: Refer to *Regulations* § 2.3 regarding change of employer.

6.2.6 *Subcommittee and TF Membership* — Any Program Member can become a member of any subcommittee or TF within any GTC or TC Chapter by contacting the cochairs/coleaders of the subcommittee or TF.

6.2.7 *Handling of Voting by Proxy* — There is no provision in the *Regulations* for proxy voting at meetings of TC Chapters, subcommittees, or TFs.

### 6.3 *Subcommittees of TC Chapters*

6.3.1 *Purpose* — Subcommittees are standing groups to which a TC Chapter delegates TF management in a certain technical area. A subcommittee may be established for the following purposes:

- to get or maintain an overview over a certain technical area,
- to reduce the burden of TF management on a TC Chapter, and
- to promote discussion by experts in the relevant technical area with greater concentration on that technical area than a TC Chapter can provide.

6.3.2 *Functions* — Subcommittee functions include:

- supervision of the TFs in the relevant technical area,
- report and recommendations to their TC Chapter,
- continuous studies in the relevant technical area,
- identification of needs for new Standards development activities in its relevant technical area, and
- activities delegated by the TC Chapter.

6.3.3 *Decision-Making Status* — A subcommittee has the same level of decision-making status as a TF. It does not have authority to make a final decision on issues subject to approval by a TC Chapter.

6.3.4 *Operation of Subcommittees of TC Chapters* — Subcommittees operate generally in accordance with § 6.4.6.

6.3.5 *Establishment and Discharge of a Subcommittee* — Establishment and discharge of a subcommittee is subject to a decision by the TC Chapter (refer to *Regulations* ¶¶ 5.7.5.1d and 5.7.5.1f). The TC Chapter reports establishment and discharge of a subcommittee to the appropriate Standards regional staff.

### 6.4 *Task Forces (TFs) of TC Chapters*

6.4.1 *Purpose* — TFs work on development of Standards, Safety Guidelines, and Auxiliary Information with approval of their parent TC Chapters.

6.4.2 *Establishing a New TF* — A new TF may be established to address the requirements of a new activity (e.g., development, review, revision, or withdrawal of a Standard or Safety Guideline). A TF may develop more than one Standards Document. (In that case, one SNARF is required for each Standards Document [refer to § 2.2]). A TF may belong to a single TC Chapter or to multiple TC Chapters in various Locales.

6.4.2.1 If a new activity requires the establishment of a new TF, the TC Chapter cochair(s) will probably ask the submitter of the new activity to establish and lead the TF.

6.4.2.2 *Overview* — The process to establish a new TF is outlined in the flow chart in Figure 7.

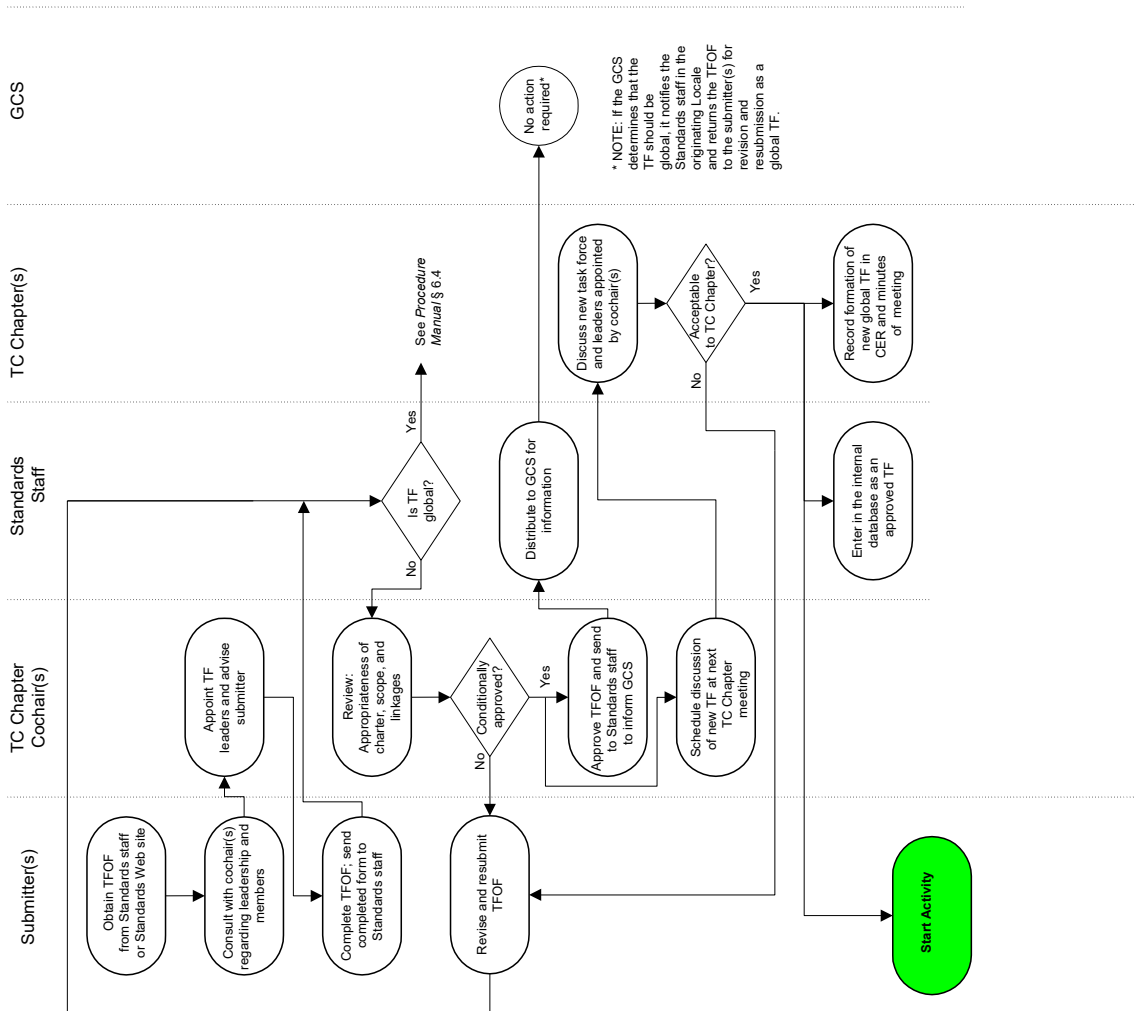


Figure 7  
Establishing a New Local TF

6.4.2.3 *Preparation* — The submitter obtains a Task Force Organization Form (TFOF) from Standards staff or the SEMI Standards Web site. Refer to Appendix 2 for example of the TFOF.

6.4.2.3.1 The submitter consults with the cochairs of the appropriate TC Chapter regarding proposed leadership and TF members. The cochairs will appoint TF leader(s), pending later agreement of the TC Chapter, and advise submitter on completing the TFOF. The submitter may complete and submit a draft TFOF to the cochairs for initial review during this time. Elements of the TFOF are as follows:

- name of proposed TF;
- parent TC Chapter (and subcommittee, if applicable);
- submitter's name, employer, telephone number, and email address;
- date of submission (if a revision, also the date of revision);
- charter;
- scope;
- formal linkages with TFs in other Locales, if any;
- Type II Liaison(s) with SDOs, if any;
- name, employer, telephone number, and email address of each TF leader; and
- name, employer, telephone number, and email address of each TF member.

6.4.2.3.1.1 *Charter and Scope* — The submitter should develop a charter and scope to indicate the objective(s) of the proposed TF and the specific activities that the TF plans to undertake (refer to *Regulations* ¶ 5.7.3.2).

6.4.2.3.1.2 *Formal Linkages with Other TFs* — If the TF is to be a part of a global TF, indicate each associated TF and its parent TC Chapter. Also indicate the nature of the relationship: joint global (i.e., international) TF, observer TF, etc.

6.4.2.3.1.3 *Type II Liaison(s) with SDOs* — If the TF is to be included in an existing Type II Liaison or plans to propose a new Type II Liaison, indicate the SDO and status.

6.4.2.3.1.4 *TF Leaders* — *Regulations* ¶ 5.7.5.1d authorizes the TC Chapter cochair(s) to appoint TF leaders, subject to agreement from the TC Chapter. It is desirable to have representatives of multiple Interest Categories as TF leaders. Each TF leader shall be a TC Member of the parent GTC.

6.4.2.3.1.5 *TF Members* — Program Members who have agreed to participate in the proposed activity described in the TFOF.

6.4.2.4 *Approval* — When the TFOF is completed, the submitter forwards it to Standards staff for the TC Chapter who reviews it to determine if the proposed TF is local or global. For the approval process for a global TF, refer to § 6.4.6.10.1. Follow the steps below for approval of a local TF.

- The Standards staff forwards the completed TFOF to the TC Chapter cochair(s) who review(s) it for appropriateness of charter, scope, and linkages. If these are not considered adequate, the TFOF is returned to the submitter with inputs for revision and resubmission.
- When the TC Chapter cochair(s) consider(s) the TFOF to be acceptable, they ask Standards staff to forward a copy to the members of the GCS for their information.
- The members of the GCS are not required to take any action, but if they recommend that the TF should be global, they notify Standards staff in the originating Locale, who in turn communicates the GCS recommendation to the submitter and TC Chapter cochair(s) for reconsideration as a global TF.
- In parallel to the inquiry to GCS members, the TC Chapter cochair(s) schedule a discussion of the proposed new TF for the next meeting of the TC Chapter.

6.4.2.5 *TC Chapter Consideration* — If the proposed TF and leadership are acceptable to the TC Chapter, the initiation of the new TF is recorded in both the CER and in the minutes of the TC Chapter meeting, and a TF leader is authorized to schedule and conduct TF meetings in accordance with §§ 6.4.4 and 6.4.6 until the work of the TF is complete.

6.4.2.5.1 *TC Chapter Does Not Approve* — If the proposed TF and/or leadership are not acceptable to the TC Chapter, the TFOF is returned to the submitter for revision and resubmission or withdrawal.

6.4.3 *Records and Other Administrative Actions* — Following TC Chapter approval, Standards staff takes the following actions:

- enters the TFOF into the internal database,
- posts the TFOF without the TF membership list to the SEMI Standards Web site,
- records the TF name and leadership on the appropriate organization chart, and
- sets a new community site dedicated to the TF in SEMI CONNECT@SEMI Web site with appropriate access controls.

NOTE 52: It is expected that the TF community site in SEMI Connect@SEMI Web site upon creation provides at least access control to allow access only to Program Members and SEMI Standards staff.

6.4.4 *Function of TFs* — “A TF’s main function is to develop Standards Documents. A TF works on focused areas within the charter and scope of its parent GTC.” (Refer to *Regulations* ¶ 5.7.4.2.) Accordingly, TF tasks include but are not limited to:

- preparation of SNARF,
- developing the Standards Documents,
- preparation of Ballot documents,
- preparation of recommendation on Ballot results (e.g., response to Negatives and Comments), and
- consideration of Negatives and Comments accompanying Votes on a failed Letter Ballot that were returned to the TF.

#### 6.4.5 *Operation of TFs*

6.4.5.1 *Facilitating Communication* — The TF leaders are responsible for communications directly with their TF members regarding all matters including meetings and progress on Draft Document development. Emails, face-to-face meetings, and/or Virtual Meetings can be used to support discussion of the Draft Document under development as appropriate (refer to *Regulations* § 7.4).

6.4.5.1.1 Effective after a one-year transition period, from the publication of this revision of the *Procedure Manual*, TF leaders shall use the TF community site in the SEMI CONNECT@SEMI Web site to maintain the TF member roster up to date and to share the working drafts of the Standards Document under development throughout the Standards Document Development Project. It is strongly recommended that each TF implement the following requirements in this section before the stated deadline.

NOTE 53: Instructions for TF members and TF leaders for how to use CONNECT@SEMI are available on the SEMI Standards Web site.

6.4.5.1.2 The TF community site in SEMI CONNECT@SEMI Web site shall be used for the purpose of satisfying the requirement of distributing the Draft Document at least one week before submission (refer to ¶ 6.4.6.8.1) except during the transition period until the TF implements their TF community site.

6.4.5.1.3 For protection of SEMI’s copyright on Standards Documents, access to editable Microsoft Word format of the Draft Document shall be controlled appropriately. The default format for working Draft Document sharing shall be Adobe Acrobat PDF.

6.4.5.2 *TF Membership* — Any Program Member may become a member of the TF (refer to *Regulations* ¶ 5.7.4). One can become a member of a TF by:

- registering with the TF leader(s) or
- contacting Standards staff to join the TF.

6.4.5.2.1 In addition, the TF leaders can invite participation on the TF from members of the parent or a related TC Chapter. TC Chapter and subcommittee cochair(s), if applicable, can help the TF leaders in inviting participation.

6.4.5.3 *Balance of TF Membership* — It is desirable to have balanced representation from multiple Interest Categories (refer to *Regulations* § 3.3).

NOTE 54: *Maintaining TF Membership Roster* — TF leaders have the primary responsibility to maintain the TF membership roster. The TF leaders should share the latest membership roster with the Standards staff for the parent TC Chapter. It should be noted that TF membership does not automatically bring GTC membership of the parent GTC. In order for a TF member to acquire privileges (e.g., to be counted toward Letter Ballot return rate requirement) as a TC Member, it is necessary to complete a membership application or update their membership (refer to § 6.2) to establish their GTC membership.

NOTE 55: TF members will receive notification of Letter Ballot issuance and TC Chapter meeting notifications if they are registered as a TC Member for the GTC (refer to § 6.2.1).

6.4.5.4 *Scheduling a TF Meeting* — A TF leader is responsible to schedule, notify the TF members of, and conduct the TF meetings. This scheduling should be in consultation with Standards staff for the TC Chapter and the TC Chapter cochairs to avoid conflicts. If a meeting is scheduled in conjunction with TC Chapter meetings or it uses SEMI's meeting room or other facilities, a TF leader requests it from Standards staff for the TC Chapter and informs the TC Chapter cochairs. The request should include the following information:

- name of TF,
- number of attendees expected (for meeting room size needs),
- date of meeting,
- meeting time and length,
- setup needed (e.g., class room, theater),
- Virtual Meeting requirements, and
- audiovisual requirements (e.g., computer, overhead projector, screen).

Standards staff notifies all TF leaders of final arrangements. In general, the TF members are notified by a TF leader, who may request Standards staff to notify the TF members of the meeting.

6.4.5.5 *Conduct of TF Meetings* — Refer to *Regulations* § 7. TF meetings should be conducted in accordance with § 4.2.

6.4.5.5.1 If interest voting is conducted in a TF or subcommittee meeting, the TF leader or subcommittee chair should record the vote for each Voting Interest.

6.4.5.6 *Records of TF Meetings* — For TF meetings, the coleader or a member prepares the minutes. The minutes or a summary report should be presented to the TC Chapter and attached to the minutes of that TC Chapter meeting.

6.4.5.7 *Standards Document Development* — The Standards Document under development and information relevant to the Standards Document should be shared with all of the TF members.

6.4.5.7.1 When the Draft Document is to be submitted for a Ballot, it shall be distributed to all the TF members for their inputs at least one week before submission to Standards staff (refer to ¶ 2.6.5). This is the TF leaders' responsibility regardless of whether the author is the TF leader or not (refer to ¶ 2.6.1.1).

6.4.5.8 *International Collaboration of TFs* — It is up to the leadership of both local and global TFs to maintain active communications to facilitate reaching of international consensus on Draft Documents developed by the TF. International meetings should be conducted in accordance with § 5. To communicate the status of activity to all interested parties worldwide well in advance of issuing Letter Ballots, the following guidance should be observed.

6.4.5.8.1 *Establishing External Communications* — A TF leader obtains contact information of leaders of corresponding TFs in other Locales from Standards staff and maintains communication on a regular basis.

6.4.5.8.2 *TFOF and SNARF Listings* — TF leaders, technical architects, and Standards staff for the TC Chapter should review the TFOF and SNARF listings, available on the SEMI Standards Web site, regularly to determine if other TFs in the same or other Locales might have an interest in a TF's activity.

6.4.5.8.3 *Report to Subcommittee, TC Chapter, and Other Locales* — TFs shall report the progress on the Standards Document Development Project to the parent TC Chapter (and subcommittee, if applicable). Reports from TF meetings held prior to the scheduled TC Chapter meeting should be included in the TC Chapter meeting minutes. To report to the related TC Chapters in other Locales, the liaison report should include the TF status.

6.4.5.9 *Discharge of a TF* — Upon completion of its intended Standards Document Development Projects, a TF can request approval from the TC Chapter for it to be discharged (refer to *Regulations* ¶¶ 5.7.5.1f and 5.7.7.1a) or to be designated as dormant (refer to ¶ 6.4.6.11).

6.4.5.9.1 Unless the TC Chapter has designated a TF to be dormant, it shall discharge a TF if

- no report has been made from a TF for three consecutive TC Chapter meetings, or
- no TF leadership has existed for two consecutive TC Chapter meetings or a year, whichever is longer.

6.4.5.9.2 Discharge of a TF automatically cancels any uncompleted Standards Document Development Projects.

6.4.5.10 *Designation of a TF as Dormant* — If future activity is anticipated, the TC Chapter may designate the TF as dormant instead of discharging it.

6.4.6 *Global TFs* — Standards Document Development Projects are international in nature, and TFs in all Locales should collaborate internationally. To develop integrated activities, global TFs may be established to develop Standards or Safety Guidelines based on international consensus from the beginning of discussion through final approval.

6.4.6.1 *Definition and Organization* — There are three types of global TFs. In all cases, the global TF has a leader from each of the Locales that participates. Note that a local TF in which Program Members from other Locales participate is not referred to as a global TF.

- Existing local TFs in different Locales having related local technical activities may collectively establish a global TF.
- New TFs may be organized in each Locale and joined to establish a global TF.
- New TFs may be established in other Locales to parallel an existing TF in one Locale. Such TFs may all collaborate actively or some may be observers to the Standards Document Development Project in another Locale.

6.4.6.2 *Approval for Establishment* — *Regulations* ¶ 5.7.6.1c authorizes the GCS to approve the establishment of global TFs. When consensus has been reached among the participating Locales to establish a global TF, a potential TF leader (submitter) in each of the Locales completes a TFOF in accordance with § 6.4.2.3. Refer to Figure 8 for a flow chart of the process for preparing the TFOF and obtaining approval for a global TF. Because the activities conducted by the global TF are based on international consensus from the beginning, it is preferable to have a common SNARF to describe each activity to be undertaken by the global TF.

6.4.6.2.1 Because the TF is global, Standards staff forwards the TFOF to the GCS.

6.4.6.2.2 The GCS reviews the TFOF for appropriateness of charter, scope, and linkages.

6.4.6.2.3 If the GCS does not approve a TFOF, it is returned to the submitter for revision and resubmission.

6.4.6.2.4 If the GCS approves the TFOF, a member of the GCS sends it to Standards staff. In addition, the TC Chapter cochairs in each participating Locale report on the proposed global TF and the TF leaders they have appointed at the next meeting of their TC Chapter.

6.4.6.2.5 *TC Chapter Does Not Approve* — If the proposed local TF leadership is not acceptable to the TC Chapter, the TC Chapter cochairs shall come up with acceptable local leadership.

6.4.6.2.6 *TC Chapter Approves* — If the proposed TF leadership is acceptable to the TC Chapter, the creation of the new global TF is recorded in both the CER (posted on the SEMI Standards Web site within two weeks of the meeting) and in the minutes of the TC Chapter meeting.

6.4.6.3 *Records* — Following GCS approval, Standards staff takes the following actions:

- enters the TFOF into the internal database, and
- records the TF name and leadership on the appropriate organization chart.

6.4.6.4 *Operations* — Global TFs generally operate in accordance with § 6.4.6. It should be noted, however, that in a global TF, decisions on Letter Ballots, SNARFs, and other items listed below are based not on the consensus of one Locale, but on the consensus of all participating Locales. Discussion of items such as Letter Ballots should respect the

opinion of each Locale, and achieve global consensus before these items are forwarded to the TC Chapter for deliberation.

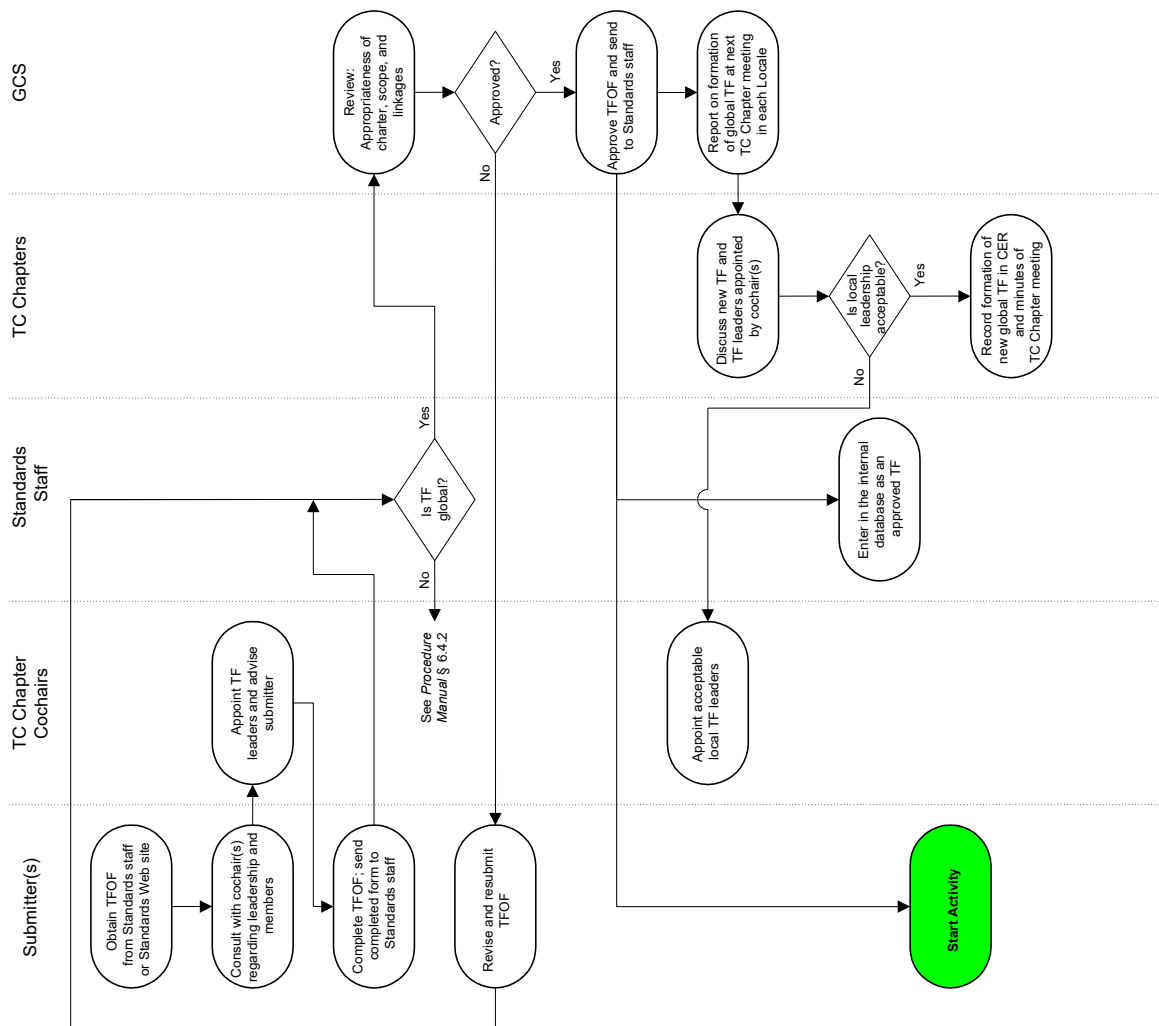
6.4.6.4.1 Letter Ballots can be originated from any participating TC Chapter.

6.4.6.4.2 If there is a problem in achieving consensus within the global TF, the TF leader(s) should request coordination by the GCS. In this case, the TF should leave the decision entirely in the hands of the GCS and follow its final decision.

6.4.6.4.3 The global TF, in addition to its normal duties, shall report the following items in the consensus process to the GCS:

- establishment of a global TF and submission of a SNARF,
- decision on TC Chapter where the Letter Ballot will be reviewed,
- approval for Letter Ballot submission by the TC Chapter, and
- results of Letter Ballot discussion.

6.4.6.5 *Discharge of a Global TF* — A global TF may be discharged by the GCS (refer to *Regulations* ¶ 5.7.6.1c) upon completion of the work defined in its SNARFs. Each of the members of the GCS should report the action at the next meeting of the TC Chapter in their Locale. If there has been no report from a TF for three consecutive TC Chapter meetings or if there is no activity in that TF, the GCS can discharge the TF, which automatically cancels any uncompleted Standards Document Development Projects. If future activity is anticipated, the GCS may designate the TF as inactive instead of discharging it.



**Figure 8**  
**Establishing a New Global TF**

## 6.5 Establishing Standards Activities in New Locales

6.5.1 *Step 1: Initiate TC Chapter Formation Group (CFG) in a New Locale* — Upon identifying the opportunity for SEMI Standards activities in a new Locale (refer to *Regulations* § 6.3), Standards HQ staff, working with Standards regional staff and Program Members from existing Locales, will recruit, train, and support local Program Members in starting and running a CFG.

6.5.1.1 The scope of a CFG should mirror that of its parent GTC, although at the start a CFG's activity could encompass only a portion of the entire scope. CFGs could establish sub-CFGs similar to TFs to deal with specific issues of particular interest.

6.5.1.2 Program Membership is required for participating in a CFG.

6.5.1.3 CFGs should have the following functions:

- recruit local Program Members;
- conduct scheduled meetings among CFG members, face-to-face and (optionally) by electronic means;

- become familiar with existing standards of other organizations, if any, in their scope areas;
- become familiar with related standards developments in their scope areas;
- develop effective leaders;
- participate in SEMI Standards Document Development Projects through liaisons with TFs and TC Chapters in existing Locales;
- develop support for the Program among local companies and other entities; and
- assist in developing and promoting education opportunities (e.g., Standards workshops) in their locale.

6.5.1.4 CFGs should provide regular reports to the RSC for its Locale, or its preferred RSC if one does not exist in its Locale, and to all other TC Chapters for its GTC to demonstrate ongoing activity. This report should be provided before each RSC and TC Chapter meeting and include the following at a minimum:

- current leadership with any leadership changes,
- schedule of CFG meetings held and planned,
- list of CFG members and their parent organization participating in each CFG meeting held, and
- list of Standards Document Development Projects in which CFG members are actively participating.

6.5.1.4.1 Failure to provide regular reports may result in the disbandment of the CFG (refer to *Regulations* § 6.5.2).

6.5.2 *Step 2: Elevate CFG to TC Chapter Status* — In Step 2, a CFG advances to become a TC Chapter, participating as equals in the GTC.

6.5.2.1 A CFG may petition the ISC through an RSC for elevation to become a TC Chapter (refer to *Regulations* § 6.2.2.1).

6.5.2.2 The petition should be accompanied with evidence that the CFG satisfies the following criteria:

- demonstrated success in scheduling, organizing, and conducting an ongoing program among the local Program Members of face-to-face meetings, Virtual Meetings, and using the Official Virtual TC Chapter Meeting software application if the parent GTC has adopted it;
- local Standards staff trained and available to perform staff support functions at meetings and between meetings;
- a representative number of TC Members, distributed among Interest Categories (refer to *Regulations* § 3.3);
- a representative number of entities represented among the TC Members;
- stable leadership, including two cochairs, and optionally a technical editor and a technical architect;
- demonstrated interest and competence in Standards Document Development Project subjects; and
- demonstrated parent organization support, by allowing Program Members to actively participate in meetings.

## 7 Liaison Relationship with Other Organizations

7.1 *Overview* — *Regulations* § 18 defines four appropriate types (i.e., Levels I, II, III, IV) of liaison relationship with other organizations, especially another SDO, or its subordinate unit that is comparable to a GTC or a TC Chapter (of a GTC). Authorization conditions and limitation of liaison relationships are defined in *Regulations* § 18.3.

### 7.2 *Type I Liaison*

7.2.1 *Proposal* — The minimum contents of the written proposal (refer to *Regulations* § 18.3.1.1) shall include:

7.2.1.1 GTC;

7.2.1.2 TC Chapter;

7.2.1.3 TF name;

7.2.1.4 TF leader's name submitting the proposal;

- 7.2.1.5 Other TF leaders, if any;
  - 7.2.1.6 Standards Document number;
  - 7.2.1.7 Proposed Standards Document title;
  - 7.2.1.8 Name of the other nonprofit organization to receive Draft Document for review and feedback;
  - 7.2.1.9 Other nonprofit organization' scope statement; and
  - 7.2.1.10 Justification (i.e., why is this feedback deemed indispensable for this Standards Document Development Project, explanation about anticipated problems in lieu of proposed coordination).
- 7.2.2 *Liaison Reports* — The TF leader shall provide a written summary of the feedback received from the other nonprofit organization and its impact, if any, on the Draft Document as part of its TF report at each meeting of its parent TC Chapter (refer to ¶ 4.2.4.1.2).

### 7.3 *Type II Liaison*

EXCEPTION: Since some approved liaisons similar to Type II Liaisons already exist with other SDOs and have ongoing activities, these activities may continue while the process defined in *Regulations* § 18.3.2 is completed.

7.3.1 *Proposal* — The minimum contents of the written proposal (refer to *Regulations* § 18.3.2.1) shall include:

- 7.3.1.1 GTC;
  - 7.3.1.2 TC Chapter;
  - 7.3.1.3 TF name;
  - 7.3.1.4 TF leader's name or TC Member's name submitting the proposal;
  - 7.3.1.5 Other TF leaders' names, if any;
  - 7.3.1.6 Candidate(s) for point-of-liaison person(s);
  - 7.3.1.7 Name of the other SDO;
  - 7.3.1.8 Name of the other SDO's subordinate unit, if applicable;
  - 7.3.1.9 Technical area addressed; and
  - 7.3.1.10 Justification (i.e., why is it deemed necessary to have an ongoing coordination channel to avoid overlap or duplication of effort in performing each organization's respective work [usually, development of standards]).
- 7.3.2 *Liaison Reports* — The point-of-liaison person(s) shall provide a written summary of the proposed or ongoing work in the other SDO and its impact, if any, on the proposed or ongoing work of the TF and/or the TC Chapter at each meeting of the Originating TC Chapter.

### 7.4 *Type III Liaison (with ISO or International Electrotechnical Commission [IEC])*

7.4.1 *Proposal* — The minimum contents of the written proposal (refer to *Regulations* § 18.3.3.2) shall include:

- 7.4.1.1 GTC;
- 7.4.1.2 TC Chapter;
- 7.4.1.3 TF name;
- 7.4.1.4 TF leader's name or TC Member's name submitting the proposal;
- 7.4.1.5 Other TF leaders' names, if any;
- 7.4.1.6 Candidate(s) for official representative;
- 7.4.1.7 Name of the other SDO (i.e., ISO or IEC);
- 7.4.1.8 Name of the SDO's technical committee and/or a subcommittee;
- 7.4.1.9 Name of the other SDO's working group or equivalent;

7.4.1.10 Technical area addressed; and

7.4.1.11 Justification (i.e., why is it deemed necessary to have an official representative of SEMI and the GTC who makes technical contributions to, participates actively in, and directly influences the work project[s] undertaken by that working group).

7.4.2 *Liaison Reports* — The official representative shall provide a written summary of the applicable work project(s) in the other SDO and its impact, if any, on the proposed or ongoing work of the TF and/or the TC Chapter at each meeting of the Originating TC Chapter.

7.5 *Type IV Liaison (with ISO or IEC)*

7.5.1 *Proposal* — The minimum contents of the written proposal (refer to *Regulations* § 18.3.4.2) shall include:

7.5.1.1 GTC;

7.5.1.2 TC Chapter;

7.5.1.3 TF name;

7.5.1.4 TF leader's name or TC Member's name submitting the proposal;

7.5.1.5 Other TF leaders' names, if any;

7.5.1.6 Candidate(s) for official representative;

7.5.1.7 Name of the other SDO (i.e., ISO or IEC);

7.5.1.8 Name of the SDO's technical committee and/or a subcommittee;

7.5.1.9 Name of the other SDO's working group;

7.5.1.10 Designation of the published Standard or Safety Guideline (refer to § 3.1) for proposed adoption; and

7.5.1.11 Justification (i.e., why is it deemed beneficial for the global electronics design and manufacturing supply chain addressed by the Program to promote the Standard or Safety Guideline for publication also under ISO or IEC).

7.5.2 *Liaison Reports* — The official representative of SEMI and the GTC, who leads the work for the adoption of the Standard or Safety Guideline by ISO or IEC (referred to as the 'convenor' under ISO and IEC terminology), shall provide a written summary of the adoption process status at each meeting of the Originating TC Chapter.

## APPENDIX 1 STANDARDS NEW ACTIVITY REPORT FORM (SNARF)

This Appendix contains a blank sample of the current SNARF, which is available as an editable file on the SEMI Standards Web site.



### STANDARDS NEW ACTIVITY REPORT FORM (SNARF)

Date Prepared: \_\_\_\_\_ Revised (if Applicable): \_\_\_\_\_

SNARF for: \_\_\_\_\_

Originating Global Technical Committee: \_\_\_\_\_

Originating TC Chapter: \_\_\_\_\_

Task Force (TF) in which work is to be carried out: \_\_\_\_\_

Submitted by: \_\_\_\_\_ Company: \_\_\_\_\_

Email: \_\_\_\_\_

Phone: \_\_\_\_\_

Refer to *Procedure Manual* § 2.2.4 for more information on properly filling out the SNARF.

#### 1. Rationale:

##### a: Describe the need or problem addressed by this activity.

(Indicate the customer, what benefits they will receive, and if possible, quantify the impact on the return on investment [ROI] if the Standards Document is implemented.)

##### b: Estimate effect on industry. Check one of the following:

1: Major effect on entire industry or on multiple important industry sectors

- identify the relevant sectors: \_\_\_\_\_

2: Major effect on an industry sector

- identify the relevant sector: \_\_\_\_\_

3: Major effect on a few companies

- identify the relevant companies: \_\_\_\_\_

4: Slight effect or effect not determinable

##### c: Estimate technical difficulty of the activity. Check one of the following:

I: No Difficulty – Proven concepts and techniques exist or quick agreement is anticipated

II: Some Difficulty – Disagreements on known requirements exist, but developing consensus is possible

III: Difficult – Limited expertise and resources exist and/or achieving consensus is difficult

IV: Extremely Difficult – Expertise and resources are scarce and/or achieving consensus is very difficult



## 2. Scope:

**a: Describe the technical areas to be covered or addressed by this Standards Document development activity.**

*(For Subordinate Standards, list common concepts or criteria that the Subordinate Standard inherits from the Primary Standard, as well as differences from the Primary Standard.)*

### b: Expected result of activity

- |  |  |
|--|--|
| <input type="checkbox"/> New Standard or Safety Guideline (including replacement of an existing Standard or Safety Guideline)  | <input type="checkbox"/> Line-item revision to an existing Standard or Safety Guideline            |
| <input type="checkbox"/> New Subordinate Standard to an existing Standard or to a new Primary Standard to be developed concurrently with this new Subordinate Standard | <input type="checkbox"/> Line-item revision to two or more existing Standards or Safety Guidelines |
| <input type="checkbox"/> New Preliminary Standard  | <input type="checkbox"/> Reapproval of a Standard or Safety Guideline                              |
| <input type="checkbox"/> Major revision to an existing Standard or Safety Guideline  | <input type="checkbox"/> Removal of a Standard or Safety Guideline                                 |
| <input type="checkbox"/> Major revision to two or more existing Standards or Safety Guidelines   | <input type="checkbox"/> Withdrawal of a Standard or Safety Guideline                              |
| <input type="checkbox"/> Publication of an existing Standard or Safety Guideline as an American National Standard  | <input type="checkbox"/> Reinstatement of a Standard or Safety Guideline                           |
|  | <input type="checkbox"/> New Auxiliary Information   |
|  | <input type="checkbox"/> Modification of existing Auxiliary Information                            |

**For a new Subordinate Standard, identify the Primary Standard here:** \_\_\_\_\_

For revision of existing Standard(s) or Safety Guideline(s), identify all of the Standard(s) or Safety Guideline(s), including Publication Date Code that are to be revised here: \_\_\_\_\_, and identify which parts of the Standard(s) or Safety Guideline(s) that are to be revised. *(Check all that apply.)*

- Modification of an existing part of Standard(s) or Safety Guideline(s) including Appendices, Complementary Files, and Supplementary Materials**
- Addition of one or more Appendices or Complementary Files to an existing Standard or Safety Guideline**
- Addition of one or more Related Information sections or Various Materials to an existing Standard or Safety Guideline**
- Revision or addition of one or more Subordinate Standards to an existing Primary Standard**

**For Standards, identify the Standard Subtype below:**

- |  |  |
|--|--|
| <input type="checkbox"/> Classification            | <input type="checkbox"/> Guide         |
| <input type="checkbox"/> Practice                  | <input type="checkbox"/> Specification |
| <input type="checkbox"/> Test Method               | <input type="checkbox"/> Terminology   |
| <input type="checkbox"/> Miscellaneous (describe:) |  |



### 3. Projected Timetable for Completion:

#### a: General Milestones

- |  |                                       |
|--|---------------------------------------|
| a. Activity Start:                     | b. 1 <sup>st</sup> Draft Document by: |
| c. (Optional) Informational Ballot by: | d. Letter Ballot by:                  |
| e. TC Chapter Approval By:             |                                       |

---

### 4. Liaisons:

**a: List SEMI Global Technical Committees, TC Chapters, Subcommittees, or Task Forces in your or other Regions/Locales that should be kept informed regarding the progress of this activity.**

*(Refer to SEMI Standards organization charts and global technical committee charters and scopes as needed.)*

**b: List any planned Type I Liaisons with external nonprofit organizations (e.g., SDO) that should receive Draft Documents from Standards staff for feedback during this activity and be notified when the Letter Ballot is issued (refer to *Procedure Manual § 7*).**

#### c: Intercommittee Ballots (check one):

- will be issued – **identify the recipient global technical committee(s):** \_\_\_\_\_
- will not be issued

---

### 5. Safety Considerations:

#### The resulting Standards Document is expected (Check one):

- to be a Safety Guideline
- NOT to be a Safety Guideline

**NOTE FOR 'to be a Safety Guideline':** When all safety-related information is removed from the Standards Document, the Standards Document is NOT technically sound and complete – Refer to § 15.1 of the *Regulations* for special procedures to be followed.

**NOTE FOR 'NOT to be a Safety Guideline':** When all safety-related information is removed from the Standards Document, the Standards Document is still technically sound and complete.

### 6. Intellectual Property Considerations:

**NOTE THAT** both a: and b: below should be checked for a Revision of existing Standard(s) and Safety Guideline(s).

**a: For a new Standard or Safety Guideline and for any part to be modified or added in a Revision of published Standards and Safety Guidelines (Check one):**

- the use of patented technology is NOT required.
- patented technology, other than previously known patented technology identified in b: below, is intended to be included in the proposed Standard(s) or Safety Guideline(s).

**(If the second box is checked, check one):**

- Letter of Intent received
- Letter of Intent not received

**b: For Revision, Reapproval, Reinstatement, or Withdrawal of existing Standard(s) and Safety Guideline(s) (Check one):**

- there is no known relevant patented technology necessary to use or implement the Standard(s) and Safety Guideline(s)
- there is previously known relevant patented technology necessary to use or implement the Standard(s) and Safety Guideline(s)



**c: The body of the Standards Document and any Appendices, Complementary Files, Related Information sections, or Various Materials that may or may not be a part of the Standards Document by reference (Check one):**

- will incorporate Copyrighted Item
- the incorporation of Copyrighted Item will NOT be required

**NOTE FOR 'the use of patented technology or the incorporation of Copyrighted Item(s) is NOT required':** If in the course of developing the Standards Document, it is determined that the use of a patented technology or the incorporation of Copyrighted Item(s) is necessary for the Standards Document, the provisions of *Regulations* § 16 shall be followed.

**NOTE FOR 'will incorporate Copyrighted Item':** A copyright release letter shall be obtained from the copyright owner prior to publication.

**7. Comments, Special Circumstances:**

**8. TC Member Review (Check one):**

- took place between (*put dates here:* \_\_\_\_\_ and \_\_\_\_\_ ) before approval at the TC Chapter Meeting, or
- took place between (*put dates here:* \_\_\_\_\_ and \_\_\_\_\_ ) before approval by the GCS, or
- is not required for this SNARF.

**NOTE FOR 'TC Member Review':** A TC Member Review is required by the *Regulations* for a period of at least two weeks before approval of a new, or a major revision of an existing, Standard or Safety Guideline. (Refer to *Regulations* ¶ 8.2.1)

**9. Approval Dates:**

TC Chapter or GCS: \_\_\_\_\_

Recorded in TC Chapter Minutes: \_\_\_\_\_

## APPENDIX 2

### TASK FORCE ORGANIZATION FORM (TFOF)

This Appendix contains a blank sample of the current TFOF, which is available as an editable file on the SEMI Standards Web site.



### TASK FORCE ORGANIZATION FORM (TFOF)

Date Prepared: \_\_\_\_\_ Revised (if Applicable): \_\_\_\_\_

Name of Task Force (TF): \_\_\_\_\_

Originating Global Technical Committee: \_\_\_\_\_

Originating Technical Committee Region: \_\_\_\_\_

Submitted by: \_\_\_\_\_ Company: \_\_\_\_\_

Email: \_\_\_\_\_

Phone: \_\_\_\_\_

Refer to *Regulations* ¶ 5.7.4.2 and § 5.7.2, and *Procedure Manual* § 2.1.4.

**1. Charter:** (State the objective of the proposed TF.)

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**2. Scope:** (Define the specific activities that the TF will conduct.)

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**3. Formal linkages with TFs in other Regions/Locales:** (Show each associated TF and its parent global technical committee; indicate nature of relationship – global TF, observer TF, etc.)



## APPENDIX 3

### CONTENT REQUIREMENTS OF EACH SECTION FOUND WITHIN STANDARDS AND SAFETY GUIDELINES

#### A3-1 Content Requirements of Each Section

A3-1.1 The sections in Standards Documents shall comply with the requirements in Table A3-1. Note that some of the requirements are written as instructions in imperative sentences where the implied subject is ‘you’ and starts with an action verb.

**Table A3-1 Content Requirements of Sections Found in Standards and Safety Guidelines**

#	Sections	Requirements
A3-1	<i>Title</i>	<ol style="list-style-type: none"> <li>(1) Every Standard and Safety Guideline shall have a title.</li> <li>(2) Select a unique title that describes the content of the Standard or Safety Guideline.</li> <li>(3) Do not use the word ‘Standard’ in the title.</li> <li>(4) Begin the title with the Subtype of Standard being developed (e.g., Specification for ..., Guide for ..., Test Method for ...) or with Safety Guideline for ... .</li> <li>(5) The title shall not start with Miscellaneous.</li> <li>(6) Use only a single Subtype of Standard except in very unusual circumstances. If the Standards Document is comprised of two Subtypes (e.g., Specification and Guide for ...), the text shall clearly identify those parts that are of each Subtype.</li> </ol>
A3-2	<i>Purpose</i>	<ol style="list-style-type: none"> <li>(1) Every Standard and Safety Guideline shall have a Purpose section.</li> <li>(2) Provide a concise explanation of the significance and application of the Standard or Safety Guideline.</li> <li>(3) Indicate the intended user and the proper application of the Standard or Safety Guideline.</li> <li>(4) If appropriate, differentiate this Standard from other similar or related Standards or Safety Guidelines.</li> </ol>
A3-3	<i>Scope</i>	<ol style="list-style-type: none"> <li>(1) Every Standard and Safety Guideline shall have a Scope section.</li> <li>(2) State the function and range of application of the Standard or Safety Guideline. Note any excluded functions or ranges, if appropriate.</li> <li>(3) List the materials, products, systems, or services covered by the Standard or Safety Guideline.</li> <li>(4) If any specific caution or warning Notices are included in the Standard or Safety Guideline, list the paragraph numbers where they occur in the last sentence of the appropriate paragraph (refer to <i>Style Manual</i> Table 1, 1-9).</li> <li>(5) The Scope Notice is mandatory (refer to <i>Style Manual</i> Table 8, 8-5).</li> <li>(6) Per § 3.3.1, the Scope section cannot contain a list of section and/or subsection numbers and/or their headings. Note that a Table of Contents may be included following the Standards Document title (refer to <i>Style Manual</i>, 1-31).</li> </ol>
A3-4	<i>Limitations</i>	<ol style="list-style-type: none"> <li>(1) State any relevant items not specifically covered in the Standard and Safety Guidelines.</li> <li>(2) For Test Methods and Practices, include all known items that may cause erroneous results to be obtained.</li> <li>(3) For each such item, describe how the existence of the problem can be identified and measures to be taken to circumvent the problem.</li> </ol>

#	Sections	Requirements
A3-5	<i>Referenced Standards and Documents</i>	<p>(1) When references to a publicly available Standards/standard/Document/document are within the Standards Document, it shall include a Referenced Standards and Documents section. Do not include any Standards/standard/Document/document that is not cited within the Standards Document. Relevant, but an uncited Standards/standard/Document/document may be included in a Related Documents section (refer to A3-10).</p> <p>(2) List all publicly available Standards/standard/Document/document that are cited in the Standard or Safety Guideline, outside of the Terminology section, and published by SEMI or another recognized SDO such as ANSI, ASTM, Deutsches Institut für Normung e.V. (DIN), International Electrotechnical Commission (IEC), ISO, and Japanese Standards Association (JSA).</p> <p>(3) List SEMI Standards and Safety Guidelines first, in alphanumeric order by designation.</p> <p>(4) List standards published by other SDOs using a separate subsection for each SDO. Place these subsections in alphabetical order by the name of the SDO. List the standards in each subsection in alphanumeric order by designation.</p> <p>(5) Do not include the publication date (e.g., month-year) code unless only a specific edition of the cited Standard/standard shall be employed.</p> <p>(6) <i>Other Documents</i> — List Auxiliary Standards Documents, European Union (EU) directives, regulations, codes, and similar types of nonstandard technical documents cited in the Standard or Safety Guideline outside the Terminology section, under the subheading Other Documents. Exclude from listing technical books, magazines and magazine articles, and journals and journal articles.</p> <p>(7) For all cited standards and technical documents not originating from SEMI, provide a footnote referencing the source of the standard or technical document and the address from which a copy can be obtained. When available, also list fax and Web site information of the organization that distributes the standard or technical document. (Refer to <i>Style Manual</i> Table 1, 1-17 and Appendix 5.)</p> <p>(8) List only published standards or Standards and Safety Guidelines. Never refer to draft documents or Draft Documents being developed by SEMI or any other SDO in this section (or elsewhere in the Standard or Safety Guideline). Note that if it is necessary to reference a Draft Document under development, allude to the material by a descriptive phrase, not necessarily the title. Include a Note to the effect that a Standard or Safety Guideline covering the topic is being developed by a SEMI Standards global technical committee. The global technical committee can be identified, if desired.</p> <p>(9) References to periodicals, books, and Web sites shall not be cited in this section. Such references should be listed as numbered footnotes at the bottom of the page that the reference first occurs. Cite only publicly available references in a SEMI Standard or Safety Guideline (refer to <i>Style Manual</i> Table 1, 1-13.)</p> <p>(10) References to publicly available Standards, Safety Guidelines, standards, and/or documents, in a Related Information section shall not be cited in this section. Create a separate Referenced Standards and Documents section to be contained within each Related Information section.</p> <p>(11) The Referenced Standards and Document Notice is mandatory (refer to <i>Style Manual</i> Table 8, 8-6).</p>
A3-6	<i>Terminology</i>	<p>(1) Include abbreviations and acronyms, definitions, and symbols used in the official content part of the Standards Document (refer to ¶ 2.16.6). Do not include terminology that is not used within the Standards Document. Terminology is an important part of most Standards and Safety Guidelines. However, in some cases, terminology for a given technical area is collected together in a Terminology Standard, which can be referenced by multiple Standards and Safety Guidelines for that technical area.</p> <p>(2) List abbreviations and acronyms, definitions, and symbols in alphabetical order in separate subsections. If desired, further divide one or more of these subsections so that related terms are grouped before alphabetizing. In rare occasions, groups of related terms may be ordered nonalphabetically (e.g., a group of terms related to a particular subject might start with the definition of the subject itself).</p> <p>(3) Do not include terminology only used in a Related Information section of the Standards Document in the official content part's Terminology section, but include it in a separate Terminology section within the Related Information section.</p> <p>(4) Do not include terminology used in the Referenced Documents and Standards section, including names of SDOs and associations, or document titles. However, if an explanation is deemed necessary, include it as a footnote to the entry there.</p>

#	Sections	Requirements
A3-7	<i>Abbreviations and Acronyms</i>	<ol style="list-style-type: none"> <li>(1) Before including an entry in this section, check to determine if the item is included in the <i>Compilation of Terms</i>, available on the SEMI Standards Web site. Make sure that all entries taken from the <i>Compilation of Terms</i> exactly match the original entries in the compilation itself, if possible. Similar, but not identical, definitions of the same term are strongly discouraged.</li> <li>(2) List descriptions of abbreviations and acronyms used elsewhere in the official content parts of the Standards Document. However, if an acronym is only used once, spell out with the acronym in parentheses where used. Do not include abbreviations and acronyms only used once, used in footnotes, or used only in tables and figures, for which they can be listed in appropriate footnotes. Refer to the <i>Style Manual</i> Table 1, 1-13, 1-21, Table 2, 2-3, and Table 3, 3-6.</li> <li>(3) List abbreviations and acronyms in alphabetical or alphanumeric order unless there is a compelling reason to order them differently. If desired, divide the list into numbered subsections so that related items are grouped before alphabetizing.</li> <li>(4) Clarification or tutorial discussion shall not be part of the entry, but may be added following the entry as a numbered discussion paragraph or a Note. When a numbered discussion paragraph is used for that purpose, start that discussion paragraph with <i>Discussion —</i>.</li> <li>(5) Use commonly accepted abbreviations and acronyms where they are available.</li> <li>(6) ‘SEMI’ is a registered trademark of this global industry association. Do not use this as an acronym to stand for anything else.</li> </ol>
A3-8	<i>Definitions</i>	<ol style="list-style-type: none"> <li>(1) Write definitions in the dictionary-definition style. Refer to <i>Style Manual</i> Table 1, 1-28.</li> <li>(2) Before including an entry in this section, check to determine if the item is included in the <i>Compilation of Terms</i>, available on the SEMI Standards Web site. Make sure that all entries taken from the <i>Compilation of Terms</i> exactly match the original entries in the compilation itself.</li> <li>(3) Do not define a term that appears only in the Terminology section unless it is used in the definition of another term.</li> <li>(4) List definitions for terms used elsewhere in the Standards Document.</li> <li>(5) List definitions of terms in alphabetical order. If desired, divide the list into numbered subsections so that related terms are grouped before alphabetizing.</li> <li>(6) Discussions, equations, figures, and Notes shall not be part of the definition. Discussion may be added following the entry as a numbered discussion paragraph in the Terminology section. Start that paragraph with <i>Discussion —</i>. Extended discussions, equations, figures, and Notes shall be placed at the first point of use within the Standards Document.</li> <li>(7) If needed for clarification or tutorial discussion, add an explanatory Note in a separate paragraph following the definition.</li> <li>(8) Identify the sources of definitions from other Standards or Safety Guidelines that are quoted. If the source is a standard or other document not published by SEMI, obtain a copyright release letter from the copyright owner and the primary author, if known, before submitting the Draft Document for balloting.</li> </ol>
A3-9	<i>Symbols</i>	<ol style="list-style-type: none"> <li>(1) List descriptions of symbols used elsewhere in the Standards Document.</li> <li>(2) List symbols in alphabetical order. If desired, divide the list into numbered subsections so that related items are grouped before alphabetizing.</li> <li>(3) Do not include standard symbols used for <i>Système International d’Unités</i> (SI) or other familiar units.</li> <li>(4) If needed for clarification or tutorial discussion, add an explanatory Note in a separate paragraph following the definition.</li> </ol>
A3-10	<i>Related Documents</i>	<ol style="list-style-type: none"> <li>(1) List in this section any Standards, Safety Guidelines, standards, other technical papers, and/or documents that provide useful background material for carrying out the Standard or Safety Guideline, but are not specifically cited in the Standard or Safety Guideline.</li> <li>(2) List only references that are publicly available.</li> <li>(3) Include as the last section of the official content parts of the Standard or Safety Guideline.</li> </ol>
A3-11	<i>Basis of Classification</i>	<ol style="list-style-type: none"> <li>(1) Clearly state and describe the categories and subcategories on which the groupings of the classifications are based.</li> <li>(2) If necessary, develop additional section headings to enhance the explanation of the groupings.</li> </ol>

#	Sections	Requirements
A3-12	<i>Classification</i>	(1) List groupings by category and subcategory using a tabular form or other selected means.
A3-13	<i>Test Methods</i>	<p>(1) List the test methods to be used to determine if the materials, products, systems, or services meet the requirements of the Specification. Indicate in this section if retesting is allowed.</p> <p>(2) Include test methods for each attribute covered in the <i>Ordering Information</i> and <i>Requirements</i> sections.</p> <p>(3) Where available, cite applicable standard test methods available from ASTM, DIN, Japan Electronics and Information Technology Industries Association (JEITA), SEMI, or other SDOs.</p> <p>(4) If several standard test methods exist for a particular attribute, indicate either (1) the preferred test method for the purpose of determining the suitability of the product(s) or service(s) or (2) the basis for choosing one test method over another.</p> <p>(5) If an appropriate standard test method is not available, describe a test method in abridged form. Instead of writing an abridged test method in this section, the test method can be a separate Test Method and cited in this section.</p> <p>(6) Write procedures/instructions in this section as imperative sentences (i.e., start with a verb because the subject 'you' is implied).</p> <p>(7) If no standard test method can be identified for a specific attribute and no test method is described, state that the value of the attribute shall be determined by a method agreed upon by the supplier and the purchaser.</p>
A3-14	<i>'Application Specific'</i>	<p>(1) Describe the instructions, options, or recommendations intended to increase the awareness of the user to available techniques, starting points, or approaches.</p> <p>(2) If appropriate, include criteria for making a selection among various options.</p> <p>(3) Use appropriate section name(s) for the type of content included in this section (i.e., the section name 'Application Specific' shall not be used).</p>
A3-15	<i>Summary of Practice</i>	<p>(1) Preview the procedure by concisely listing the key steps.</p> <p>(2) If desired, include a flow chart of the key steps as a graphical representation.</p>
A3-16	<i>Apparatus</i>	<p>(1) List all of the equipment required to carry out the procedure. Include a diagram of the apparatus in this section, if reasonable.</p> <p>(2) Do not include names or graphical trademarks of specific companies or organizations in the official content parts or Notes in this section. If the name of a company needs to be referred to in order to indicate the owner of a product trademark, provide it only in a footnote (refer to <i>Regulations</i> § 1.5.11).</p> <p>(3) Avoid the incorporation of a specific equipment product name unless such equipment is the only product that is commercially available and that satisfies the conditions for the apparatus. Refer to <i>Regulations</i> § 1.5.11.2 if the name of such equipment is trademarked.</p> <p>(4) Specify the requirements to be met by each individual equipment.</p> <p>(5) For each individual equipment, specify the range or nominal value of all parametric requirements that directly affect the test result.</p> <p>(6) Specify the requirements so that the stated precision and bias of the test can be met by competent operators; do not overspecify or underspecify.</p> <p>(7) Make sure that all equipment and supplies called for in the procedure are described in this section.</p> <p>(8) Describe in this section any requirements for setting up and preparing the apparatus to carry out the procedure.</p>

#	Sections	Requirements
A3-17	<i>Reagents and Materials</i>	<ol style="list-style-type: none"> <li>(1) List all process chemicals, gases, and other materials required to carry out the procedure.</li> <li>(2) Do not include names or graphical trademarks of specific companies or organizations in the official content parts or Notes in this section. If the name of a company needs to be referred to in order to indicate the owner of a product trademark, provide it only in a footnote (refer to <i>Regulations</i> § 1.5.11).</li> <li>(3) Avoid the incorporation of the specific commercial name of a reagent or material unless such reagent or material is the only product that is commercially available and that satisfies the conditions for the procedure. Refer to <i>Regulations</i> § 1.5.11.2 if the name of such reagent or material is trademarked.</li> <li>(4) Cite SEMI Specifications for required process chemicals and gases, where these are available to identify the assay and grade required by the procedure. Be sure to include the cited Standards in the <i>Referenced Standards and Documents</i> section.</li> <li>(5) If water is required for use in the procedure, reference SEMI F63; be sure to indicate the grade of water required.</li> </ol>
A3-18	<i>Safety Precautions</i>	<ol style="list-style-type: none"> <li>(1) Identify any hazardous materials, operations, and equipment required to perform the procedure safely.</li> <li>(2) Cite appropriate SEMI Safety Guidelines or other applicable safety standards and regulations.</li> <li>(3) Cite a material safety data sheet (MSDS), where applicable.</li> <li>(4) Insert caution and warning information (refer to <i>Style Manual</i> Table 1, 1-9) concerning the use of hazardous items immediately before the points in the procedure or other sections where the item shall be used.</li> </ol>
A3-19	<i>Test Specimens</i>	<ol style="list-style-type: none"> <li>(1) Describe all test specimens required to carry out the procedure or test method.</li> <li>(2) Write procedures/instructions in this section as imperative sentences (i.e., start with a verb because the subject 'you' is implied). The previous sentence is an imperative sentence, for example.</li> <li>(3) Describe the essential properties of the required test specimens.</li> <li>(4) Present a step-by-step procedure for selecting, preparing, and conditioning the test specimens.</li> </ol>
A3-20	<i>Procedure</i>	<ol style="list-style-type: none"> <li>(1) List detailed, step-by-step instructions for performing the procedure.</li> <li>(2) Write procedures/instructions in this section as imperative sentences (i.e., start with a verb because the subject 'you' is implied). The previous sentence is an imperative sentence, for example.</li> <li>(3) Instruct the user of the Standard to record all information required for interpreting the results of the procedure; include all information specified in the report section.</li> <li>(4) Review the sequence of steps in the procedure to ensure that: <ul style="list-style-type: none"> <li>• Each step follows from the previous step,</li> <li>• All branches are clearly identified, and</li> <li>• No choices available to the user of the Standards Document remain unspecified.</li> </ul> </li> </ol>
A3-21	<i>Calculations</i>	<ol style="list-style-type: none"> <li>(1) Describe in sequence, each calculation required to obtain the test result(s).</li> </ol>
A3-22	<i>Interpretation of Results</i>	<ol style="list-style-type: none"> <li>(1) List the steps required to interpret the results of the procedure, if appropriate.</li> <li>(2) Some Practices, such as Practices to prepare a specimen for a test, do not require interpretation of the results.</li> <li>(3) If interpretation is required, write procedures to interpret results in this section as imperative sentences (i.e., start with a verb because the subject 'you' is implied). The first sentence above is an imperative sentence, for example.</li> </ol>

#	Sections	Requirements
A3-23	<i>Report</i>	<p>(1) List the essential results of carrying out the procedure, if appropriate. Include the following items:</p> <ul style="list-style-type: none"> <li>• Identification of the test specimens, if any;</li> <li>• The location where the procedure was performed and the operator who carried it out;</li> <li>• Description of the specific equipment used to carry out the procedure, including software version, if appropriate;</li> <li>• Any optional portions of the procedure or choices exercised in carrying out the procedure; and</li> <li>• Results of carrying out the procedure.</li> </ul> <p>(2) Do not request information for the report unless its collection and recording are explicitly spelled out in the procedure.</p>
A3-24	<i>Ordering Information</i>	<p>(1) List all required and optional items to be included in a purchase order for the materials, products, systems, or services covered by this Specification.</p> <p>(2) Ensure that the list is complete enough that an order based on it will result in definition of the desired product or service.</p> <p>(3) The list may be developed in tabular or outline format.</p> <p>(4) Be sure to list any choices of grades or other items that shall be selected to define the product or service completely.</p> <p>(5) Where there is not a unique test method for particular attributes, ensure that the purchase document references the test method to be used for such attributes.</p>
A3-25	<i>Requirements</i>	<p>(1) List the requirements that shall be met for the materials, products, systems, or services to fulfill the Specification.</p> <p>(2) For servicing covered by the Specification, list the attributes or characteristics that the services shall have.</p> <p>(3) If desired, group related requirements into independent sections.</p> <p>(4) Liberal use of tables and outlines facilitates understanding of the Specification requirements.</p>
A3-26	<i>Sampling</i>	<p>(1) Specify procedures for selecting test specimens from a lot in order to determine the acceptability of the lot.</p>
A3-27	<i>Certification</i>	<p>(1) List the requirements for certifying that the product(s) or service(s) meet the Specification. If desired, use the following standard paragraphs:</p> <p style="margin-left: 2em;">x.1 Upon request of the purchaser in the contract or order, a manufacturer's or supplier's certification that the product was manufactured and tested in accordance with this Specification, together with a report of the test results, shall be provided at the time of shipment.</p> <p style="margin-left: 2em;">x.2 If desired, the supplier and purchaser may agree that the product shall be certified as 'capable of meeting' certain requirements. In this context, 'capable of meeting' shall signify that the supplier is not required to perform the appropriate tests. However, if the purchaser performs the test(s) and the product fails to meet the requirement(s), the product may be subject to rejection.</p>
A3-28	<i>Product Labeling</i>	<p>(1) List information to be included on the label of the product, including (if appropriate) a statement of conformance with the Specification.</p>
A3-29	<i>Packing and Package Labeling</i>	<p>(1) List requirements for protective or outer packaging, including information to be placed on the package label(s).</p>
A3-30	<i>Summary of Test Methods</i>	<p>(1) Preview the procedure by concisely listing the key steps.</p> <p>(2) If desired, include a flow chart of the key steps as a graphic.</p>

#	<i>Sections</i>	<i>Requirements</i>
A3-31	<i>Preparation of Apparatus</i>	<ol style="list-style-type: none"> <li>(1) Present a step-by-step procedure for preparing or setting up the equipment required to carry out the Test Method.</li> <li>(2) Write procedures/instructions in this section as imperative sentences (i.e., start with a verb because the subject 'you' is implied). The previous sentence is an imperative sentence, for example.</li> <li>(3) Include this section only for equipment requiring special set-up procedures; use the Calibration and Standardization section for these procedures.</li> </ol>
A3-32	<i>Calibration and Standardization</i>	<ol style="list-style-type: none"> <li>(1) Give step-by-step procedures for calibrating or standardizing the apparatus.</li> <li>(2) Write procedures/instructions in this section as imperative sentences (i.e., start with a verb because the subject 'you' is implied). The previous sentence is an imperative sentence, for example.</li> <li>(3) Do not include this section if calibration and standardization procedures are automatically provided in the apparatus.</li> <li>(4) Describe calibration and standardization procedures in the Procedure section if they are required before each test.</li> </ol>
A3-33	<i>Precision and Bias</i>	<ol style="list-style-type: none"> <li>(1) Provide in this section a statement of the precision and bias expected to be achieved by a competent operator in using the Test Method together with a description of the basis for the statement such as the results of a single laboratory or multilaboratory (i.e., round-robin) test.</li> <li>(2) SEMI E89 provides guidance for performing a measurement systems analysis (MSA), which will provide precision and bias estimates among other metrics.</li> </ol>

## **APPENDIX 4 PROCEDURE FOR REPLACEMENT OF A PUBLISHED STANDARDS DOCUMENT WITH A NEW ONE THAT CHANGES DESIGNATION LETTER AND POSSIBLY PRIMARY TECHNICAL AREA**

### **A4-1 Special Procedure**

A4-1.1 An Originating TC Chapter that wishes to change the Designation Letter of an existing Standards Document may submit a written request to Standards HQ staff for approval of a change to one of those listed in Table 9. Upon approval of the request by Standards HQ staff, the Originating TC Chapter issues a Line-Item Letter Ballot to replace the existing Standards Document (refer to *Regulations* ¶ 8.4.1.1), with changes (including those to the Title and/or the Purpose or Scope sections) that consist solely of deletion of terms describing the old technical area and/or addition of terms describing the new technical area.

A4-1.2 Under the condition that the rest (i.e., outside of this procedure) of the resulting Letter Ballot does not exceed the limitations on a Line-item Letter Ballot defined in §§ 3.5.2, 3.6.1, and 3.6.1.2, other changes to revise the Standards Document may also be needed and included as separate Line Items in the SNARF and Line-Item Letter Ballot. The TF should review the Standards Document to determine that it contains the sections appropriate to its Subtype, if a Standard, or Type (for a Safety Guideline) and that the contents of these sections are complete and accurate. Table 10 lists sections that are mandatory (M), optional (O), or prohibited (P) in each Standard Subtype and Safety Guideline. Section contents are described in Appendix 3.

A4-1.3 The Background Statement for the Letter Ballot should include a note citing this procedure as authority to issue a Line-Item Letter Ballot for the changes described in ¶ A4-1.1.

A4-1.4 If changes outside the scope of this Appendix are desired, the ballot for the new Standards Document shall be a full Letter Ballot.

## RELATED INFORMATION 1

### USEFUL DOCUMENTS

The following list of SEMI Documents and forms that are useful in conducting Standards Document development work is provided for information only. The principal citation to these items in this *Procedure Manual* is provided in square brackets after the title. Each of these items may be obtained from the SEMI Standards Web site unless otherwise indicated.

#### **R1-1 Program Regulations and Policies**

- R1-1.1 *Regulations: Governing SEMI Standards Program* [refer to ¶ 1.1.1]
- R1-1.2 Antitrust Reminder [refer to § 4.1.3.2]
- R1-1.3 Guidance for the Development of Standards That May Involve Patentable Technology [refer to § 4.1.3.2]
- R1-1.4 International Effective Meeting Guidelines [refer to §§ 4.1.3.2 and 5.1]
- R1-1.5 Program Membership Requirement [refer to § 4.1.3.2]

#### **R1-2 Style Manual and Standards Document Templates**

- R1-2.1 *SEMI Standards Style Manual* [refer to § 2.6.3]
- R1-2.2 Standards Document Templates [refer to § 2.6.3]

#### **R1-3 Compilation of Terms**

- R1-3.1 SEMI International Standards Compilation of Terms [refer to § 3.12.3]

#### **R1-4 Global Technical Committee Activity Information**

- R1-4.1 TFOF and SNARF Listings [refer to §§ 6.4.6.9.2 and 2.2.7.4]
- R1-4.2 TC Chapter Express Report (CER) [refer to § 4.4.1]
- R1-4.3 Standards Document Status Report [refer to ¶ 2.2.7.4.1]
- R1-4.4 Liaison Report [refer to § 4.1.3.2 and ¶ 6.4.6.9.3]

#### **R1-5 Program Organization**

- R1-5.1 Organization Charts [refer to § 6.1.5]
- R1-5.2 Global Technical Committee Charters and Scopes [refer to §§ 2.2.4.3.1, 2.2.7.2.3.2, and Appendix 1]

#### **R1-6 Forms**

- R1-6.1 Standards New Activity Report Form (SNARF) [refer to ¶ 2.1.2]
- R1-6.2 Task Force Organization Form (TFOF) [refer to §§ 2.1.4 and 6.4.2.3]
- R1-6.3 A&R Form [refer to § 2.14.2; available on SEMI Standards Web site]
- R1-6.4 A&R Appeal Form Template [refer to § 2.15.2.2; available from Standards staff]
- R1-6.5 Publication Improvement Proposal (PIP) Form [refer to ¶ 2.16.4.1]
- R1-6.6 Publication Change Request (PCR) Form [refer to ¶ 2.16.4.3]

## Revision Record

<i>Description</i>	<i>Authority<sup>#1</sup></i>	<i>Date of Action</i>
Revision 0.20, with inputs from Regional Standards Committee members in Japan, Europe and North America	Regulations Subcommittee	April 2000
Revision 0.21b, Edited to improve readability, reduce redundancy and SEMI Staff functions, and conform to <i>Regulations Governing SEMI Standards Committees, December 2, 1999</i>	Regulations Subcommittee	July 2000
Revision 1.0, Full initial release	Regulations Subcommittee	Aug. 1, 2000
Changes to Sections 2.8, 2.14, and 3.2 concerning ballots and line items	Regulations Subcommittee	December 7, 2000
Changes to Section 2.4, Auxiliary Information	Regulations Subcommittee	April 25, 2001
Addition of Section 5.7, creating new standards regions	Regulations Subcommittee	December 5, 2002
Addition of “Step 3” to Section 5.7, Revision to Abstentions (2.11.5.1.2.1), complete rewrite of Section 2.18 (5-year review) and addition of 2.19 (Delayed Revision)	Regulations Subcommittee	July 16, 2003
Modification of Sections 3.2.4.1 and 3.2.5.1 to expand number of line items to 10	Regulations Subcommittee	December 4, 2003
Addition of Section 2.20, Procedural Review and revision to Section 2.16, Appeals	Regulations Subcommittee	July 14, 2004
Addition of Section 3.4, Terminology Documents	Regulations Subcommittee	July 29, 2004
Addition of Section 2.21, Revision History	Regulations Subcommittee	November 12, 2004
Editorial Corrections of procedural review body in entire document	Robert Scace	November 12, 2004
Deletion of Section 2.5 — Draft Development Using a Web site, Corrections of Section 2.10.4, 2.10.5 to reflect current practices; modifications to section order to improve linearity and readability	Standards Staff	June 17, 2005
Modifications to Section 2.12 and Related Information	Regulations Subcommittee	July 12, 2005
Modifications to Section 2.12.3.3	Regulations Subcommittee	March 15, 2006
Significant modifications to all sections	Standards Staff/Regulations Subcommittee	November 18, 2008
Modifications to comply with July 2009, November 2009, and March 2010 updates to <i>Regulations</i>	Standards Staff/Regulations Subcommittee	June 17, 2010
Clarifications on Subordinate Standards, clarifications on SNARF contents	Standards Staff/Regulations Subcommittee	July 19, 2010
Modifications to comply with June 2011 updates to <i>Regulations</i>	Standards Staff/Regulations Subcommittee	July 8, 2011
Modification of Table 11, minor editorial changes throughout	Standards Staff/Regulations Subcommittee	November 30, 2011
Major revision for consistency with the November 2012 <i>Regulations</i> changes	Standards Staff/Regulations Subcommittee	December 3, 2012

<i>Description</i>	<i>Authority</i> <sup>#1</sup>	<i>Date of Action</i>
Major revision for consistency with the March 2013 <i>Regulations</i> changes	Standards Staff/Regulations Subcommittee	March 28, 2013
Major revision for consistency with the December 2014 <i>Regulations</i> changes. Special procedure added for correction of nonconforming title of Standards Documents; Clarification of Table of Contents placement in the Documents; Improved conduct for joint TC Chapter meeting.	Standards Staff/Regulations Subcommittee	December 1, 2014
Major revision for consistency with the March 2015 <i>Regulations</i> changes. New requirements added related to Notices; New guidance added related to Notes; Clarification of SNARF approval procedures for new Standards and Safety Guidelines and major revisions of existing Standards and Safety Guidelines; Updated Appendix 4 (e.g., Withdrawn Standards Documents do not need title corrections); and Clarification of procedures related to Table of Contents.	Standards Staff/Regulations Subcommittee	March 27, 2015
New ¶ 1.1.7 to introduce that <i>Procedure Manual</i> becomes effective 30 days after public distribution; Revision to Appendix 4 to update nonconforming titles; New Appendix 5 for designation changes procedure with related changes to ¶ 3.1.3 and Table 9; and Miscellaneous revision to clarify allowable editorial changes in reapproval ballot to ¶ 3.3.2.3.1.	Standards Staff/Regulations Subcommittee	February 12, 2016
Clarification on Minority Report and record of Letter Ballot review. Clarification on organizational/technical standing of subcommittees. Paper ballot elimination and clarification for Background Statement accompanying Letter Ballot. Clarification on adjudicating Negatives. Clarification on Ratification Ballot. Provide guidance where referenced auxiliary documents are to be listed. Correction of an omission from when the ratification ballot procedure was implemented. Add new ballot taxonomy figure. Revisions/updates to Appendix 4.	Standards Staff/Regulations Subcommittee	November 10, 2016
Clarification on Official Virtual TC Chapter Meeting practices section. Clarification on Letter Ballot Review section. Clarification on Document maintenance after publication. Clarification on types and use of Editorial Changes. Clarification on Withdrawn Standards. Update to remove normative content from Notes. Clarification on Reinstatement Ballot for Line Items. Clarification on Reapproval Ballot. Define and use the acronym IP for intellectual property. Clarification on when to revise a SNARF vs. creating a new one. Update of Appendix 4 for correction of nonconforming titles.	Standards Staff/Regulations Subcommittee	June 8, 2018

Description	Authority <sup>#1</sup>	Date of Action
<p>Clarification of IP-related policies regarding technical presentations in TC Chapter meetings.</p> <p>Clarification of IP-related policies to harmonize with the <i>Regulations</i> changes related to related to proper incorporation of company names, graphical trademarks, product trademarks, product names, commercial names, etc. and copyrighted items.</p> <p>Clarification of SEMI's copyrights related to restriction on inclusion in other documents.</p> <p>Revision of list of examples that do not qualify as editorial changes to harmonize with planned revisions to the <i>Style Manual</i>.</p> <p>Clarification of use of Notices.</p> <p>Update of Appendix 4 for list of published documents with nonconforming titles.</p> <p>Made minor editorial corrections.</p>	Standards Staff/Regulations Subcommittee	February 28, 2019
<p>A new § 7 for liaison relationship with other organizations and concomitant changes.</p> <p>Clarification on editorial changes made independently from letter ballot process.</p> <p>Clarification on Standards Document Development Project.</p> <p>Improvement to procedural review terminology.</p> <p>Changes corresponding to “Miscellaneous Improvements” of the <i>Regulations</i>.</p> <p>Revision to Table 10 to allow alternative to Test Method section title.</p> <p>Revisions to Table A3 in Appendix 3.</p> <p>Revisions/Updates to Table A4 in Appendix 4.</p> <p>Miscellaneous changes to the <i>Procedure Manual</i>.</p>	Standards Staff/Regulations Subcommittee	February 28, 2020
<p>Clarification to transition period, simulation, implementation, and participation for Official Virtual TC Chapter Meeting.</p> <p>Miscellaneous clarifications for Virtual Meeting terminology and improvement to international effective meeting guidelines.</p>	Standards Staff/Regulations Subcommittee	June 22, 2020
<p>Add new § 6.1.3.4.1 TC Chapter Disbandment Procedure.</p>	Standards Staff/Regulations Subcommittee	November 5, 2020
<p>Clarification to provide alternative, bias-free terms or option to rewrite as necessary.</p> <p>Clarification of Inactive Status.</p> <p>GTC Charter and Scope Revision Process and new ¶ 2.2.4.3.1.1 Temporarily Hosting New Task Force Activity.</p> <p>Ratification Ballot improvement.</p> <p>Clarification to the Terminology section that is not mandatory if no term or acronym is defined.</p> <p>Clarification to Terminology and Referenced Standards</p> <p>Revisions/Updates to Table A4 in Appendix 4.</p> <p>Miscellaneous changes to the <i>Procedure Manual</i>.</p>	Standards Staff/Regulations Subcommittee	November 1, 2021
<p>Clarification of Exception for Line-Item Ballot in ¶ 3.5.2.2 and § 3.5.3.</p> <p>Clarification of Type 1 and 2 Editorial Changes in Table 6.</p> <p>Clarification to Reapproved Designation for Primary Standard.</p> <p>Clarification to Line-Item Ballot Background Statement for Primary/Subordinate Standards in § 2.6.4.1.</p> <p>Revisions/Updates to Appendix 4.</p> <p>Miscellaneous <i>Procedure Manual</i> Improvement.</p>	Standards Staff/Regulations Subcommittee	February 28, 2023

<i>Description</i>	<i>Authority</i> <sup>#1</sup>	<i>Date of Action</i>
New § 2.2.8 Cancellation of a SNARF. Clarification ¶ 6.4.3 for the Use of CONNECT@SEMI for TF Management and as a Document Development Depository. New Note 44 to set requirement for an official TC Chapter meeting quorum. Clarification on § 4.4 for TC Chapter CER posted within 10 business days. Clarification on ¶ 2.6.4.1 for reapproval of Subordinate Standard. Deletion of entire Appendix 4. Miscellaneous <i>Procedure Manual</i> Improvement.	Standards Staff/Regulations Subcommittee	February 20, 2024
Clarification on § 6.4.5.10 for discharging of a TF. New ¶ 6.4.5.11 Designation of a TF as Dormant. Clarification of TFOF and SNARF forms. Miscellaneous <i>Procedure Manual</i> Improvement.	Standards Staff/Regulations Subcommittee	September 27, 2024
Major Revision to Multiple Related Standards on a Single Ballot Action. Clarification to Major Revision Ballot Format. New § 3.8.4.1.3 Primary Standard Revision Checklist. Clarification of the SNARF form. Miscellaneous <i>Procedure Manual</i> Improvement.	Standards Staff/Regulations Subcommittee	July 07, 2025

#1 Name of group having authority on the given date.