

TR- Committee- An Engineering Committee sponsored by the TIA Mobile and Personal Communications, Network Equipment, or User Premises Equipment Divisions. The designator "TR" is historic, and probably refers to "transmitters", although a modern definition would be "Telecommunications Requirements".

Voting Representative- An individual designated by a company which is a Member of a Formulating Group, to vote on its behalf. (See 3.2.3.1.)

2 ORGANIZATION

2.1 General

The TIA is a national, full-service trade association serving manufacturers, suppliers, and distributors of telecommunications equipment, systems, and other products and their customers. The voting Members of the TIA are U.S. companies engaged principally in the business of manufacturing or selling telecommunications products. TIA publishes an Annual Report which is available upon request that describes TIA's organization and accomplishments. In addition, TIA publishes a Standards and Technology Annual Report (STAR) that covers the activities of the Engineering Committees.

The affairs of the Association are managed by a Board of Directors elected from the Membership. The general operations of the Association and its Staff are under the direction of the President who is also a member of the Board. The Board has created standing committees to establish policy and carry out specialized programs within the Scope of the standing committee.

In addition to the general activities of the Association, Member companies have the option of associating with one or more of the TIA's product-oriented Divisions dealing in such product areas as: Fiber Optics, Mobile and Personal Communications, Network Equipment, and User Premises Equipment.

2.2 Standards and Technology Department

The Standards and Technology Department is a specialized Staff-level activity of the Association providing engineering-related services to the various TIA Divisions, the standing committees, and the TIA general Membership. All TIA Engineering Committees are located under the Technical Committee. TIA Divisions outline their technical needs to the Standards and Technology Department for action, the results of which may take the form of TIA Standards, Specifications, Bulletins, or other publications, technical positions on government regulations or military specifications, formulation of positions on international and regional Standards, or the sponsoring of technical conferences and symposia.

2.3 Administration

The Standards and Technology Department is headed by one or more Vice Presidents, who report to the President and are responsible for carrying out the engineering activities of the Department. The responsibilities include the management of the Standards and Technology Department Staff and facilities and general guidance of the activities of the Committees.

One or more Staff Engineers or Technical or other Assistants may be provided to assist the Vice President(s) in the conduct of work of the Standards and Technology Department.

2.4 Structure

2.4.1 TIA Technical Committee

The Technical Committee is one of the special committees created by the Board of Directors and chaired by a member of the Board. The Technical Committee has overall responsibility for establishing the broad technical policy of the Association, including the organization and operating policies of the Standards and Technology Department and Engineering Committees.

2.4.2 TIA Technical Standards Subcommittee (TSSC)

The Technical Standards Subcommittee (TSSC) is a special Subcommittee of the TIA Technical Committee. TSSC provides the initial approval of all projects requested by TIA Formulating Groups and monitors for duplication of work between Formulating Groups. In addition, TSSC reviews projects being undertaken by other Standards Developing Organizations (SDO) to determine if there is overlap of projects between TIA and other SDOs.

TSSC ensures there is liaison internally and externally so that TIA Standards activities remain within assigned Scopes. The TSSC approves all new Engineering Committee Scopes and revisions to those Scopes and, when required, directs that such Scope statements be sent to ANSI for approval. TSSC monitors the overall Engineering Committee work program at TIA and provides guidance as necessary.

When conflicts develop between Formulating Groups, TSSC will attempt to resolve the conflict, and failing a resolution will escalate the matter to the Chair of the Technical Committee for appropriate action.

TSSC also reviews all Standards Proposals recommended by Formulating Groups. This review verifies that the Standards Proposal has been prepared in full compliance with the rules and procedures of TIA for such programs and further verifies that the balloting process has met the requirements of TIA and the American National Standards Institute. TSSC does not review Standards Proposals for technical content.

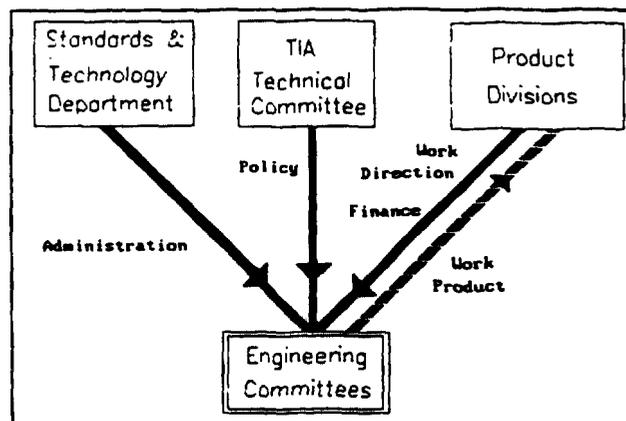
The membership and operating procedures for the TSSC are set forth in Annex A.

3 ENGINEERING COMMITTEES

The work of the Standards and Technology Department is conducted through its Engineering Committees with the assistance of the Standards and Technology Department Staff.

3.1 Establishment of Committees

By resolution of the TIA Board of Directors, the Chair of the Technical Committee has authority to create Engineering Committees and to dissolve those that are no longer needed. Such Committees normally will be organized to correspond to the appropriate product structures of the TIA Product Divisions and will be sponsored by those Divisions (Fiber Optics, Mobile and Personal Communications, Network Equipment, and User Premises Equipment), and their administrative expenses will be underwritten by those Divisions. Engineering Committees also may be organized directly under the auspices of the TIA Technical Committee when the planned work is interdisciplinary or when other circumstances dictate.



The Chair of the Technical Committee shall appoint a Chair pro tempore for any newly-organized Engineering Committee. Once a new committee has been organized, or if a Chair should become vacant on an existing Committee, a new Chair will be appointed by the Chair of the Technical Committee from eligible candidates recommended by the Engineering Committee Membership.

The appointment is a personal one, not directly tied to the person's employer. However, TIA and ANSI have policies that require balance in Committee structures and a large portion of leadership positions should not be held by one company or organization. In addition, when an individual is initially recommended for a leadership position or when that individual changes employers, the support of his or her company or organization is relevant to the appointment decision.

Thus, the following criteria will be used by the Technical Committee Chair and the Engineering Committee Chairs in their selection and reaffirmation process (See 3.1.1):

1. Determine the candidate or candidates recommended by the group. (**Note:** When new groups are being initially formed a facilitator or Chair pro tempore can be immediately appointed in order to determine the group's recommended candidate(s).
2. Determine if the individual is willing to serve if appointed and acknowledges the personal commitment and resource commitment to the position.*
3. Request a letter from the person's employer acknowledging that the person has been recommended for the position (or reaffirmation if currently serving) and request a confirmation of support of the person, including the resources to support the position. Additional support, such as technical editing support for documents generated in the Formulating Group can also be sought.*
4. Review the candidates to determine who is best qualified. Ensure that candidates meet the eligibility criteria of the Engineering Manual, have technical expertise in the areas that are relevant, and are supported in their recommendation. An objective is to spread leadership positions among various members.
5. Seek input and counsel from TIA Staff and the Chair of the sponsoring Division.*

* These criteria also apply when an individual changes employers, but the individual can continue to serve until further notice.

Subcommittees, Working Groups, or Task Groups may be established by an Engineering Committee if deemed necessary to carry out its mission.

- (1) **Subcommittees** normally will be formed when it is desirable to divide responsibility for the subject matter falling within the scope of an Engineering Committee. Subcommittees, like their parent Committees, have no fixed term of existence and are intended to continue to exist until there is no need. Subcommittee Chairs shall be appointed by the Chair of the parent Engineering Committee from eligible candidates recommended by the Committee Membership. The Chair of the parent Engineering Committee may dissolve the Subcommittee when it is no longer required.
- (2) **Working Groups** are established by an Engineering Committee or Subcommittee for specific purposes, such as (but not limited to) developing a draft of a specific Standard or Specification, and are to be dissolved by the Chair of the parent body when their function is no longer required. The Chair of the working group is appointed by the Chair of the parent body.
- (3) **Task Groups** are ad hoc bodies that are formed by an Engineering Committee, Subcommittee, or Working Group to address a specific problem as part of the larger body. Task Groups meet informally and do not have a Standard-formulating mission. They are dissolved by the Chair of the parent body when the purpose for which they were formed has been completed. Appointment of a Task Group Chair (where appropriate) and dissolution of the Task Group are functions of the Chair of the parent body.

NOTE: The generic term "**Formulating Group**" is used in this Manual to refer to an Engineering Committee or a Subcommittee, but not to a Working Group or a Task Group.

An alphanumeric designation of the pattern *TR-15* will be assigned to each Engineering Committee by the TIA Standards and Technology Department. Subcommittees shall be designated by the addition of a decimal and a numerical suffix; e.g., *TR-15.1*, and Working Groups shall be designated by the addition of a further decimal and numerical suffix; e.g., *TR-15.1.1*. Where a Working Group is directly attached to an Engineering Committee, the numerical suffix 0 (i.e., *TR-15.0.1*) may be used to so indicate.

If a person resigns, dies, or is otherwise unable to lead, the Vice-Chair, if there is one, shall assume leadership or a Chair pro tem can be utilized. Vice Chairs are recommended because it is desirable to have continuity of leadership within Committees and Subcommittees.

3.1.1 Reaffirmation of Chairs

The Chair of the Technical Committee at any time, but at least every two years, shall call upon each existing Engineering Committee and Subcommittee for reaffirmation of their leadership and structure. Should the Chair of any Engineering Committee or Subcommittee fail to receive reaffirmation, a new Chair may be appointed as described above. The criteria for reaffirmation are the same as for initial appointment. (See 3.1)

3.1.2 Types of Projects

Engineering Committees may initiate projects to produce the following types of TIA documents:

- (1) Standards;
- (2) Specifications;
- (3) Interim Standards (as a step enroute to a Standard);
- (4) Bulletins;
- (5) Engineering Publications;
- (6) input documents to other Standards bodies.
- (7) such other projects as may be authorized by the Chair of the sponsoring Division or by the Chair of the Technical Committee.

3.2 Membership

3.2.1 Eligibility

Membership in Engineering Committees and their subelements is open to U. S. companies¹ having a direct and material interest within the respective jurisdiction of the

¹ A U.S. company (or comparable body) is a corporation, partnership, or sole proprietorship having a permanent place of business in the United States, its territories or possessions. Such a company need not be U.S.-owned and may be a subsidiary of a foreign company. Comparable bodies include associations, trade unions, institutions, and the like, having a permanent place of business in the United States.

Formulating Groups. TIA Membership is not a prerequisite to participation. (Also See 3.2.4 for government participation.)

Persons participating in such programs should be technical personnel. Under some circumstances, eligibility for Membership may be limited by circumstances beyond the TIA's control, such as government regulations, the need for security clearances, etc. Any question as to eligibility shall be referred to the TIA Vice President responsible for Standards activities.

Any company, organization, or individual desiring to participate on a TIA Formulating Group should notify the TIA Secretariat. The TIA Secretariat will inform the party of the fees involved, if any, and the procedure to follow for both voting and non-voting participation. The Secretariat will also inform the requester of the requirement to attend two meetings to demonstrate an active interest and to obtain voting rights. The requirements to maintain voting rights will also be provided.

In order for a Formulating Group to work effectively it is highly desirable that all interest categories² be represented in TIA Formulating Groups, and it is an absolute requirement that no interest category be intentionally excluded. Chairs of Engineering Committees are expected to make an affirmative effort to obtain full representation of all interest categories in Formulating Groups under their jurisdiction and to avoid domination by any one group. Where an imbalance exists in spite of such efforts, the Chair has an additional responsibility to ensure that no one interest category constitutes more than 50% of the parties receiving ballots during the public comment period (See 6.6). **Note:** The 50% limit applies to the writing of most Standards. In the case of safety Standards, ANSI requires that no one interest group should constitute more than 1/3 of the parties receiving ballots during the comment period.

3.2.2 Eligibility for Chair

Acceptance of the Chair of a TIA Engineering Committee represents a major commitment of talent and support resources by an employer. In order to ensure that such a commitment exists and will be ongoing, it is the TIA's policy that Chairs of Engineering Committees are to be selected from among qualified representatives of private sector

² Typically, **Manufacturer** (of the product or device being Standardized); **User** (of the product or device being Standardized); **Other User** (of the Standard but not necessarily the product, such as testing laboratories, manufacturers of products or devices connecting to or associated with the product or device being standardized, or network operators; and **General Interest**. Other categories may be more appropriate, depending upon the nature of the Standard.

companies having a direct and material interest in the work of the Committee. It is preferred, but not required, that Chairs be representatives of TIA Member companies³. In all cases, Chairs shall be representatives of the private sector.

Maintaining a leadership position on a Formulating Group can require a significant amount of time and travel. Individuals seeking such positions should ensure that their personal commitments and their employer's priorities will allow them the necessary resources to serve effectively. Additionally, Chairs may be requested to provide additional resources such as technical editors to ensure the quality, technical accuracy, and compliance with the TIA Style Manual in the final documents.

Chairs of Subcommittees, Working Groups, and Task Groups should preferably be representatives of TIA Member companies and, in any event, shall be representatives of organizations holding voting status in the Engineering Committee to which their Subcommittee or working group is attached.

3.2.3 Company Representation

3.2.3.1 Voting Representative

Membership in TIA Formulating Groups is vested in companies (or comparable bodies) whether TIA Member or non-member⁴. An individual designated by the company is placed on the list of voting representatives and exercises full Membership privileges after the company has been represented at two consecutive meetings. ⁵(See 3.2.5 below for Membership continuation requirements.)

³ TIA Member companies, for the purpose of this document, are companies holding general class Membership in good standing in the Telecommunications Industry Association. Associate Members of the TIA are not afforded the services of the Standards and Technology Department. Companies which are not general-class Members of the TIA, but which hold voting status in TIA Engineering Committees, are not classified as TIA Member companies. Further information may be found in the bylaws of the Telecommunications Industry Association.

⁴ Non-Member participation fees may be charged. See 3.2.8. Further details are available from the Standards and Technology Department.

⁵This two-meeting requirement applies in the case of joining an existing Formulating Group, and does not apply when a new Formulating Group is being formed or reorganized.

Representatives on Engineering Committees and subelements are considered to be acting for their respective companies in developing an industry position on issues before such Formulating Groups. Voting representation from any company is limited to one representative on any Formulating Group or subelement. ⁶Where a company includes several divisions or subsidiaries, voting representation is limited to one person from that company unless it can be shown that the operations are so different as to represent different interest categories.

3.2.3.2 Alternate Voting

When the designated Voting Representative is not present at a Formulating Group meeting or is unavailable to respond to a mail ballot, any other employee or representative of that company may be designated by it to exercise Formulating Group Membership privileges, including voting, on behalf of that Member. In such case, only one such company representative may vote, per the requirements of 3.2.3.1, above.

3.2.3.3 Supplemental Representative

In addition to the Voting Representatives list referred to above, the TIA maintains a supplemental mailing list, and individuals whose names appear on this list receive copies of all Formulating Group correspondence mailed by the TIA.

Non-members of the TIA holding voting Membership status in a Formulating Group may place additional names on the supplemental mailing list upon payment of a service fee per name, per list.

Member companies of the TIA may place one additional name on the supplemental mailing list without charge, and may place further additional names on the supplemental mailing list upon payment of a service fee per name, per list. Deviations from this policy require approval of the TIA Vice President responsible for Standards activities.

Persons whose names appear on the supplemental mailing list are not recognized as the Voting Representative, but when a vote is cast in the absence of the regular Voting

⁶Some TIA Engineering Committees have traditionally chosen to operate as administrative groups coordinating the work of their Subcommittees, which function as the Formulating Groups. The Members of such Committees are often the Subcommittee Chairs, and are representing the Membership of the Subcommittees, rather than their individual companies. It may occur that two or more of the Subcommittee Chairs are employees of the same company. In such case, the TSSC may waive the one company, one vote provision of 3.2.3.1.

Representative (3.2.2.2 above), it is desirable that it be cast by an individual who has been receiving Formulating Group correspondence through the supplemental mailing list and who has been participating regularly in Formulating Group meetings.

3.2.3.4 Multiple Votes

No individual may vote or cast a ballot on behalf of more than one Member. No proxy or absentee ballots will be recognized.

3.2.4 Government Participation

The TIA, through its Standards and Technology Department, engages in the writing and maintenance of voluntary industry Standards and Specifications which relate to the products and services its Members produce. The TIA desires and encourages the active participation in its Standards-developing activities of all parties having a direct and material interest in its Standards, including U.S. federal, state, and local government entities when they have such a direct and material interest.

Contribution to the Standards-making process may take the form of liaison with appropriate Formulating Groups, participation in the open industry balloting of Standards Proposals, or active participation in Formulating Groups. Because Standards-making depends on consensus rather than the will of a simple majority, participation in the consensus-building process, in any of the forms described above, is of far greater significance than the final act of voting in a Committee.

Agencies at all levels of U.S. federal, state, and local government are encouraged to participate in TIA Standards-making activities on a non-voting basis when they have a *direct and material interest in the Standards work and are willing and able to commit to full and consistent participation at any of the levels described above.* When a government entity chooses to participate in a Formulating Group on a nonvoting basis, all fees are waived. The names of such participants will be entered on the supplemental mailing list of the Formulating Groups, entitling those representatives to all Formulating Group-related correspondence mailed by the TIA. The level of active participation by such government designees will be reviewed periodically, and the names may be removed for nonparticipation (See 3.2.5). State and local jurisdictions in particular may find it more practical to be represented by their respective national associations.

Whenever the federal government requests voting status on a TIA Standards Formulating Group, one such voting status shall be granted without charge, with the understanding that that representative will represent the interests of the entire federal government. Should more than one branch or agency of the federal government request voting status in the same Formulating Group, and should the various branches and agencies be unable

to agree upon a consolidated representation, such voting status will be granted upon a showing of direct and material interest, provided that the normal non-member participation fees are paid by each participating federal branch or agency.

Whenever a state government requests voting status on a TIA Standards Formulating Group, one such voting status shall be granted without charge, with the understanding that that representative will represent the interests of all of the states, through the appropriate national association of state governments. Should more than one state government request voting status in the same Formulating Group, and should the various states be unable to agree upon a consolidated representation, such voting status will be granted upon a showing of direct and material interest, provided that the normal non-member participation fees are paid by each participating state government.

Whenever a local government requests voting status on a TIA Standards Formulating Group, one such voting status shall be granted without charge, with the understanding that that representative will represent the interests of all local governments, through the appropriate national association of local governments. Should more than one local government request voting status in the same Formulating Group, and should the various local governments be unable to agree upon a consolidated representation, such voting status will be granted upon a showing of direct and material interest, provided that the normal non-member participation fees are paid by each participating local government.

3.2.5 Membership Continuation

Continuation in voting status as a Member of any Formulating Group or subelement depends upon active participation in the work program.

The criterion for removal of a company from voting status is absence from three consecutive meetings. ⁷Failure to respond to a Formulating Group mail ballot shall be counted as an absence for this purpose. When a company holding voting Member status in a Formulating Group has gone unrepresented for three successive meetings, the Chair shall so advise the Staff unless, on a case-by-case basis, failure to participate or attend is excused. The Staff shall notify the company of its failure to meet minimum participation requirements and shall remove the company and its representatives from the list of voting Members. Reinstatement requires a resumption of participation in the Committee's work, and participation in two consecutive meetings. The Chair shall notify the Staff when reinstatement requirements have been met.

⁷The three-meeting rule applies for companies who have been regular participants. If a company has been represented at only two meetings, it may be dropped after failure to attend the next two meetings.

Formulating Group Chairs are required to enforce the Membership continuation rules in order to maintain their ability to raise a quorum at meetings. (See 5.3.2.)

Formulating Group Chairs should also encourage Member companies to ensure that the person shown on the mailing lists as their Voting Representative is in fact the person who attends Formulating Group meetings.

3.2.6 Liaison Representatives

Formulating Group Chairs may appoint nonvoting liaison representatives from other trade associations or professional societies when appropriate. Liaison arrangements are usually made on a reciprocal basis. A liaison representative has full privileges of participation in Formulating Group activities and will receive Committee mailings but may not vote. Fees will be waived when a reciprocal arrangement exists. Requests or recommendations for liaison arrangements with non-U.S. counterpart or regional or international Standards bodies should be referred to the Standards and Technology Department.

3.2.7 Non-U.S. Observers

Requests from non-U.S. Standards Developing Organizations, individuals, or companies for observer status will be considered on a case-by-case basis, and should be referred to the Standards and Technology Department.

3.2.8 Fees

Since the operations of the Engineering Committees and the Standards and Technology Department are heavily subsidized from the dues paid by Association Members, a charge per meeting commensurate with costs is assessed to companies that desire to be Members of Engineering Committees but are not voting Members of the TIA. In order to encourage participation in the Engineering Committees by under-represented interest categories, this fee may be waived or reduced for such groups. The decision to waive or reduce fees on an interest category basis will be the responsibility of the Vice President responsible for Standards activities, after consultation with the Chair of the Engineering Committee and the Chair of the sponsoring TIA Division.

Companies having a direct and material interest in the matters being considered for Standardization in TIA Committees, but who can demonstrate that they would be prevented from participation in the Standards formulation process by imposition of participation fees or special fees may seek partial or complete abatement of the fees on a hardship basis by contacting the Vice President responsible for Standards activities. Since the cost of travel to attend meetings usually far outweighs the fees, such

companies should also consider the alternative of participation in the pool of persons agreeing to receive unsolicited ballots during the public ballot period, since this does not require meeting attendance. See 6.6.

In providing printing, postage, meeting room, and other administrative expenses to Formulating Groups, TIA undertakes a major financial commitment. Like any trade association, TIA's resources are finite. TIA will budget Standards activities based on historical information and revenue sources available to TIA. This budget will provide a finite amount of support. If Standards activities of Formulating Groups become extraordinary and exceed the budgeted resources, then the Formulating Group may be assessed an additional fee or asked to provide the additional resources internal to the Formulating Group.

Engineering Committees carrying out special projects which require the retention of outside labs or experts may also levy a voluntary assessment on themselves in order to finance the special expenses. Failure to pay such a voluntary assessment shall not bar a Member from further participation in the work of the Committee.

3.3 Formulating Group Functions

TIA Formulating Groups shall confine their activities to the preparation of Standards-related projects listed in 3.1, to the development and coordination of U.S. positions with international, regional, and other national Standards bodies, and to the furnishing of assistance, information, and recommendations on engineering matters to the product Divisions, the standing and special committees, the officers, and the Board of Directors of the TIA. In addition, at the direction of their sponsoring Divisions or the Standards and Technology Department, they may engage in other engineering-related activities in keeping with their scopes and the TIA Legal Guides.

3.4 Responsibilities of a Chair

The Chair of each TIA Engineering Committee is responsible for the conduct of group activities in accordance with the procedures prescribed in this Manual and the TIA Legal Guides.

In addition to the above, each Chair of an Engineering Committee is responsible for overseeing subordinate Subcommittees and Working Groups and for the preparation of periodic and annual reports on Committee activities to be furnished to the Standards and Technology Department and the Technical Committee. Each Engineering Committee Chair is encouraged to appoint a Vice Chair from among eligible candidates proposed by the Committee Membership.

Appropriate liaison shall be established whenever a matter in the work of an Engineering Committee may concern another Department, Division, or standing committee within the Association.

One of the responsibilities of the Chair of an Engineering Committee is to appoint and reaffirm Chairs for Subcommittees, Working Groups, and Task Groups. Appointment and reaffirmation should follow the process and criteria set forth in 3.1. Chairs must also conduct their meetings in accordance with Section 5 of this Manual.

Committee and Subcommittee Chairs shall provide the Standards and Technology Department with current information for the maintenance of lists of Members, Voting Representatives, and Supplemental Representatives.

3.5 Formulating Group Scope

When a new Engineering Committee has been established, the Chair of that Committee shall submit a proposed Committee scope, defining the technical area of responsibility, for the review and approval of the TIA Vice President responsible for Standards activities, the TSSC, and the appropriate ANSI Standards Board. When approved and published, that Scope becomes the principal guide for the work of the Committee.

Subcommittee Scopes must be within the parent Engineering Committee Scope and should be forwarded to the parent Committee for initial approval and to transmit the Scope to the TSSC for final approval and publication. Subcommittee Scopes do not require ANSI approval.

Scopes of all Engineering Committees and Subcommittees are published by the Standards and Technology Department in a Committee Scope Manual supplied to all Engineering Formulating Group Chairs. Limited additional copies may be requested from the Standards and Technology Department.

Revision of a Committee Scope also requires TSSC and ANSI review and approval. Revision of a Subcommittee Scope requires only TSSC approval.

4 [reserved]

5 MEETINGS

5.1 Meeting Location and Facilities

Formulating Group Chairs should consider convenience and travel costs for Members, costs to the TIA, and appropriateness of facilities when selecting meeting locations. The

TIA has some conference rooms available for meetings. The TIA Staff can also provide assistance in locating and dealing with commercial meeting facilities such as hotels and conference centers. When it is necessary to schedule a meeting at a location which will involve costs to the TIA, arrangements shall be made only by the TIA Staff, in recognition of the budget constraints for such activities.

Meetings also may be scheduled at company facilities provided by Formulating Group Members or underwritten by Members at commercial facilities, subject to the following guidelines:

- (1) Host companies should refrain from inappropriate hospitality actions such as elaborate dinners and receptions.
- (2) Attendees should not be subjected to sales or product presentations unless the Formulating Group requested such a presentation for reasons related to their deliberations.
- (3) Gifts or other promotional items of value should not be given to attendees.
- (4) The requirement for security clearances for attendees should be avoided.
- (5) If necessary for the work of the Formulating Group, the Chair should make arrangements for computers and copying services. Expenses to be paid by the TIA, if any, must be pre-authorized by the TIA Vice President responsible for Standards activities, and within budget constraints for such activities.
- (6) Meetings may be held outside the United States if this is agreed to by the Members of the Formulating Group.

5.2 Meeting Notices, Agenda and Reports

5.2.1 Meeting Notices

Chairs shall coordinate meeting arrangements with the TIA Standards and Technology Department and when possible shall forward to that department the information necessary for preparation of a meeting notice (Annex D) at least four weeks prior to the scheduled meeting. Unless the Chair requests earlier transmittal, the TIA will send out the meeting notices two to four weeks before the meeting to the mailing list(s) designated by the Chair.

Once meeting dates and locations are established, Chairs may use preliminary meeting notices to allow participants ample time for travel arrangements.

5.2.2 Agenda

Detailed agenda shall be forwarded to the TIA concurrently with the meeting notice information. If more than one Formulating Group is meeting concurrently at the same place, the Chair of the senior group should consolidate the agenda for all such groups.

The agenda should list the items to be discussed, and shall clearly indicate any substantive items to be voted upon at the meeting. Examples of such items are:

- (1) approval of Standards proposals for industry ballot (including issuing ballots for the reaffirmation, revision or rescission of existing Standards);
- (2) adoption or revision of Formulating Group procedures;
- (3) changes in Formulating Group scope; or
- (4) termination of the Formulating Group.

Action on substantive items which have not been the subject of prior notification in the published agenda may be deferred to a letter ballot if requested by a Formulating Group Member.

Reference in the agenda to any document should be specific, using project or publication numbers, to avoid confusion and misunderstanding. Well-prepared agenda expedite the work of the Formulating Group. Typical agenda are included in Annex D.

5.2.3 Meeting Reports

Each Chair may appoint a Secretary to record and prepare a meeting report for each meeting. In the absence of the Secretary, the Chair is responsible for preparation of the report.

Meeting reports are not "minutes" in the strict sense of the term, since a detailed record of all comments and discussions is not required. The report shall include the date and place of the meeting, a list of persons in attendance, a statement that a quorum was (or was not) present, actions taken, significant unresolved issues, voting records, a document list (See 5.2.3.1), future meeting schedules (if applicable), and time of adjournment.

The Secretary shall prepare the meeting report in accordance with the format contained in Annex E. The meeting report shall be signed by both the Secretary and the Chair and forwarded to the TIA Standards and Technology Department for review and distribution. No distribution of the meeting report may be made in any form prior to review and approval by the TIA Standards and Technology Department. (See 5.2.3.2.)

The Chair shall ensure that corrections, additions, and reclassification from voting to non-voting and vice-versa are legibly marked on the forms provided by the TIA and are returned immediately following the meeting to the Standards and Technology Department for data base maintenance.

The original attendance list shall be attached to the meeting report and may serve in lieu of the list of persons in attendance if all names are clearly legible when reproduced.⁸ Short working documents not available at the meeting may be appended to the meeting report. When a large document falls into that category, its pertinent material should be abstracted. Lengthy reports and attachments are usually far more expensive to process and mail than their use justifies.

Subcommittee and Working Group reports may optionally be included with the meeting report of the parent Committee or Subcommittee if the meeting took place in conjunction with a meeting of the parent Committee.

The TIA Standards and Technology Department normally circulates meeting reports to:

- (1) Members of the Formulating Group;
- (2) individuals listed on the supplemental mailing list (those receiving everything that goes to Members);
- (3) "Others Present" when their complete mailing addresses are supplied by the Chair or Secretary to the Standards and Technology Department, and the Chair requests such distribution.

Meeting reports shall contain the following statement as the last paragraph before the signature(s):

⁸ The permanent archives of the Standards and Technology Department are retained on microfilm and other image-based media. This places a higher standard of legibility on original documents.

"This meeting was conducted in accordance with the TIA Legal Guides and the Engineering Manual."

Availability of accurate meeting reports from previous meetings is essential to the orderly conduct of meetings. It is the responsibility of the Chair and the Secretary to submit meeting reports to the TIA in sufficient time to allow for their approval and distribution prior to the next regularly scheduled meeting.

5.2.3.1 Document Record

A document list identifying all documents distributed at or in preparation for the meeting shall be made a part of the meeting report, but items appearing on the document list should not be incorporated in or distributed with the meeting report. TIA meeting reports are intended as a permanent record of Formulating Group action, and not as a medium of information transmittal for those not attending meetings.

5.2.3.2 Legal Approvals

All meeting reports shall be submitted for legal review to ensure the actions were in compliance with antitrust and liability laws. Strict compliance with this requirement serves to protect the Committee Members and the Association from allegations of wrongdoing.

All meeting reports shall be approved by the cognizant Staff Engineer or the Vice President responsible for Standards activities, and the TIA General Counsel or an attorney authorized by the TIA General Counsel before any distribution is made. After TIA Staff approval, the meeting report is distributed to the Committee and approved by the Committee as a part of the permanent legal record.

5.3 Conduct of Meetings

5.3.1 General

All meetings shall be conducted in accordance with the Legal Guides contained in Annex B. The Chair is responsible for "getting the most" from a meeting so that the time and expense of all present can be justified. This requires that the agenda be followed and that discussion be kept pertinent to the agenda.

The meeting may be conducted formally or informally at the discretion of the Chair depending upon size of the body and the nature of the work at hand.

5.3.2 Quorum

A quorum of a Formulating Group, consisting of a simple majority of the listed⁹ voting Member companies, is required to conduct business.

If a quorum is not present, no final action may be taken, but material may be formulated and distributed to the Formulating Group for action by letter ballot.

5.3.3 Voting Procedures

Voting may be conducted in meetings or may be accomplished by letter ballot.

5.3.3.1 Voting in Formulating Group Meetings

At a meeting where a quorum is present *at the time of the vote*, a simple majority of those present and voting is sufficient to act in all matters except approval of an Interim Standard or approving a Standards Proposal for public ballot, in which case a consensus within the Formulating Group is required. Each Formulating Group Member company represented shall have one vote. If the Chair's company is represented by a Voting Representative other than the Chair, the Chair is without vote.

NOTE: Chairs should recognize that while a simple majority of those present (assuming a quorum) is sufficient for *procedural* matters, a consensus will eventually be required for approval of a *Standards Proposal*

⁹"Listed" in this case means those Member companies represented on the Formulating Group voting Member list maintained in the offices of the TIA. The only exception to this rule would be the power of the Chair to restore to voting status a company which has been represented at two successive meetings after being dropped for lack of participation.

The Membership continuation rules in 3.2.5 of the Engineering Manual are provided to help Chairs in purging their voting lists of inactive Members. Chairs must, however, insure that changes in Membership are reported to TIA so that the official lists may be updated. This should be via changes to the lists provided by the TIA.

Remember that when determining a quorum, a company is counted as present if it is represented at the meeting. That representative need not be the individual named on the list. In keeping with 3.2.3.4, however, no individual should be counted as representing more than one Member company for the purpose of determining a quorum.

or *Interim Standard*, and it may thus be unwise to act on items such as proposed Standards material unless broad support is evident.

The Chair may at his or her discretion, put the question out for a letter ballot, and not call for a vote at the meeting.

5.3.3.2 Letter Ballots

Formulating Groups may also act by means of a 30-day letter ballot which has been mailed to all Members appearing on the voting list.

A two-thirds majority of those casting ballots within the balloting period is sufficient to act in all matters except approval of an Interim Standard or approving a Standards Proposal for public ballot. If the required affirmative vote is not realized, the Chair shall attempt to determine the nature of the objections and changes necessary to resolve the concerns, and may decide whether to conduct a second letter ballot with minor rewording of the ballot, or whether the matter shall be carried over as an agenda item for the next meeting.

A consensus within the Formulating Group is required to approve an Interim Standard or to approve a Standards Proposal for public ballot. (See 6.7 for additional information on ballot options.)

The Chair or Secretary shall forward the exact wording of the question to be resolved by the letter ballot and any attached material to the TIA Standards and Technology Department. The Staff will prepare a letter ballot and mail it to the last known address of each voting Member of the Formulating Group. All responses received within the specified voting period will be forwarded to the Chair, author, or Secretary as specified.

The period for voting on Formulating Group letter ballots shall be 30 days from the date of issuance unless otherwise noted on the ballot with the approval of the cognizant Chair.

6. DEVELOPMENT OF TIA STANDARDS AND SPECIFICATIONS

6.1 [reserved]

6.2 TIA Standards and Specifications

TIA Standards or Specifications are issued to achieve one or more of the following purposes:

- (1) promoting interchangeability and interoperability of products falling within the scope of TIA Engineering Committees;
- (2) eliminating misunderstandings or confusion between manufacturers and buyers with respect to products on which TIA Standards or Specifications are adopted;
- (3) providing assistance to the purchaser in selecting and obtaining the proper product for a particular need;
- (4) improving the quality of products covered by TIA Standards or Specifications.

Technical Standardization work of the TIA consists of discussion in an open forum by technical representatives from a wide spectrum of industry, leading to a consensus on electrical, mechanical, optical, environmental, quality, reliability and other properties of telecommunications components, equipment and systems. It also includes the drafting, review, approval and issuance of Standards and Specifications based upon that consensus, and the maintenance of Standards and Specifications once issued. Where appropriate, and where the requirements of ANSI have been met, such material will be proposed as a TIA Interim Standard, an ANSI/TIA Standard, or an ANSI/TIA Specification.

TIA Standards and Specifications are published in a uniform format described in the *TIA Style Manual*.

6.3 Establishing a Standards Project

An Engineering Committee or Subcommittee may initiate a project by submitting a completed Project Request (Annex C) to the TSSC through the TIA Standards and Technology Department. The project will be processed by TSSC as described in Annex A. Upon approval,¹⁰ a Project Number (PN) will be assigned by the Standards Secretariat, and the Committee will be so informed. The Project Number will be used to identify the drafts through each stage of the development process. For any project which is expected to result in the publication of a Standard, Specification, or Interim Standard, the Project Request must be accompanied by ANSI Form PINS-1, *ANSI Project Initiation Notification System (PINS) Input Form*. (A copy of the ANSI PINS form is also found in Annex C.)

¹⁰See Section 2.4.2, for approval action of the TSSC.

The Staff assigned a four-digit identifying number with the prefix PN- during the development process. The prefix will change to SP- (Standards Proposal) when the document is circulated for industry ballot.

Upon assignment of a Project Number, the TIA Standards Secretariat will, on the advice of the Formulating Group, circulate project information to persons or organizations believed to be affected by the finished Standard or Specification, affording them the opportunity to participate in the development process. A project shall be assigned by the Engineering Committee to a Subcommittee, a Working Group of a Subcommittee, or itself for implementation.

6.4 Copyright Statement

Once a project is undertaken, a draft begins to take form in the Formulating Group as the result of written contributions submitted by group Members, and of open discussion in group meetings. It is the responsibility of the Formulating Group Chair to ensure that each such draft bears a TIA copyright notice. ¹¹Ultimately, the finished document will be copyrighted and published by the TIA.

Contributors shall place on the cover page of any written contribution intended for inclusion in a TIA document the following copyright statement:

"The contributor grants a free, irrevocable license to the Telecommunications Industry Association (TIA) to incorporate text contained in this contribution and any modifications thereof in the creation of a TIA Standards publication; to copyright in the TIA's name any TIA Standards publication even though it may include portions of this contribution; and at the TIA's sole discretion to permit others to reproduce in whole or in part the resulting TIA Standards publication."

This statement is to be included on written contributions to a formulating body, so that the TIA has the right to copyright and sell Standards, Specifications, or Bulletins which result in whole or in part from the contribution, and to allow publication of excerpts from the TIA publications. The statement also extends these rights to the TIA's existing policy of allowing and encouraging other regional or national Standards bodies to adopt TIA Standards as their own. (That policy makes it clear that a license to use the TIA's

¹¹Such as:

copyrighted material in a Standard of another region or nation does not automatically convey rights to Essential Patents required for conformance with the Standard.)

Contributions which do not contain this statement from the original author or copyright owner shall not be accepted for Formulating Group use.

6.5 Early Disclosure of Essential Patents

The Standards developing and approval process is made more efficient if the existence of Essential Patents is made known as early as possible in the development work. Early disclosure affords formulating body participants the greatest opportunity to evaluate the propriety and desirability of Standardizing the patented technology, and allows patent holders and prospective licensees ample time to negotiate the terms and conditions of licenses outside the Standards development process itself. Conversely, the discovery at the final stages of Standards development of an Essential Patent which is not available for licensing under reasonable terms may result in the loss of years of Committee effort.

A two-part approach will be used by the TIA to encourage early disclosure of Essential Patents:

Formulating Group Chairs will ask, at the beginning of each meeting where a potential Standard is being considered, whether there is knowledge of patents, the use of which may be essential to the Standard being considered. The fact that the question was asked will be recorded in the meeting report, along with any affirmative responses. The specific wording of this question is not defined by the TIA.

In addition, the TIA will make a mailing on an annual or semi-annual basis to every Committee participant on its mailing lists, reminding them of the ANSI policy and the need for early disclosure.

The second part of the approach is the use of an optional, voluntary statement on contributions to Formulating Groups. Such a statement might take the form:

"The individual preparing this contribution (knows) (does not know) of patents, the use of which may be essential to a Standard resulting in whole or in part from this contribution."

No Formulating Group may establish rules which would have the effect of excluding contributions based on a patent policy which is more restrictive than that stated above.

6.6 Standards Proposal

6.6.1 Consensus Development

Standards shall be produced by consensus; i.e., work shall continue until substantial agreement is reached by the Members of the Formulating Group. Although unanimity is desirable, it is not required to produce a work product. Consensus is achieved through a process of discussion, correspondence, draft contributions, and revision, all leading to the final result. Final adoption of text shall be by the voting Membership of the Engineering Committee. (Engineering Committees may delegate this final adoption authority to their Subcommittees.)

The TIA's process requires that consensus must first be reached in the Formulating Group before proposing a document for acceptance as a TIA Standard and as an American National Standard.

Consensus must again be demonstrated as the result of a public ballot on the proposed Standard. There is an additional requirement that the total pool of persons receiving unsolicited ballots¹² must not be dominated by any one interest category. This pool includes voting, supplemental, government, and liaison representatives on the mailing list of the Formulating Group, as well as other persons known to have an interest in the subject of the Standard, who have agreed in advance to receive and review ballots on the subject.

When consensus is reached within the Formulating Group and has been formalized by a vote, the Chair shall forward the proposed Standards document to the Standards and Technology Department for issuance of a Standards Proposal.

6.6.1.1 Canvass Method as an Alternative

As an alternative, the Formulating Group can propose by a 2/3 vote that a proposed Standard be sent for industry ballot using the ANSI Canvass Method (Consult the TIA Secretariat for more information.)

6.6.2 Submission of a Standards Proposal (SP)

The material submitted to the Standards and Technology Department shall be prepared in accordance with the *TIA Style Manual*. It shall be accompanied by a statement of the

¹² i.e., other than persons previously unknown to the TIA who request a ballot by writing or calling in.

background and intended purpose of the Standard, and any other information which will improve industry's understanding of the proposal. The Standards and Technology Department Staff will obtain from the Chair a tabulation of the interest categories represented on the mailing list of the Formulating Group, and will combine this data with information about the remainder of the balloting pool to determine whether there is a dominant interest category. Where domination¹³ by one group is indicated, the Staff shall contact the Chair to seek additional candidates for the balloting.

Upon review of the proposed Standards document by the Standards and Technology Department and approval by the TIA General Counsel or an attorney authorized by the TIA General Counsel, and upon determination that a balanced balloting pool exists, a ballot will be added to the Standards document and the Standards Proposal will be circulated for review and comment to companies, organizations, and individuals who are known to have, or who have indicated that they have, a direct interest in the subject.

Copies of Standards Proposals shall also be available for purchase from the TIA's publisher during the comment period. An appropriate fee, not to exceed the anticipated sales price of the finished Standard, is charged for Standards Proposal copies.

Simultaneously with issuance with the Standards Proposal, ANSI is notified (by use of their BSR-8 form) of the availability of the draft Standard for comment. ANSI publishes notice of the Standards Proposal in *ANSI Standards Action*, and establishes a 60-day period during which the public may request copies of the proposal. Balloting is not complete until this period expires.

If the option to ballot by the Canvass Method is chosen, the Standards and Technology Department will work with ANSI to determine an appropriate canvass list.

6.7 Ballot Options

Parties responding to the Standards Proposal (SP-) ballot (or to a Committee letter ballot for approval of an Interim Standard) have three options, plus abstention:

"Yes", without comment. Indicates agreement with the proposed Standard.

"Yes", with comment. Indicates general agreement, but suggests enhancements or changes to the proposed Standard which, if not acted on, would not cause the party to change his or her vote. Comments shall be acknowledged by the

¹³ Domination exists when one interest category represents more than 50% of the pool of persons being solicited for ballots.