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Engineering Manual

- ◆ Description of the organization of the Standards and Technology Department of the Telecommunications Industry Association and its Engineering Committees
- ◆ Rules for operation of the Engineering Committees
- ◆ Intellectual Property Policy
- ◆ Rules for operation of the Technical Standards Subcommittee
- ◆ Legal Guidelines

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Third Edition



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1 **Revision History**

2 TIA's first-ever Engineering Manual was issued December 6, 1991 and supplemented
3 with various Advisory Notes until May 31, 2001.

4 The second edition of TIA's Engineering Manual was approved and released on June 1,
5 2001.

6 This represents the third edition of the TIA Engineering Manual and incorporates
7 required changes per the American National Standards Institute Subcommittee on
8 Accreditation. Specifically, changes were made to the following sections:

9 Section 6.10, Comment Resolution

10 Section 11.1, Standards Secretariat Record Retention

11 Section 13.2, Formal Appeals

12 The changed text is shown throughout the Manual.

1 Introduction

2 A major function of the Telecommunications Industry Association (TIA) is the writing and
3 maintenance of voluntary industry Standards and Specifications, the formulation of
4 positions for presentation on behalf of the United States in international standards fora,
5 and the preparation of technical information and reports for use by industry and
6 government. These activities are carried out by the volunteer Members of TIA
7 Engineering Committees, operating under the authority of the TIA Technical Committee,
8 a Special Committee created by the TIA Board of Directors. The TIA Standards and
9 Technology Department administers and supports the activities of the Engineering
10 Committees.

11 This Manual describes the manner in which the Standards activities of the
12 Telecommunications Industry Association are organized and the manner in which its
13 activities are conducted.

14 Specific responsibility for overseeing the Standards and Technology Department and
15 the Engineering Committees has been assigned by the TIA Board of Directors to the
16 TIA Technical Committee, one of the standing committees established by the Board
17 under the provisions of the bylaws of the Association. The product Divisions of the
18 Association sponsor the Engineering Committees working in their product areas by
19 providing guidance, direction, and administrative funding.

20 Special legal requirements apply to Standards writing. Because of this, Standards and
21 Specification writing are administered and supported by the Standards and Technology
22 Department, which also coordinates the technical program and provides a unified
23 interface with the American National Standards Institute (ANSI) and other Standards
24 Development Organizations (SDOs).

25 A further purpose of this Manual is to provide legal and policy guidelines for the
26 formulation and conduct of Engineering Committees, Subcommittees, and Working
27 Groups. It specifies how such groups are formed or disbanded, how leadership is
28 chosen and maintained, membership requirements; the development and
29 implementation of a program of work; the conduct of meetings; administrative
30 processing of contributions, drafts, and correspondence; relations with other SDOs; and
31 the responsibilities of the Chairs.

32

1 **Statements of Policy of the Standards and Technology Department**

2 **Relationship with Other Elements of the TIA**

3 The TIA Engineering Committees shall confine their activities to the preparation of
4 Standards and Specifications, and to other documents and technical matters, as further
5 defined in this Manual. The Engineering Committees shall conduct their activities in
6 strict compliance with the policies, rules and procedures set forth in this Manual, and
7 with the Legal Guides in Annex B to this Manual.

8 It is intended that the other standing and special committees, and the TIA Product
9 Divisions shall confine their activities to other than Standards, Specifications, and
10 technical matters, and shall refer such technical matters to the Standards and
11 Technology Department and appropriate Engineering Committees.

12 The Product Divisions may recommend work programs and guide the efforts of the
13 Engineering Committees that they sponsor within the Standards and Technology
14 Department, but shall not themselves engage in the preparation of Standards or
15 Specifications.

16 **Relationship with ANSI**

17 The TIA is a member of the American National Standards Institute which recognizes TIA
18 as a National Standards Body for the United States.

19 As a matter of policy, it is expected that most new TIA Standards and Specifications are
20 intended for submission to ANSI as candidates for recognition as American National
21 Standards. Some areas of technical work may first be defined as TIA Standards, for a
22 period of five years, before consideration of advancing the document to the status of
23 American National Standard.

24 **International Cooperation and Harmonization**

25 The TIA's trade policy goals include removal of barriers to market access, full
26 participation of U.S. government and industry in the Standards-setting process
27 worldwide, and achievement of a minimum level of Standards required to ensure
28 interoperability and proper function of the international network. In the spirit of these
29 goals, the TIA encourages its Committees and Staff to work cooperatively with other
30 Members of the ANSI confederation, international standards bodies and counterpart
31 national and regional Standards bodies outside the United States to harmonize
32 telecommunications equipment Standards and to avoid unnecessary duplication of
33 effort. To this end, the TIA will share its Standards and Specifications, whether work in
34 progress or completed works, with counterpart Standards organizations in other

1 countries, subject to the intellectual property rights, other property and contractual rights
2 of third parties and any applicable laws and government regulations. The TIA will also
3 allow non-voting international observers representing international, regional and
4 national SDOs to participate in TIA Formulating Group meetings and activities unless
5 contrary to U.S. law or regulation.

6 In recognition of the common telecommunications network shared by the United States
7 and Canada, and of the North American Free Trade Agreement (NAFTA), TIA
8 Engineering Committees are encouraged to work with their Canadian and Mexican
9 counterpart groups to produce common harmonized Standards as well as encouraging
10 Canadian and Mexican organizations to directly participate in TIA Formulating Group
11 activities, subject to any applicable laws and government regulations.

12 **Patent Policy**

13 When an Essential Patent has been identified in any proposed TIA Publication, TIA will
14 follow a policy based upon that of the American National Standards Institute (ANSI).
15 (www.ansi.org)

16 (1) Inclusion of Patents in TIA Publications

17 There is no objection in principle to drafting a TIA Publication in terms that include the
18 use of a patented item, if it is considered that technical reasons justify this approach.
19 Not all TSBs encompass Essential Patent(s) or published pending patent application(s).
20 However, if there are normative elements in a TSB which include use of a patented
21 item, then the same policy applies to TSBs. If TIA receives notice that a proposed TIA
22 Publication may require the use of a patent, then the procedures stated below in
23 Sections (2) through (5) shall be followed.

24 Any discussion regarding terms and/or conditions of a license are not permitted in any
25 TIA activity.

26 (2) Statement from the Patent Holder

27 Prior to approval of each such proposed TIA Publication, TIA shall receive a statement
28 from the identified party or patent holder. The statement must be in the words of the
29 TIA-approved form entitled "Statement from the Patent Holder", attached hereto as
30 ANNEX H. If a patent holder statement is received by TIA which is deemed not to be in
31 accordance with this Patent Policy by the Standards and Technology Department, TIA
32 will advise the Chair of the Formulating Group of any Essential Patents or published
33 pending patent applications identified therein, but not other contents of such statement.

34

1 Whenever a proposed TIA Publication undergoes a revision necessitating a new ballot,
2 new patent holder statements will be requested from each identified party or patent
3 holder.

4 (3) Record of Statement

5 Prior to approval of a proposed TIA Publication, a record of the patent holder's
6 statement shall be placed and retained in the files of TIA. TIA will forward a copy of the
7 statement to ANSI when the document in process is related to the development of an
8 American National Standard.

9 (4) Notice

10 When TIA receives from a patent holder the assurance set forth in Sections (2a) or (2b)
11 of Annex H, the TIA Publication shall include a note as follows:

12 NOTE: The user's attention is called to the possibility that compliance with this
13 document may require use of one or more inventions covered by patent rights.

14 By publication of this TIA Publication, no position is taken with respect to the
15 validity of those claims of rights or of any patent rights in connection with this
16 document. The patent holder(s) so far identified to TIA have, however, filed
17 statements of willingness to grant licenses under those rights either without
18 compensation or on reasonable and nondiscriminatory terms and conditions to
19 applicants desiring to obtain such licenses for the purpose of implementing this
20 TIA Publication. Details regarding the filed statements may be obtained from the
21 TIA.

22 (5) Responsibility for Identifying Patents

23 The following statement will appear on every TIA Publication:

24 TIA shall not be responsible for identifying patents for which licenses may be required in
25 connection with any TIA Publication or for conducting inquiries into the legal validity or
26 scope of those patents that are brought to its attention.

27 **Metric Policy**

28 As shown in the *TIA Style Manual (Section 4.8)*, the International System of Units (SI),
29 as specified in *ANSI/IEEE-268* or its subsequent revisions, shall be used in TIA
30 Standards. If necessary, dual dimensioning can be used but the policy requires that any
31 variation from the policy be explained in the foreword or introduction.

32

1 **Definitions and Terms**

2 An understanding of the terms below will be helpful in following the text of this Manual.

3 i. Adds technical requirements to an existing standard that do not change previously
4 published requirements; or

5 ii. Revises one or two portions of a large existing standard.

6 **Advisory Note** - text to change or modify the current Engineering Manual until revised
7 and approved by ANSI. The proposed text must be approved by the Technical
8 Committee prior to release, and is withdrawn after it has been incorporated into the next
9 version of the Manual. (See Section 14)

10 **American National Standard** - a standard developed by an ANSI-accredited standards
11 developer and approved by the ANSI Board of Standards Review.

12 **American National Standards Institute or ANSI** – serves as administrator and
13 coordinator of the United States private sector voluntary standardization system.
14 Founded in 1918 by five engineering societies and three government agencies, the
15 Institute remains a private, non-profit membership organization supported by a diverse
16 constituency of private and public sector organizations and accredits standards
17 developers in the United States.

18 ANSI does not itself develop American National Standards; rather it facilitates
19 development by establishing consensus among qualified groups. The Institute ensures
20 that its guiding principles – consensus, due process and openness – are followed by the
21 more than 175 distinct entities currently accredited under one of the Federation's three
22 methods of accreditation (organization, committee or canvass).

23 **Association** - (when capitalized) The Telecommunications Industry Association.

24 **Ballot** – as used in this Manual, there are two types of ballots: Letter Ballot and
25 Standards Proposal Ballot (See specific definitions).

26 **Bulletin** - although not a Standard, contains technical information that may have
27 significant value to industry or users. Most often TIA publishes Telecommunications
28 Systems Bulletin (TSB); however, other types of Bulletins exist. (See Section 8.2)

29 **Consensus** – established when those participating in the consideration of the subject at
30 hand have reached substantial agreement. Substantial agreement means more than a
31 simple majority, but not necessarily unanimity. Consensus requires that all views and
32 objections be considered and that a concerted effort be made toward their resolution.
33 Consensus may also be achieved when the minority no longer wishes to articulate its
34 objection. The opinions of the minority should be recorded with the report of the
35 substantial agreement (consensus) of the majority.

- 1 **Division** - an affinity grouping of TIA Member companies by product category. (See
2 Section 2.1)
- 3 **Engineering Committee** - a Committee of volunteer members, established under the
4 authority of the TIA Technical Committee to formulate Standards and provide other
5 engineering functions in support of the TIA. (See Section 3.1)
- 6 **Erratum**— a document which corrects a manifest mistake or omission in the original text
7 of the Standard or an error subsequently discovered.
- 8 **Essential Patent** - a patent which is necessarily infringed by the practice of a TIA
9 Publication.
- 10 **FO- Committee** - an Engineering Committee sponsored by the TIA Fiber Optics
11 Division.
- 12 **Formulating Group** - Engineering Committee, Subcommittee, or Working Group that
13 specifically has been delegated formulating authority to develop standards. It elects its
14 leadership and conducts all of its meetings with the same formality (e.g., notice of
15 meetings, meeting reports, voting lists, recorded votes, etc.), and within the authority
16 granted by its parent body. Such term does not include a Task Group. (See Section 3.1)
- 17 **Interim Standard or IS** - a term used until 2001 to indicate a standard released for a
18 limited period, prior to its being submitted for approval as an American National
19 Standard. All interim standards in effect *upon the date* of the adoption of this manual
20 shall be governed by the TIA Engineering Manual dated 1991.
- 21 **Joint Standards Document or JSD** - standard developed by a Joint Standards Group
22 comprised of two or more internal or internal/external entities of Standards Developing
23 Organizations. (See Section 6.1.1).
- 24 **Interest Category** – classification of the respondents to a Standards Proposal Ballot is
25 required by the ANSI. The categories used by TIA are (See Section 3.2.2):
- 26 **Producer** (of the product or device being standardized);
- 27 **User** (of the product or device being standardized);
- 28 **Producer/User** (company that may be both); and
- 29 **General Interest** (any interested party not defined in the other listed categories).
- 30 **Letter Ballot** – submitted to the TIA Standards Secretariat for distribution to specified
31 TIA Formulating Group(s). It is issued for no less than 30 days, but at the Chair’s
32 discretion can be issued for a longer period of time. It can also be extended if it is
33 determined that a simple majority of formulating group member ballots have not been
34 returned.

- 1 **Member (of the TIA)** - a company holding general class membership in the TIA. (See
2 Section 2.1.)
- 3 **Member (Formulating Group)** - a company or organization which holds voting status in
4 a TIA Formulating Group, but not necessarily a TIA Member. (See Section 3.2)
- 5 **Normative Elements** - those elements of a Standard setting the provisions with which it
6 is necessary to comply in order to be able to claim conformity with the Standard. (See
7 Section 2.1 of the *TIA Style Manual*).
- 8 **Public Review Document** – a Standards Proposal announced in the *ANSI Standards*
9 *Action* for a 45 or 60-day review and comment period.
- 10 **Publication** - any TIA Standard and Technology Department document that is
11 published by the department and available for sale or distribution to the general public.
12 It does not include documents intended for distribution to only members of Formulating
13 Groups.
- 14 Quorum – a simple majority of the listed voting member companies in a formulating
15 group (See Section 5.3.2)
- 16 **Sub-Element** –any Subcommittee, working group or ad hoc group under the auspices
17 of a Formulating Group
- 18 **Simple Majority** - 50% of those eligible to vote, rounded down to an integer value
19 plus 1
20
- 21 **Specification (TIA)** - as used in this Manual, a document prepared specifically to
22 facilitate procurement that clearly and accurately describes the essential technical
23 requirements for purchased material. Procedures necessary to determine that the
24 requirements for the purchased material covered by the Specification has been met are
25 also referenced or included. (See Section 6.2.)
- 26 **Standard (TIA)** - as used in this Manual, a document that establishes engineering and
27 technical requirements for processes, procedures, practices and methods that have
28 been adopted by consensus. Standards may also be established for selection,
29 application and design criteria for material. (See Section 6.2)
- 30 **Note:** *Unless indicated otherwise, the word "Standard" in this Manual applies*
31 *equally to TIA Standards and Specifications.*
- 32 There are two general categories of **Standards**:
- 33 (1) **TIA Standards** – a Standard or Bulletin developed through the consensus
34 process of a TIA Formulating Group that is submitted as a Letter Ballot to the TIA
35 Standards Secretariat. The relevant documentation is approved by TSSC before
36 it is issued as a TIA Standard. It is not necessary for the document to be

1 submitted for the ANSI public review period because the standard is not
2 designated as an American National Standard. (See Section 6.2)

3 (2) **ANSI/TIA (ANS) Standards** – a TIA Standard developed through the consensus
4 process of a TIA Formulating Group that is submitted as a Standards Proposal
5 Ballot to ANSI for a public review period. At the close of the public review period,
6 the TSSC must approve the relevant documentation. In addition, the voting
7 record and relevant documentation must be approved by the ANSI Board of
8 Standards Review before it is designated as an American National Standard
9 developed by TIA. (See Section 6.2.)

10 **Standards Development Organization (SDO)** – an entity in the United States
11 accredited by ANSI that uses a method of consensus development in which the
12 standards developer must develop its own operating procedures. The procedures must
13 meet the general requirements of Section 2.2 of the ANSI Procedures. By choosing to
14 use this method, flexibility is provided, allowing the standards developer to utilize a
15 system that accommodates its particular structure and practices. Entities outside the
16 United States are also referred to as SDOs, but the body that accredits or authorizes
17 the operating procedures is unique to a particular country or region.

18 **Standards Proposal Ballot** – used for approving the creation, revision, or withdrawal of
19 an ANS standard. It is submitted to the TIA Standards Secretariat with the appropriate
20 Ballot Authorization form by the Formulating Group for distribution to the predetermined
21 voting panel for the subject standard. The ballot is issued for no less than 45 days. A
22 ballot shall be extended if it is determined that an insufficient number of ballots have
23 been returned. The formulating group may request a 45-day Public Review instead of
24 the normal 60-day Public Review if the document meets the ANSI guidelines for 45-day
25 Public Review. All Standards Proposal Ballots designated for 45-day Public Review
26 must be available electronically to the requestor. The availability of the document must
27 be announced in ANSI's Standards Action.

28 **Supplemental Representative** - an individual designated by a company or
29 organization which is a Member of a Formulating Group, to receive Committee mailings,
30 but is not the Voting Representative. (See Section 3.2.3.3.)

31 **Technical Committee** - one of the special committees created by the Board of
32 Directors of the TIA to set policy for the operation of the TIA engineering program. (The
33 Technical Committee is not to be confused with "Engineering Committee"). (See
34 Section 2.4.1)

35 **Technical Standards Subcommittee (TSSC)** - a Subcommittee of the Technical
36 Committee, which performs a specific role in the Standards approval process. (See
37 Section 2.4.2 and Annex A)

38 **Telecommunications Systems Bulletin or TSB** - a document proposed by a
39 Formulating Group to publicize material which, although not a published Standard, may

- 1 have significant value to industry or users. A TSB cannot be used to modify or amend a
2 Standard, but may announce planned enhancements or modifications for a particular
3 Standard.
- 4 **TR- Committee** - an Engineering Committee sponsored by one of the TIA's product-
5 oriented Divisions, other than the Fiber Optics Division. The designator "TR" is historic,
6 and probably refers to "transmitters", although a modern definition would be
7 "Telecommunications Requirements."
- 8 **Voting Panel** –The Formulating Group membership and additional parties who
9 respond to the solicitation for registration by the registration close date will form the
10 voting panel for that particular SP ballot and be eligible to vote. (See Section 6.6.2.1)
- 11 **Voting Representative** - an individual designated by a member company that is a
12 Member of a Formulating Group, to vote on its behalf at meetings. (See Section
13 3.2.3.1.)

1 **1 Objective**

2 The engineering activities of the TIA are organized to conduct standardization programs
3 and to provide other appropriate technical and engineering services within the scope of
4 the Association, subject to policies established by the Board of Directors. All activities
5 must be conducted within the Legal Guides established by the Association (See Annex
6 B).

7 **2 Organization**

8 **2.1 General**

9 The TIA is a national trade association serving manufacturers, suppliers, distributors,
10 and users of telecommunications equipment and systems. General members are
11 companies (or a division of a company) formed under the laws of the United States
12 engaged in the business of developing, manufacturing, distributing, selling, installing,
13 launching or consulting in respect to, communications or information technology
14 products (including software) or services other than common carrier services. TIA
15 publishes an Annual Report that is available upon request that describes TIA's
16 organization and accomplishments. In addition, TIA publishes a *Standards and*
17 *Technology Annual Report (STAR)* that covers the activities of the Standards and
18 Technology Department and the Engineering Committees. Both documents are
19 available on the TIA website.

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

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

29 **2.2 Standards and Technology Department**

30 The Standards and Technology Department is one of many departments of the TIA and
31 provides services to the various TIA product-oriented Divisions, the standing
32 committees, and the TIA general membership. All TIA Engineering Committees fall
33 under the jurisdiction of the TIA Technical Committee of the TIA Board of Directors. TIA
34 product-oriented Divisions and other trade associations often outline technical needs to
35 the Standards and Technology Department for action, the result of which may take the
36 form of TIA Standards, Specifications, Bulletins, or other publications, technical
37 positions on government regulations or military specifications, formulation of positions

1 on international and regional Standards, or the sponsoring of technical conferences and
2 symposia. ANSI requires open membership in the Formulating Groups to all interested
3 parties when developing American National Standards. Since the product-oriented
4 Divisions are only open to general members, direction and guidance from the Division
5 on technical matters within the scope of the Formulating Groups is advisory and not
6 mandatory.

7 **2.3 Administration**

8 The Standards and Technology Department is headed by the Vice President, Standards
9 and Technology who reports to the President and is responsible for carrying out the
10 engineering activities of the Department. The responsibilities include the management
11 of the Standards and Technology Department Staff and facilities, and general guidance
12 of the activities of the Committees.

13 Any of the Standards staff may assist the Vice President, Standards and Technology in
14 the conduct of work of the Standards and Technology Department.

15 **2.4 Structure**

16 At the highest level, the TIA Board of Directors oversees the affairs of the Association
17 and directs its President and professional staff. The technical affairs of the Association
18 are under the TIA Technical Committee. The Standards and Technology Department
19 staff provide administrative support to the Technical Committee and its sub-elements,
20 the product-oriented Divisions and their sub-elements, and the Engineering Committees
21 and their sub-elements. A current organizational chart can be found in *the Standards
22 and Technology Annual Report*.

23 **2.4.1 TIA Technical Committee**

24 The Technical Committee is one of the special committees created by the Board of
25 Directors and chaired by a member of the Board to oversee the Standards and
26 Technology Department and the standards program. The Technical Committee has
27 overall responsibility for establishing the broad technical policy of the Association,
28 including the organization and operating policies of the Standards and Technology
29 Department and Engineering Committees, and advises the Board of Directors on
30 technical issues. The Technical Committee monitors the activities of TIA's Formulating
31 Groups and TIA's liaison and coordination with ANSI and domestic and international
32 standards-setting organizations. The Committee also serves as liaison to EIA's
33 Engineering Department. From time to time the Technical Committee may create
34 Subcommittees or Working Groups to address specific issues as necessary. All
35 Engineering Committees are under the authority and jurisdiction of the Technical
36 Committee. The Technical Committee acts as the contact point for members' technical
37 concerns.

1 2.4.2 TIA Technical Standards Subcommittee (TSSC)

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

8 TSSC ensures there is liaison internally and externally so that TIA Standards activities
9 remain within assigned Scopes. The TSSC approves all Scopes of new Engineering
10 Committees and revisions to those Scopes. The TSSC monitors the overall
11 Engineering Committee work program at TIA and provides guidance as necessary.

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

15 The TSSC reviews all new Standards Proposals recommended by Formulating Groups.
16 The TSSC does not review Standards Proposals for technical content. This review
17 verifies that the Standards Proposal has been prepared in full compliance with the rules
18 and procedures of TIA for such programs and further verifies that the balloting process
19 has met the requirements of TIA and ANSI, where appropriate. The TSSC has given
20 the Standards Secretariat the authority to review and approve Standards Proposals for
21 creation, reaffirmation, revision, and withdrawal of a proposed document that has no
22 unresolved comments. The full membership of the TSSC will review all Standards
23 Proposals that have unresolved comments before recommending the document for
24 publication to ANSI. In the case of documents that are not Standards Proposals, only
25 the Chair of the TSSC reviews documents recommended by Formulating Groups and
26 approves the document for publication.

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

28 **3 Engineering Committees**

29 The work of the Standards and Technology Department is conducted through its
30 Engineering Committees and their sub-elements with the assistance of the Standards
31 and Technology Department Staff.

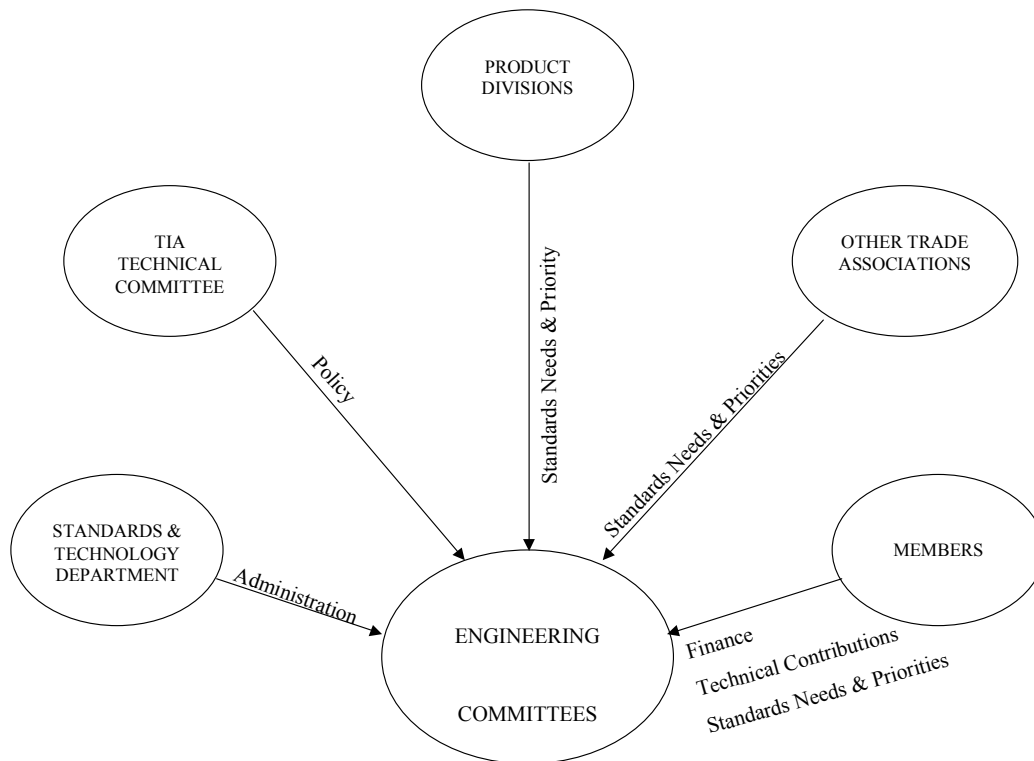
32 **3.1 Establishment and Dissolution of Engineering Committees**

33 The Chair of the Technical Committee has authority to create Engineering Committees
34 and to dissolve those that are no longer needed, subject to the approval of the
35 Technical Committee membership. Such Engineering Committees normally will be
36 organized to correspond to the appropriate product structures of the TIA product-
37 oriented Divisions. Engineering Committees also may be organized directly under the

1 auspices of the TIA Technical Committee when the planned work is interdisciplinary or
 2 when other circumstances dictate (as shown below).

3

4



5

6 3.1.1 Election of Leadership

7 The election to the office of Chair and Vice Chair of an Engineering Committee is a
 8 personal one, not directly tied to a person's employer. However, TIA and ANSI have
 9 policies that require balance in Committee structures. No one company should
 10 dominate a Committee's leadership positions. In addition, when an individual is initially
 11 a candidate for a leadership position or when that individual changes employers, the
 12 support of their company or organization is required.

13 The Chair of the Technical Committee shall appoint a facilitator for any newly organized
 14 Engineering Committee. A new Engineering Committee shall elect a candidate by the
 15 end of its second meeting to serve a two-year term, and the term of office shall begin at
 16 the close of the meeting at which they are elected. Leadership elections shall be held in
 17 accordance with the election procedures described in Section 4.

18 The new Engineering Committee shall forward the elected candidate's name to the
 19 Chair of the Technical Committee and TIA Standards Secretariat for confirmation.

1 The Chair of the Technical Committee in consultation with the Standards Secretariat
2 shall review the candidate's eligibility requirements as herein (See Section 4.1)
3 provided. If the candidate is eligible, the Chair of the Technical Committee shall confirm
4 the candidate to the office to which he/she was elected. If the candidate is ineligible, the
5 Chair of the Technical Committee shall so advise the Engineering Committee in
6 question and re-initiate the election procedure by appointing a facilitator.

7
8 The Chair of an Engineering Committee shall appoint a facilitator for any newly
9 organized sub-element. A new sub-element shall elect a candidate by the end of its
10 second meeting to serve a two-year term, and the term of office shall begin at the close
11 of the meeting at which they are elected. New leadership elections shall be held in
12 accordance with the election procedures described in Section 4.

13
14 The Chair of the Engineering Committee shall forward the elected candidate's name to
15 the Chair of the Technical Committee and TIA Standards Secretariat for confirmation.
16 The Chair of the Technical Committee in consultation with the Standards Secretariat
17 shall review the candidate's eligibility requirements as herein provided. If the candidate
18 is eligible, the Chair of the Technical Committee shall confirm the candidate to the office
19 to which he/she was elected. If the candidate is ineligible, the Chair of the Technical
20 Committee shall so advise the Engineering Committee in question and re-initiate the
21 election procedure by appointing a facilitator.

22
23 Chairs and Vice Chairs of even numbered Formulating Groups shall stand for re-
24 election in even numbered years (i.e., 2000, 2002), Chairs and Vice Chairs of odd
25 numbered Formulating Groups shall stand for re-election in odd numbered years (i.e.,
26 2001, 2003). This will ensure continuity when leadership changes.

27 28 *3.1.2 Dismissal of Leadership*

29 If requested by a simple majority of the Formulating Group voting membership (at a
30 meeting or in writing) a 30-day secret Letter Ballot of the voting membership shall be
31 conducted for the proposal to dismiss a Chair or Vice-Chair. For dismissal at least 75%
32 of the votes cast must be in favor of dismissal. The parent Committee Chair and
33 Technical Committee Chair shall confirm the dismissal process.

34 *3.1.3 Establishment and Dissolution of Subcommittees, Working Groups, or Task* 35 *Groups*

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

- 38 (1) **Subcommittees** normally will be formed when it is desirable to divide
39 responsibility for the subject matter falling within the scope of an Engineering
40 Committee. Subcommittees, like their parent Committees, have no fixed term of
41 existence and are intended to continue to exist until there is no need.
42 Subcommittee Chairs and Vice Chairs shall be elected by the Subcommittee

1 Membership, using the same processes and subject to the same term limitations
2 as that of Engineering Committee leadership. The Chair of the parent
3 Engineering Committee may dissolve the Subcommittee, with the approval of the
4 Engineering Committee when it is no longer required.

5 (2) **Working Groups** are established by an Engineering Committee or
6 Subcommittee for specific purposes, such as (but not limited to) developing a
7 draft of a specific Standard or Specification, and may be dissolved by the Chair
8 of the parent body when their function is no longer required. The Chair of the
9 Working Group is appointed by the Chair of the parent body except when the
10 Working Group is a formulating body. If a Working Group is granted formulating
11 authority, its leadership shall be elected as described for Formulating Groups and
12 it must follow all procedures for submitting meeting notices, agenda and reports.
13 The Vice Chair is appointed by the Chair of the Working Group with the provision
14 that the Vice Chair is not from the same company as the Chair.

15 (3) **Task Groups or ad hoc groups** are bodies that are established by an
16 Engineering Committee, Subcommittee, or Working Group to address a specific
17 problem as part of the larger body. Task Groups meet informally and do not
18 have a standard-formulating mission. The Chair of the parent body shall dissolve
19 the task or ad hoc group when the purpose for which it was formed has been
20 completed. Appointment of a Task Group Chair (where appropriate) and
21 dissolution of the Task Group are functions of the Chair of the parent body. The
22 Vice Chair is appointed by the Chair of the Task Group or Ad Hoc Group with the
23 provision that the Vice Chair is not from the same company as the Chair.

24 An alphanumeric designation of the pattern *TRXX* (or *FOXX*) (e.g., *TR-15*) will be
25 assigned to each Engineering Committee by the TIA Standards and Technology
26 Department. Subcommittees shall be designated by the addition of a decimal and a
27 numerical suffix; e.g., *TR15.1*, and Working Groups shall be designated by the addition
28 of a further decimal and numerical suffix; e.g., *TR15.1.1*. Where a Working Group or an
29 ad hoc group is directly attached to an Engineering Committee, the numerical suffix 0
30 (i.e., *TR15.0.1*) or an alphabetical suffix (i.e. *TR15ABC*) may be used to so indicate.

31 *3.1.4 Establishment and Revision of Formulating Group Scope*

32 When a new Engineering Committee has been established, the elected Committee
33 Chair shall be required to submit a proposed Committee Scope, defining the technical
34 area of responsibility, for the review and approval of the TIA Vice President, Standards
35 and Technology and the TSSC. When approved and published, that scope becomes
36 the principal guide for the work of the Committee. Subcommittee Scopes must be within
37 the parent Engineering Committee Scope and should be forwarded to the parent
38 Engineering Committee for initial approval. The Scope approved by the parent
39 Engineering Committee shall then be transmitted to the TSSC for final approval and
40 publication. Formulating Group Scopes do not require ANSI approval.

1 Scopes of all Engineering Committees and Subcommittees are published by the
2 Standards and Technology Department in a Committee Scope Manual supplied to all
3 Engineering Formulating Group Chairs. The Scope Manual is posted on the TIA web
4 site.

5 *3.1.5 Formulating Group Functions*

6 TIA Formulating Groups shall develop projects listed in Section 6.1, as well as
7 contribute to the development and coordination of U.S. positions (See Section 3.2.1) on
8 technical matters related to international, regional, and other national Standards bodies.
9 The TIA Formulating Groups may also provide assistance, information, and
10 recommendations on engineering matters to the product-oriented Divisions, the
11 standing and special committees, the officers, and the Board of Directors of the TIA.
12 The Formulating Groups may also select delegates that will represent the group in
13 meetings with other standards groups. In addition, at the suggestion of their sponsoring
14 Divisions or the Standards and Technology Department, they may engage in other
15 engineering-related activities in keeping with their scopes and the TIA Legal Guides.

16 **3.2 Application for Membership to Formulating Groups**

17 Application for membership on a TIA Formulating Group shall be submitted either in
18 writing or via e-mail to the TIA Standards Secretariat who will forward a copy to the
19 Chair of the Formulating Group. An organization requesting membership shall state its
20 reason(s) for seeking membership and the relevant contact information for its
21 designated representatives. The organization shall designate one such representative
22 as its Voting Representative and may designate additional parties as Supplemental
23 Representatives. The TIA Standards Secretariat will inform the party of the fees
24 involved, if any, and the rules for participation. The Secretariat will also inform the
25 requester of the requirement to attend two meetings to demonstrate an active interest
26 and to obtain meeting voting rights. The requirements to maintain meeting voting rights
27 will also be provided. The TIA Standards Secretariat will advise the Formulating Group
28 Chair on the verification of status and whether all TIA general class member dues or
29 non-member fees have been paid. (See Section 3.2.9)

30 *3.2.1 Eligibility for Participation in Formulating Groups*

31 Participation in Engineering Committees and their sub-elements is open to any
32 company (or comparable body)¹ that has a direct and material interest within the
33 respective jurisdiction of the Formulating Groups. TIA Membership is not a prerequisite
34 to participation. (See Section 3.2.4 for government participation.)

¹ A company (or comparable body) is a corporation, other legal entity, partnership, or sole proprietorship organized under the laws of a specific country or countries. Comparable bodies include organizations; associations; trade unions; and institutions, including government agencies and international organizations.

1 The working language for all such Committees and sub-elements shall be English.
2 Persons participating in such programs should be technical personnel. Under some
3 circumstances, eligibility for Membership may be limited by circumstances beyond the
4 TIA's control, such as government regulations, the need for security clearances, etc.
5 Any question as to eligibility shall be referred to the TIA Standards and Technology staff
6 person assigned to a respective Formulating Group. Whenever government regulations
7 or government policies require, or the need to develop a USA-only position or
8 recommendation arises, that portion of a meeting may be limited to USA participants²
9 only.

10 3.2.2 *Formulating Group Balance*

11 All appropriate interests that might be directly and materially affected by the standards
12 activity of the committee shall have the opportunity for fair and equitable participation
13 without dominance by any single interest. Each member shall designate its own interest
14 category as appropriate and in accordance with the committee's already established
15 categories. Interest categories appropriate to the development of consensus in any
16 given standards activity are functions of the nature of the standards being developed.
17 In defining the interest categories appropriate to a standards activity, consideration shall
18 be given to at least the following: (a) Producer, (b) User, (c) Producer/User, and (d)
19 General Interest.

20 The standards developer shall have a balance of interests and shall not be dominated
21 by any single interest category.

22 Dominance means a position or exercise of dominant authority, leadership, or influence
23 by reason of superior leverage, strength, or representation to the exclusion of fair and
24 equitable consideration of other viewpoints. The requirement implicit in the phrase
25 "shall not be dominated by any single interest category" normally will be satisfied by the
26 historical criteria for balance that is: a) no single interest category constitutes more than
27 one-third of the membership of a committee dealing with safety or b) no single interest
28 category constitutes a majority of the membership of a committee dealing with product
29 standards.

30 Unless a directly or materially affected person claims that a single interest category
31 dominated, the absence of dominance is presumed.

² A USA Participant is a company or comparable body organized under the laws of any state of the United States of America.

1 **3.2.3 Company or Organizational Representation in Formulating Groups**

2 **3.2.3.1 Voting Representative – One Company, One Vote**

3 Membership in TIA Formulating Groups is vested in companies (or comparable bodies)
4 whether TIA Member or non-Member³. An individual designated by the company is
5 placed on the list of Voting Representatives and exercises full Membership privileges
6 after the company has been represented at two consecutive meetings and such voting
7 right vests after quorum (See Section 5.3.2) has been established at the second
8 meeting attended⁴. (See Section 3.2.5 below for Membership voting continuation
9 requirements.)

10 Representatives on Engineering Committees and sub-elements are considered to be
11 acting for their respective companies or organizations in developing an industry position
12 on issues before such Formulating Groups. Voting representation from any company or
13 organization is limited to one representative on any Formulating Group or sub-element⁵.
14 Where a company includes several divisions or subsidiaries, voting representation is
15 limited to one person from that company unless it can be shown that the operations are
16 so different as to represent different interest categories (i.e., one company, one vote).

17 **3.2.3.2 Alternate Voting**

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

23 **3.2.3.3 Supplemental Representative**

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

³ Non-Member participation fees may be charged. See Section 3.2.9. Further details are available from the Standards and Technology Department.

⁴ This two-meeting requirement applies in the case of joining an existing Formulating Group, and does not apply when a new Formulating Group is being established or reorganized.

⁵ Some 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.

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

4 Member companies of the TIA may place additional names on the supplemental mailing
5 list without charge for up to 10 individuals, and may place further additional names on
6 the supplemental mailing list upon payment of a service fee per name, per list.
7 Deviations from this policy require approval of the TIA Vice President, Standards and
8 Technology.

9 Persons whose names appear on the supplemental mailing list are not recognized as
10 the Voting Representative, but when a vote is cast in the absence of the regular Voting
11 Representative (Section 3.2.3.1), it is desirable that the vote be cast by an individual
12 who has been receiving Formulating Group correspondence through the supplemental
13 mailing list and who has been participating regularly in Formulating Group meetings.

14 *3.2.3.4 Multiple Votes*

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

17 *3.2.4 Government Participation*

18 The TIA, through its Standards and Technology Department, provides a forum for the
19 writing and maintenance of voluntary industry Standards and Specifications that relate
20 to the products and services its Members and others provide. The TIA desires and
21 encourages the active participation in its Standards-developing activities of all parties
22 having a direct and material interest in its Standards, including U.S. or other federal,
23 state, and local government entities when they have such a direct and material interest.
24 Contribution to the Standards-making process may take the form of liaison with
25 appropriate Formulating Groups, participation in the open industry balloting of
26 Standards Proposals, or active participation in Formulating Groups. Because
27 Standards-making depends on consensus rather than the will of a simple majority,
28 participation in the consensus-building process, in any of the forms described above, is
29 of far greater significance than the final act of voting in a Committee.

30 Agencies at all levels of federal, state, and local government are encouraged to
31 participate in TIA Standards-making activities when they have a direct and material
32 interest in the Standards work and are willing and able to commit to full and consistent
33 participation at any of the levels described above.

34 TIA provides many alternatives to encourage government entity participation:

- 35 1. If a government entity chooses to participate in a Formulating Group on a non-
36 voting basis, all fees are waived. The names of the participants will be entered
37 on the supplemental mailing list of the Formulating Groups, entitling those

1 representatives to all Formulating Group-related correspondence distributed by
2 the TIA.

3 2. If a government entity chooses to participate in a Formulating Group on a voting
4 basis, active participation is required by such government designees (See
5 Section 3.2.5) and a participation fee is assessed (See Section 3.2.9). State and
6 local jurisdictions in particular may find it more practical to be represented by
7 their respective national associations which can consolidate their inputs.

8 3. Recognizing the limited resources of many government agencies, TIA offers an
9 additional *optional* fee waiver provision that will provide voting rights:

10 a) If all branches and agencies of a **federal** government who have requested
11 to participate in a Formulating Group on a voting basis designate one
12 representative to represent the interests of all such branches and agencies,
13 then the normal non-member participation fees will be waived as respects
14 participation by such designee. (See Section 3.2.9 and paragraph 2 above.)

15 b) If all branches and agencies of a **state** government who have requested to
16 participate in a Formulating Group on a voting basis designate one
17 representative to represent the interests of all such branches and agencies,
18 then the normal non-member participation fees will be waived as respects
19 participation by such designee. (See Section 3.2.9 and paragraph 2 above.)

20 c) If all branches and agencies of a **local** government who have requested to
21 participate in a Formulating Group on a voting basis designate one
22 representative to represent the interests of all such branches and agencies,
23 then the normal non-member participation fees will be waived as respects
24 participation by such designee. (See Section 3.2.9 and paragraph 2 above.)

25 3.2.5 *Membership Voting Continuation*

26 Continuation of voting status as a Member of any Formulating Group or sub-element
27 depends upon active participation in the work program. There are two types of
28 participation: attendance at meetings and responding to ballots.

29 Option A (includes ballots)

30 The criterion for removal of a company (or organization) from voting status in a
31 Formulating Group is absence from three consecutive meetings. If a Member of a
32 Formulating Group does not respond to any Formulating Group ballots that close
33 between any two consecutive meetings of the Formulating Group, then it shall be
34 counted as a single absence for the purpose of maintaining voting status.

35 When a company holding voting status in a Formulating Group has gone unrepresented
36 for three successive meetings or does not respond to at least 50% of the Formulating
37 Group ballots between successive meetings, the Chair shall so advise the Staff unless,
38 on a case-by-case basis, failure to attend or vote on ballots are excused. The Chair

- 1 shall notify the company of its failure to meet minimum participation requirements and
2 shall remove the company and its representatives from the list of voting Members.
3 Reinstatement requires a resumption of participation in the Committee's work, and
4 participation in two consecutive meetings.
- 5 If a member of a Formulating Group votes on ballots between any two consecutive
6 meetings of the Formulating Group, then it shall be counted as a single attendance for
7 the purposes of maintaining voting status.
- 8 The Chair shall notify the Staff when reinstatement requirements have been met.
- 9 Formulating Group Chairs are required to enforce the Membership continuation rules in
10 order to maintain their ability to raise a quorum at meetings. (See Section 5.3.2.) In
11 addition, any participant in default of payment of fees may have membership rights
12 dropped or suspended (See Section 3.2.9)
- 13 Formulating Group Chairs should also encourage Member companies to ensure that the
14 person shown on the distribution lists as their Voting Representative is in fact the
15 person who attends Formulating Group meetings.
- 16 Formulating Group Chairs shall be responsible for notifying the TIA Standards
17 Secretariat of who the eligible member companies are when the ballot authorization
18 form is submitted under this option.
- 19 Option B (excludes ballots)
- 20 The criterion for removal of a company (or organization) from voting status in a
21 Formulating Group is absence from three consecutive meetings.
- 22 When a company holding voting status in a Formulating Group has gone unrepresented
23 for three successive meetings, the Chair shall so advise the Staff unless, on a case-by-
24 case basis, failure to participate or attend is excused. The Chair shall notify the
25 company of its failure to meet minimum participation requirements and shall remove the
26 company and its representatives from the list of voting Members. Reinstatement
27 requires a resumption of participation in the Committee's work, and participation in two
28 consecutive meetings. The Chair shall notify the Staff when reinstatement requirements
29 have been met.
- 30 Formulating Group Chairs are required to enforce the Membership continuation rules in
31 order to maintain their ability to raise a quorum at meetings. (See Section 5.3.2.) In
32 addition, any participant in default of payment of fees may have membership rights
33 dropped or suspended (See Section 3.2.9)
- 34 Formulating Group Chairs should also encourage Member companies to ensure that the
35 person shown on the distribution lists as their Voting Representative is in fact the
36 person who attends Formulating Group meetings.

1 3.2.6 *Liaison Representatives*

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

10 3.2.7 *Observers*

11 Requests for status as an Observer at a meeting from other organizations or individuals
12 should be referred to the Standards and Technology Department. A Chair or Staff may
13 allow any person to observe one meeting without the payment of any fees or dues, in
14 order to allow the person to see if their company or organization is directly and
15 materially interested in the work of the Formulating Group.

16 3.2.8 *Non-U.S. Observers*

17 Requests from non-U.S. Standards Development Organizations, individuals, or
18 companies for observer status will be considered on a case-by-case basis, and should
19 be referred to the Standards and Technology Department. Since in some cases U.S.
20 export laws and regulations may bar participation in the meetings or receipt of technical
21 information, special rules apply to non-U.S. participants.

22 3.2.9 *Fees*

23 Since the operations of the Engineering Committees and the Standards and Technology
24 Department are heavily subsidized from the dues paid by Association Members, a
25 charge per planned meeting commensurate with costs is assessed to companies that
26 desire to be Members of Engineering Committees but are not general class Members of
27 the TIA. In order to encourage participation in the Engineering Committees by under-
28 represented interest categories, this fee may be waived or reduced for such individuals
29 belonging to an underrepresented interest category. After consultation with the Chair of
30 the Formulating Group, the Standards & Technology Staff person assigned to oversee
31 the Formulating Group will make the decision to waive or reduce fees based on the
32 interest category represented.

33 Companies having a direct and material interest in the matters being considered for
34 standardization in TIA Committees, who can demonstrate that they would be prevented
35 from participation in the Standards formulation process by imposition of participation
36 fees or special fees may seek partial or complete abatement of the fees on a hardship
37 basis by contacting the Standards and Technology staff person assigned to oversee the
38 Formulating Group. Since the cost of travel to attend meetings usually far outweighs

1 the fees, such companies should also consider the alternative of participation in the pool
 2 of persons agreeing to receive unsolicited documents during the public review period,
 3 since this does not require meeting attendance. (See Section 6.6.2.)

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

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

16 Some domestic Formulating Groups work closely with the U.S. Technical Advisory
 17 Groups (US TAGs) for the International Organization for Standardization (ISO) and the
 18 International Electrotechnical Commission (IEC). Voting members may be assessed an
 19 International Participation Fees (IPF). Some TAG Administrators may also charge a
 20 TAG Administration fee. TIA Standards and Technology Department is not responsible
 21 for the assessment or collection of such IPF and TAG administrative fees, but it has
 22 agreed to provide lists of voting members of Formulating Groups when such Group's
 23 activities are closely supportive of related international work conducted in ISO or IEC.

24 **3.3 Responsibilities of Formulating Group Leadership**

25 The Chair and Vice Chair of each TIA Engineering Committee or sub-element is
 26 responsible to:

- 27 (1) Conduct group activities in accordance with the procedures prescribed in this
 28 Manual, especially Section 5, and the TIA Legal Guides as the presiding official
 29 to ensure a meeting that is prompt, efficient, and effective.
- 30 (2) Prepare (or have a Committee Secretary prepare) meeting notices and agendas
 31 and meeting reports and have them sent to the TIA Standards Secretariat in time
 32 to provide adequate notice of upcoming meetings.
- 33 (3) Request and prepare Project Initiation Notification System (PINS) and other
 34 authorization forms for transmittal to TIA Standards Secretariat.
- 35 (4) Submit ballots in accordance with the Style Manual and Engineering Manual on a
 36 timely basis.
- 37 (5) Provide adequate notice and information to the TIA Meeting Planner about future
 38 meeting dates, locations, and facility requirements if TIA is to contract for the

- 1 arrangements. If TIA has signed a hotel contract, then TIA staff must be involved
2 in any modifications to requirements with the hotel or meeting location.
- 3 (6) Ensure that, when requested by the TIA Meeting Planner, attendance rosters are
4 transmitted to the TIA Meeting Planner for room pick-up verification. If TIA staff
5 is present during the full duration of the meeting, the Meeting Planner shall
6 request TIA staff to make the transmittal.
- 7 (7) Ensure special provisions of the Engineering Manual such as the Early
8 Disclosure Request Statement of the Patent Policy and compliance with Export
9 Control regulations are communicated. (See Section 6.5.1).
- 10 (8) Establish appropriate liaison whenever a matter in the work of an Engineering
11 Committee or Formulating Group may concern another Department, Division, or
12 standing committee within the Association. Liaison should also be established to
13 organizations external to TIA including domestic and international Standards
14 Development Organizations.
- 15 (9) Ensure that elections are conducted for Chairs for Subcommittees and Working
16 Groups when they have a standard-formulating mission. The election should
17 follow the process and criteria set forth in Sections 3.1.1 and 4.
- 18 (10) Appoint Chairs for Working Groups and Task Groups that do not have a
19 standard-formulating mission.
- 20 (11) Provide the Standards and Technology Department with current information for
21 the maintenance of lists of Members, Voting Representatives, and Supplemental
22 Representatives.
- 23 (12) Oversee subordinate Subcommittees and Working Groups, ensure their activities
24 are conducted in accordance with the agreed scope and in accordance with
25 relevant procedures prescribed in this Manual, and prepare periodic and annual
26 reports on Committee activities to be furnished to the Standards and Technology
27 Department and the Technical Committee.
- 28 (13) Conduct the meeting in a dignified and professional manner.
- 29 (14) Elect a Vice Chair from among eligible candidates proposed by the Committee
30 Membership and to create a Committee Secretary position to assist with the
31 meeting reports and other administrative interfaces with the TIA Standards
32 Secretariat. In the absence of a Committee Secretary, these functions are the
33 responsibility of the Chair.
- 34 (15) Represent the consensus of the Group even when said position is not aligned
35 with the person's company position.
- 36 (16) Lead the Group to consensus even when the consensus position is not aligned
37 with the person's company position.

1

2 **4 Election Procedures**

3 The Chair and Vice Chair shall be elected by the Formulating Group to serve a two-year
4 term or until their successors are elected. The terms of office shall begin at the close of
5 the meeting at which they are elected. The anniversary of the election meeting shall be
6 determined by each Formulating Group.

7 This election shall be conducted at a regularly scheduled meeting of the Formulating
8 Group, and shall be announced in writing, to the Formulating Group, at least 30 days in
9 advance of the meeting. When an election is held to fill the office of Chair, the
10 announcement shall also indicate that there will be an election to fill the position of Vice
11 Chair in the case where the Vice Chair may be elected to the office of Chair. If, at the
12 election, the Vice Chair is elected to the office of Chair, that individual shall become
13 Chair immediately, the position of Vice Chair shall be assumed vacant, and an election
14 shall be held for the office of Vice Chair. If, as a result of the election, the Vice Chair is
15 not elected to the office of Chair, that individual shall remain Vice Chair and stand for re-
16 election. In all other cases, the individual(s) elected shall assume office at the close of
17 the meeting at which they are elected.

18 **4.1 Eligibility for Formulating Group Chair and Vice Chair**

19 Acceptance of the Chair of a TIA Formulating Group represents a major commitment of
20 talent and support resources by an employer. In order to ensure that such a
21 commitment exists and will be ongoing, it is the TIA's policy that Chairs of Formulating
22 Groups be elected from among qualified representatives of organizations holding voting
23 status in the Formulating Group.

24 Maintaining a leadership position on a Formulating Group can require a significant
25 amount of time and travel. Individuals seeking such positions should ensure that their
26 personal commitments and their employer's priorities will allow them the necessary
27 resources to serve effectively and review the responsibilities required in Section 3.3.
28 Candidates' employers shall submit a letter of support to the parent Committee Chair
29 and the TIA Vice President, Standards & Technology that the candidate and employer
30 will commit the time and resources required in fulfilling the position.

31 Vice Chairs are recommended because it is desirable to have continuity of leadership
32 within Formulating Groups. Vice Chairs are to be elected using the same process as
33 that used for Chair, and shall not be from the same member company as the Chair.
34

35 No individual shall serve more than two consecutive terms as Chair, or more than two
36 consecutive terms as Vice-Chair. Should no candidate come forward seeking election at
37 the end of a Chair's or Vice Chair's first two year term, that Chair or Vice Chair may
38 continue in office for another consecutive term.
39

1 For a Chair or Vice Chair to serve more than two consecutive terms, a waiver must
2 allow the Chair or Vice Chair to run for reelection. To obtain such waiver, at least 75%
3 of organizations in good standing listed on the quorum list of the Formulating Group
4 must be in favor of the waiver. It is the expectation but not the requirement that waivers
5 will be granted in exceptional circumstances.

6 Whenever a vacancy exists in the office of Chair or Vice-Chair, the successor shall be
7 elected for a full term of two years. This election shall be conducted at a regularly
8 scheduled meeting of the Committee, shall be announced, in writing, to the Committee
9 consistent with meeting notice guidelines (Section 5.2) with an additional seven days,
10 and shall be conducted by secret letter ballot. When an election is held to fill the office
11 of Chair, the announcement shall also indicate that there may be an election to fill the
12 position of Vice-Chair in the case where the Vice-Chair may be elected to the office of
13 Chair. If, at the election, the Vice-Chair is elected to the office of Chair, that individual
14 shall become Chair immediately, the position of Vice-Chair shall be assumed vacant
15 and an election should be held for the office of Vice-Chair. In all other cases, the
16 individual(s) elected shall assume office at the close of the meeting at which they are
17 elected or upon the occurrence of the vacancy, whichever is later.

18 **4.2 Nomination of Candidates**

19 The following process will be used by a Formulating Group to receive nominations for
20 candidates:

21 (1) Nomination letters and letters of support for Chair and Vice-Chair shall be sent to
22 the Vice President, Standards and Technology and copied to the current
23 Formulating Group leadership.

24 (2) Candidates are asked to submit a statement of interest, qualifications and
25 objectives to the Standards Secretariat who will distribute it with the name of the
26 nominees.

27 (3) At least 30-days before the designated election meeting, the names of nominees
28 for Chair and Vice Chair will be sent by the Standards Secretariat to the
29 organizations in good standing listed on the quorum list of the Formulating
30 Group.

31 (4) Before the election, additional nominations from the floor shall be permitted.
32 Each nomination from the floor shall be accompanied by a written letter of
33 support from the employer of the candidate and a statement of interest,
34 qualifications and objectives for their proposed administration.

35 **4.3 Election of Candidates**

36 Voting for the Chair and Vice Chair shall be by the organizations in good standing listed
37 on the quorum list of the Formulating Group. Elections shall be conducted via secret

1 ballot. Official ballots shall be provided to the Formulating Group by the Standards
2 Secretariat.

3 The election will be conducted by the current Chair or duly appointed neutral party
4 (preferably TIA staff) at a plenary meeting of the Formulating Group. Election for Chair
5 shall be by a majority on the first ballot. If no candidate receives a majority, a run-off
6 election will be held among the candidates receiving the two highest number of votes on
7 the first ballot. This process is repeated until one candidate receives a majority vote. At
8 the conclusion of the election of a Chair, the election of the Vice Chair will be conducted
9 in the same manner prescribed for the election of the Chair. The appointed neutral
10 party shall forward all ballots to the Standards Secretariat for archiving.

11 **4.4 Announcement of Results**

12 The result of the election of the Chair and Vice Chair shall be reported in the following
13 manner:

- 14 (1) The current Chair shall announce the winner of both the Chair and Vice Chair
15 positions after the ballots have been tallied by the appointed neutral party.
- 16 (2) The Chair shall not announce the ballot tally figures at the plenary.
- 17 (3) Any candidate shall be able to review the tally sheets by making their request
18 known to the Standards Secretariat. This review will take place at the
19 headquarters of the Secretariat. Request for review of said documents shall be
20 made within 180 days after the election meeting.
- 21 (4) The Secretariat shall keep both the tally sheets and the ballots for no less than
22 180 days after the election meeting where the election was held.

23 Newly elected officers will assume office immediately following the election meeting.
24

25 **5 Meetings**

26 **5.1 Meeting Location and Facilities**

27 Formulating Group Chairs should consider convenience and travel costs for Members,
28 costs to the TIA, and appropriateness of facilities when selecting meeting locations.
29 The TIA has some conference rooms available for meetings and these can be used on
30 a space-available basis. The TIA Staff can also provide assistance in locating and
31 negotiating with commercial meeting facilities such as hotels and conference centers.
32 When it is necessary to schedule a meeting at a location that will involve costs to the
33 TIA, arrangements shall be made only by the TIA Staff, in recognition of the budget
34 constraints for such activities.

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

- 4 (1) Host companies are requested to avoid inappropriate or elaborate hospitality
5 actions.
- 6 (2) Attendees should not be subjected to sales or product presentations unless the
7 Formulating Group requested such a presentation for reasons related to their
8 deliberations. Any product presentation should not include pricing information or
9 other commercial terms and should be done in a manner fair to all presenters.
- 10 (3) Gifts or other promotional items of significant value should not be given to
11 attendees.
- 12 (4) The requirement for security clearances for attendees should be avoided.
- 13 (5) Expenses to be paid by the TIA shall be pre-authorized by Standards and
14 Technology staff assigned to the Formulating Group, and shall be within budget
15 constraints for such activities. TIA staff shall coordinate closely with the Chair to
16 determine what additional requirements are necessary for the meeting (e.g.
17 audio visual equipment, computer services, LANs, and copying services).
- 18 (6) Meetings may be held outside the United States if agreed to by the Members of
19 the Formulating Group.
- 20 (7) The Formulating Group shall maintain a set of general guidelines to provide to
21 the prospective host(s). Specific requirements may change from meeting to
22 meeting depending upon scope and venue, however, the host should be notified
23 of the specific requirements at least four (4) weeks prior to the meeting in order
24 to secure appropriate facilities.

25 **5.2 Meeting Notices, Agenda and Reports**

26 *5.2.1 Meeting Notices, Notices of Cancellation*

27 Chairs shall coordinate meeting arrangements with the TIA Standards and Technology
28 Department and shall electronically forward the meeting notice to the TIA Standards
29 Secretariat at least 24 days prior to the first day of the scheduled meeting. Agendas
30 should accompany the meeting notice, but will be accepted until two weeks prior to the
31 first day of the meeting. (See Section 5.2.2.) Unless the Chair requests earlier
32 transmittal, the TIA shall send out the meeting notices electronically at least 14 days
33 before the meeting to the list(s) designated by the Chair, and post the information on
34 TIA's web and File Transfer Protocol (FTP) sites.

35 Once meeting dates and locations are established, Chairs shall use preliminary
36 announcements to allow participants ample time for travel arrangements. Chairs shall

1 coordinate meeting arrangements with the TIA Meeting Planner (if applicable) and
2 forward to the Standards Secretariat an electronic copy of the meeting notice at least
3 24-days prior to the first day of the scheduled meeting. The draft agenda shall
4 accompany the meeting notice. If meetings are less than four weeks apart, the
5 committee shall send the meeting notice to the TIA Standards Secretariat at the
6 conclusion of the previous meeting. When the Chair requests earlier transmittal, the TIA
7 shall send the meeting notices to the list(s) designated by the Chair, and post the
8 information on TIA's web and File Transfer Protocol (FTP) sites within 48 hours of
9 receipt. It is suggested that the notification of the next meeting be placed at the end of
10 the meeting agenda of the previous meeting.

11 Meetings that do not fulfill the notification requirements can still be held, however, the
12 results of the meeting are advisory and shall be contributed to the next meeting that
13 fulfills the notification requirements.

14 Meeting reports are to be filed within six weeks of the meeting close date. Once
15 received by the TIA Standards Secretariat, the TIA General Counsel or an attorney
16 authorized by the TIA General Counsel is to approve the meeting report within five (5)
17 business days. Upon approval, the TIA has five (5) business days to distribute the
18 meeting report.

19 Meetings may be cancelled if it is anticipated, with cause, that there will be no quorum
20 for conducting business at the meeting, no Chair or Vice Chair will be present to
21 conduct the meeting, or an emergency or other act of nature precludes attendance at
22 the meeting (e.g., hurricane. A notice of cancellation will be sent as soon as possible to
23 provide the most time to the possible participants. A substitute meeting may be
24 scheduled in order to continue the progress of a Formulating Group in the event a
25 meeting is canceled. Notification requirements for substitute meetings shall be the
26 same as for any other meetings of the Formulating Group.

27 5.2.2 Meeting Agenda

28 A detailed meeting agenda should be forwarded electronically to TIA Standards
29 Secretariat concurrently with the meeting notice information. In all cases, the agenda
30 shall be available at least two weeks prior to the first day of the meeting. If more than
31 one Formulating Group is meeting concurrently at the same place, the Chair of the
32 senior group should submit the agenda for all such groups.

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

- 35 (1) approval of Standards proposals for industry ballot (including issuing ballots for
36 the reaffirmation, revision or withdrawal of existing Standards);
- 37 (2) adoption or revision of Formulating Group procedures;
- 38 (3) changes in Formulating Group scope;

1 (4) termination of the Formulating Group, or

2 (5) election of the leadership of the Formulating Group.

3 If so requested by a Formulating Group member, the Chair, with concurrence of the
4 Group, may defer action on substantive items that have not been the subject of prior
5 notification on the published agenda. Action may be deferred to a subsequent meeting
6 or a Letter Ballot may be issued.

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

10 5.2.3 *Meeting Reports*

11 Each Chair of a Formulating Group is encouraged to appoint a Secretary to record and
12 prepare a meeting report for each meeting. In the absence of the Secretary, the Chair
13 is responsible for preparation of the report.

14 Meeting reports are not "minutes" in the strict sense of the term, since a detailed record
15 of all comments and discussions is not required. The report shall include:

16 (1) the date and place of the meeting;

17 (2) a list of persons in attendance (members and nonmembers);

18 (3) a statement that a quorum was (or was not) present;

19 (4) actions taken;

20 (5) significant unresolved issues;

21 (6) voting records (the use of "unanimous" when applicable or the notation by
22 member name of negative and abstaining votes cast);

23 (7) a document list (See Section 5.2.3.1);

24 (8) future meeting schedules (if applicable);

25 (9) action items assigned;

26 (10) time of adjournment.

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

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

1 The Secretary shall prepare the meeting report in accordance with the format contained
 2 in Annex E. The draft meeting report shall be signed by the Secretary or the Chair and
 3 forwarded to the TIA Standards and Technology Department for review and distribution.
 4 *No distribution of the draft meeting report may be made in any form prior to review and*
 5 *approval by the TIA Standards and Technology Department and Legal Counsel for TIA.*
 6 (See Section 5.2.3.2.) After legal approval is received, the draft meeting report can be
 7 discussed, accepted or modified at a subsequent meeting, and any changes recorded in
 8 the report of that subsequent meeting. If the Legal Counsel-approved draft meeting
 9 report is modified substantially at the subsequent meeting, the entire report should be
 10 re-submitted for approval by Legal Counsel.

11 The Chair of the Formulating Group shall ensure corrections, additions, and
 12 reclassification from voting to non-voting and vice-versa are legibly marked on the forms
 13 provided by the TIA and are returned immediately following the meeting to the
 14 Standards and Technology Department for database maintenance.

15 The original attendance list may be sent separately when the meeting report is sent to
 16 the Standards Secretariat electronically. The attendance list may be attached to the
 17 meeting report and serve in lieu of the list of persons in attendance if all names are
 18 clearly legible when reproduced⁶. Short working documents not available at the meeting
 19 may be appended to the meeting report. When a large document falls into that
 20 category, its pertinent material should be abstracted.

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

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

- 25 (1) Members of the Formulating Group;
- 26 (2) Individuals listed on the supplemental mailing list;
- 27 (3) "Others Present" when their complete mailing addresses are supplied by the
 28 Chair or Secretary to the Standards and Technology Department, and the Chair
 29 requests such distribution.

30 Availability of accurate meeting reports from previous meetings is essential to the
 31 orderly conduct of meetings. It is the responsibility of the Chair and the Secretary of the
 32 Formulating Group to submit meeting reports to the TIA in sufficient time to allow for
 33 their approval and distribution prior to the next regularly scheduled meeting. Once
 34 received by the TIA Standards Secretariat, the TIA General Counsel or an attorney
 35 authorized by the TIA General Counsel is to approve the meeting report within five (5)
 36 business days. Upon approval, the TIA has five (5) business days to distribute the

⁶ The permanent archives of the Standards and Technology Department may be retained on microfilm and other image-based media. This places a higher standard of legibility on original documents.

1 meeting report. Meeting reports must be approved and distributed prior to the next
2 meeting.

3 *5.2.3.1 Document List*

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

9 *5.2.3.2 Legal Approvals*

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

14 All meeting reports shall be approved by the TIA General Counsel, or an attorney
15 authorized by TIA General Counsel before any distribution is made. After TIA Staff
16 approval, the meeting report is distributed to the Committee and approved by the
17 Committee as a part of the permanent legal record. Distribution may take place by
18 posting to the TIA web site and sending notification to members.

19 **5.3 Conduct of Meeting**

20 *5.3.1 General*

21 All meetings whether face to face, conference call or web based, shall be conducted in
22 accordance with the Legal Guides contained in Annex B. The Chair is responsible for
23 maximizing the time spent at a meeting so that the time and expense of all present can
24 be justified. This requires that the agenda be followed and that discussion be kept
25 pertinent to the agenda. At the beginning of each meeting, Section 6.5.1,
26 Encouragement of Early Disclosure, should be satisfied.

27 TIA periodically conducts training sessions (e.g., Leadership Workshops), which focus
28 on topics such as the TIA Engineering Manual, ANSI processes or how to conduct a
29 meeting. The Chairs of Formulating Groups, their Vice Chairs and Secretaries are
30 strongly encouraged to attend.

31 *5.3.2 Quorum*

32 A quorum of a Formulating Group, consisting of a simple majority of the listed voting
33 Member companies, is required to conduct business. Listed, in this case, means those

1 Member companies represented on the Formulating Group voting Member list
2 established by the Chair and maintained in the offices of TIA. If a Member company is
3 not represented at a meeting, and if its absence constitutes a failure to meet the
4 participation requirements for maintaining voting membership (See Section 3.2.5), it
5 may be removed from the Voting Member list for the purpose of determining if a quorum
6 is present. After quorum is established, any new Members who have vested voting
7 rights should be so advised. (See Section 3.2.5.)

8 Any participant who is not a member of the Formulating Group and who desires to join
9 the group, should be advised to submit a membership application in accordance with
10 Section 3.2.

11 After the first meeting of a new Formulating Group, the participants participating in the
12 first meeting shall establish quorum.

13 It is the Chair's responsibility to ensure that decisions or actions are only taken in the
14 presence of a quorum.

15 If a quorum is not present, no final action may be taken, but material may be distributed
16 to the Formulating Group for action by Letter Ballot.

17 *5.3.3 Voting Procedures*

18 Voting may be conducted in meetings, including electronic meetings where all
19 participants can hear and be heard, or may be accomplished by Letter Ballot.

20 *5.3.3.1 Voting in Formulating Group Meetings*

21 At a meeting where a quorum is present *at the time of the vote*, a simple majority of
22 those voting (excluding abstentions) is sufficient to act in all matters except the final
23 approval of a TIA Standard, or approving a Standards Proposal for public ballot, in
24 which case a consensus within the Formulating Group is required. Each Formulating
25 Group Member company or organization represented shall have one vote. If the Chair's
26 company is represented by a Voting Representative other than the Chair, the Chair is
27 without vote.

28 The Chair, with the concurrence of the group, may put a question out for a Letter Ballot,
29 and not call for a vote at the meeting.

30 At a meeting, a Formulating Group may recommend publication of a TIA standard if
31 consensus has been reached and **all** the following are true:

- 32 • TIA has completed a Letter Ballot of the proposed TIA standard.
33 This is typically a 30-day ballot.
- 34 • The meeting agenda includes an item for approval of the document.

1 • The Letter Ballot results in no ballot comments or if comments are
2 received, all ballot comments (both technical and editorial) are
3 satisfactorily resolved.

4 • No one at the meeting dissents to the recommendation to publish.

5 **Note:** If technical changes are made to resolve ballot comments on the document, any
6 voting member at the meeting may request a default Letter Ballot on the matter.

7 At a meeting, a Formulating Group may recommend publication of an American
8 National Standard if consensus has been reached and **all** the following are true:

9 • TIA has completed a Standards Proposal Ballot.

10 • The meeting agenda includes an item for approval of the Standards
11 Proposal.

12 • The Standards Proposal ballot results in no ballot comments or if
13 comments are received, all editorial ballot comments are
14 satisfactorily resolved. (See Section 7.2.1)

15 • No one at the meeting dissents to the recommendation to publish.

16 If technical changes are made to resolve ballot comments on the Standards Proposal, a
17 rebalot is required according to Section 6.11, and a recommendation to publish cannot
18 be made at the time of comment resolution.

19 *5.3.3.2 Letter Ballots*

20 A simple majority of those casting ballots is required to approve any procedural matter
21 posed as a question on a Letter Ballot. Consensus is required to approve a TIA
22 Standard or to approve a Standards Proposal. (See Section 6.7 for additional
23 information on ballot options.) In all other matters, a two-thirds majority of those casting
24 ballots within the balloting period is sufficient.

25 If the number of required affirmative votes on a Letter Ballot is not attained, the Chair
26 shall attempt to determine the nature of the objections and changes necessary to
27 resolve the concerns. The Chair, with concurrence of the Formulating Group, may
28 decide to issue a second Letter Ballot (default or rebalot), or may decide the matter
29 should be carried over as an agenda item for the next meeting.

30 The Chair or Secretary of the Formulating Group shall forward the exact wording of the
31 issue(s) to be resolved by the Letter Ballot and any attached material to the TIA
32 Standards and Technology Department. The Staff will prepare a Letter Ballot and
33 electronically transmit it to the last known e-mail address of Formulating Group
34 interested parties. All responses received within the specified voting period will be
35 forwarded to the Chair, editor, or Secretary as specified.

36 The period for voting on Formulating Group Letter Ballots shall be at least 30 days from
37 the date of issuance unless otherwise noted on the ballot with the approval of the

1 cognizant Chair. At the Chair's discretion, the voting period may be longer than 30
2 days.

3 **6 Development of Standards**

4 **6.1 Types of Projects**

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

- 7 (1) Standards, both TIA Standards and American National Standards;
- 8 (2) Adoption of international standard as ANS Standard;
- 9 (3) Bulletins;
- 10 (4) Engineering Publications;
- 11 (5) Input documents to other Standards bodies;
- 12 (6) Such other projects as may be authorized or requested by the Chair of the
13 sponsoring Division or by the Chair of the Technical Committee;
- 14 (7) Joint Standards.

15 *6.1.1 Joint Standards Development*

16 A joint standards group is a standards development body that consists of two or more
17 internal or internal/external entities. Its purpose is to develop a standard that is of
18 mutual interest to all the entities concerned. When a joint standards group is formed,
19 TSSC shall be notified with the PINS form that will state the objectives and deliverables
20 of this group.

21 Where the interests of the industry are served by having TIA Engineering Committees
22 work jointly with other SDOs external entities to develop Joint Standards Documents
23 (JSD), then the Engineering Committee Chair who desires to undertake a program of
24 joint standards development should advise the Vice President, Standards and
25 Technology, of the nature of the technical work plan, and an agreement for technical
26 coordination as well as an agreement covering copyrights, publication rights, and other
27 commercial matters shall be negotiated and approved by the Chair of the TSSC.

28 *6.1.2 Initiation of Joint Standards*

29 Prior to the formation of such a joint standards group with an external entity, a signed
30 agreement shall be reached between TIA and the other organization on the following

1 items:

2

3 a) procedures for future revisions of the standard;

4 b) selection of Chair(s);

5 c) voting procedure (acceptance criteria, resolution of comments, and disapprovals);

6 d) patents procedure;

7 e) distribution rights including copyright and use of organizational logos;

8 f) meetings and related legal requirements (notices, agendas, motions, meeting
9 minutes, cost, etc.);

10 g) development costs;

11 h) development timetable.

12 **6.2 Standards**

13 Both ANS and TIA Standards are issued to achieve one or more of the following
14 purposes:

15 (1) promoting interchangeability and interoperability of products falling within the
16 scope of TIA Engineering Committees;

17 (2) eliminating misunderstandings or confusion between manufacturers and buyers
18 with respect to products on which TIA Standards or Specifications are adopted;

19 (3) providing assistance to the purchaser in selecting and obtaining the proper
20 product for a particular need;

21 (4) improving the quality of products covered by TIA Standards or Specifications.

22 Technical standardization work of the TIA consists of discussion in an open forum by
23 technical representatives from a wide spectrum of all interested groups, leading to a
24 consensus on electrical, mechanical, optical, environmental, quality, reliability and other
25 properties of telecommunications components, equipment and systems. It also includes
26 the drafting, review, approval and issuance of Standards based upon that consensus,
27 and the maintenance of Standards once issued. Where appropriate, and where the
28 requirements of ANSI have been met, such material will be proposed as an ANS
29 Standard. In cases where the standard is not intended to become an American
30 National Standard, such material will be proposed as a TIA Standard and published in a
31 uniform format described in the *TIA Style Manual*.

1 **6.3 Establishing a New Project**

2 6.3.1 New TIA Standards

3 For all new projects for TIA Standards, a Formulating Group must initiate a project by
4 submitting a completed New TIA Internal Project Request (Annex C) to TIA Standards
5 Secretariat. The project will be forwarded to the TSSC through the TIA Standards
6 Secretariat and processed by TSSC as described in Annex A. Upon approval by the
7 TSSC⁷, a Project Number (PN) will be assigned by the TIA Standards Secretariat, and
8 the Committee will be so informed. The Project Number will be used to identify the
9 drafts through each stage of the development process.

10 The Staff assigns a four-digit identifying number with the prefix PN- (Project Number)
11 during the development process. Upon assignment of a Project Number, the TIA
12 Standards Secretariat will, on the advice of the Formulating Group, circulate project
13 information to persons or organizations believed to be affected by the finished Standard,
14 affording them the opportunity to participate in the development process. Projects shall
15 be assigned by the Engineering Committee to a Subcommittee, a Working Group of a
16 Subcommittee, or itself for implementation.

17 Notice of the Project Number (PN) assignment shall also be placed in TIA's *Industry*
18 *Pulse* and posted to web pages used by TIA. A number for the final document may be
19 reserved in the appropriate numbering series or a number may be reserved in the
20 J-STD series for Joint Standards Documents intended to be TIA Standards.

21

22 6.3.2 New American National Standards

23 For all new projects for American National Standards, a Formulating Group must initiate
24 a project by submitting a completed New TIA Internal Project Request (Annex C) to TIA
25 Standards Secretariat. The project will be forwarded to the TSSC through the TIA
26 Standards Secretariat and processed by TSSC as described in Annex A. Upon
27 approval by the TSSC⁸, a Project Number (PN) will be assigned by the TIA Standards
28 Secretariat, and the Committee will be so informed. The Project Number will be used to
29 identify the drafts through each stage of the development process. For any project
30 which is expected to result in the publication of a ANS Standard, the Project Request
31 must also be accompanied by *ANSI Project Initiation Notification System (PINS) Input*
32 *Form*. (A current copy of the ANSI PINS form is found in Annex C.)

33 For any project the Staff assigns a four-digit identifying number with the prefix PN-
34 (Project Number) during the development process. The prefix will change to SP-
35 (Standards Proposal) when the document is circulated for Standards Proposal ballot.

⁷ See Section 2.4.2 for approval action of the TSSC.

⁸ See Section 2.4.2 for approval action of the TSSC.

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

7 Notice of the Project Number (PN) assignment shall also be placed in TIA's *Industry*
8 *Pulse* and posted to web pages used by TIA. ANSI will also provide notice via ANSI
9 Standards Action when an American National Standard is contemplated.

10 A number for the final document may be reserved in the appropriate numbering series
11 or a number may be reserved in the J-STD series for Joint Standards Documents
12 intended to be American National Standards.

13 6.3.3 Existing Projects

14 6.3.3.1 TIA Standards

15 For all existing projects for TIA Standards, a Formulating Group shall initiate a project
16 by submitting a completed Existing TIA Internal Project Request (Annex C) to TIA
17 Standards Secretariat. The project will be forwarded to the TSSC through the TIA
18 Standards Secretariat and processed by TSSC as described in Annex A. Upon
19 approval by the TSSC⁹, a Project Number (PN) will be assigned by the TIA Standards
20 Secretariat, and the Committee will be so informed. The Project Number will be used to
21 identify the drafts through each stage of the development process.

22 The Staff will assigns a three-alpha identifying suffix PN- XXXX-AAA (Project Number)
23 during the development process. Upon assignment of a Project Number, the TIA
24 Standards Secretariat will, on the advice of the Formulating Group, circulate project
25 information to persons or organizations believed to be affected by the finished Standard,
26 affording them the opportunity to participate in the development process.

27 Notice of the Project Number (PN) assignment shall also be placed in TIA's *Industry*
28 *Pulse* and posted to web pages used by TIA. A number for the final document may be
29 reserved in the appropriate numbering series or a number may be reserved in the
30 J-STD series for Joint Standards Documents intended to be TIA Standards.

31 32 6.3.3.2 American National Standards

33 For all existing projects for ANS Standards, a Formulating Group must initiate a project
34 by submitting a completed Existing TIA Internal Project Request (Annex C) to TIA
35 Standards Secretariat. The project will be forwarded to the TSSC through the TIA
36 Standards Secretariat and processed by TSSC as described in Annex A. Upon

⁹ See Section 2.4.2 for approval action of the TSSC.

1 approval by the TSSC¹⁰, a Project Number (PN) will be assigned by the TIA Standards
2 Secretariat, and the Committee will be so informed. The Project Number will be used to
3 identify the drafts through each stage of the development process. For any project
4 which is expected to result in the publication of a ANS Standard, the Project Request
5 must also be accompanied by Existing ANSI Form PINS, *ANSI Project Initiation*
6 *Notification System Input Form*. (A current copy of the ANSI PINS form is found in
7 Annex C.)

8 The Staff will assigns a three-alpha identifying suffix PN- XXXX-AAA (Project Number).
9 The prefix will change to SP- (Standards Proposal) when the document is circulated for
10 ANS ballot.

11 Upon assignment of a Project Number, the TIA Standards Secretariat will, on the advice
12 of the Formulating Group, circulate project information to persons or organizations
13 believed to be affected by the finished Standard, affording them the opportunity to
14 participate in the development process.

15 Notice of the Project Number (PN) assignment shall also be placed in TIA's *Industry*
16 *Pulse* and posted to web pages used by TIA. ANSI will also provide notice via ANSI
17 Standards Action when an American National Standard is contemplated.

18 A number for the final document may be reserved in the appropriate numbering series
19 or a number may be reserved in the J-STD series for Joint Standards Documents
20 intended to be American National Standards.

21 **6.4 Copyright Statement on Contributions**

22 Once a project is undertaken, a proposed standard begins to take form in the
23 Formulating Group as the result of written contributions, and of open discussion in
24 meetings. It is the responsibility of the Formulating Group Chair to ensure that each
25 such contribution bears a TIA copyright notice. Ultimately, the finished document will be
26 copyrighted and published by the TIA. Joint standards may be copyrighted by all
27 pertinent Standards Development Organizations involved in development and as
28 determined by agreement among them.

29 Contributors shall place on the cover page of any written contribution intended for
30 inclusion in a TIA document the applicable copyright statements contained in the TIA-
31 approved form entitled "Contribution Template", attached hereto as ANNEX G.

32 If Joint Standards Documents are being produced, the language may need slight
33 modification to include all Standards Development Organizations who will hold
34 copyright.

¹⁰ See Section 2.4.2 for approval action of the TSSC.

1 The applicable statements in ANNEX G shall be included on written contributions to a
2 Formulating Group, so that TIA has the right to copyright and sell TIA Publications
3 which contain the contribution in whole or in part, and to allow publication of excerpts
4 from the TIA publications. The statement also extends these rights to TIA's existing
5 policy of allowing and encouraging other regional, national or international standards
6 bodies to adopt TIA Publications as their own. (That policy makes it clear that a license
7 to use the TIA's copyrighted material in a TIA Publication of another region, nation, or
8 SDO does not automatically convey rights to Essential Patents or copyrights required
9 for conformance with the TIA Publication.)

10 No Formulating Group may establish rules which would have the effect of excluding
11 contributions based on a copyright policy which is more restrictive than that stated
12 within this Section 6.4.

13 **6.5 Disclosure of Essential Patents**

14 The Standards developing and approval process is made more efficient if the existence
15 of Essential Patent(s) and published pending patent application(s) is made known as
16 early as possible in the development work. Early disclosure affords Formulating Group
17 participants the greatest opportunity to evaluate the propriety and desirability of the text
18 of the proposed standard in view of the disclosed patented technology. Conversely, the
19 discovery at the final stages of standards development of an Essential Patent that is not
20 available for licensing under reasonable terms may result in the loss of years of
21 Committee effort.

22 *6.5.1 Encouragement of Early Disclosure*

23 A two-part approach will be used by TIA to encourage early disclosure of Essential
24 Patent(s).

25 Formulating Group Chairs will ensure that members are aware that:

26 TIA's Patent Policy can be found in Statements of Policy and subsequent sections of
27 this Engineering Manual. Participants in the work of the TIA Formulating Group are
28 urged to review the appropriate Sections. Individual participants are encouraged to
29 notify TIA of any patents or published pending patent applications of which they are
30 aware that may be essential to the practice of a proposed TIA Publication early on in its
31 development to reduce the possibility for delays in the development process and
32 increase the likelihood that the proposed TIA Publication will be approved. However, a
33 member who has provided TIA with the statement set forth in ANNEX H with respect to
34 the applicable proposed TIA Publication need not (but may elect to) identify its specific
35 patents or published pending patent applications that may be essential to the practice of
36 the proposed TIA Publication in question. Patent searches are not required to comply
37 with the TIA Patent Policy.

38 In addition, TIA will place a notification on each ballot for a proposed TIA Publication
39 that the TIA Patent Policy is applicable to the Reference Document, which encourages

1 identification of Essential Patent(s) or published pending patent application(s)
2 necessary for the practice of the Reference Document and, if appropriate, the filing of a
3 Patent Holder Statement.

4 The second part of the approach may be the use of an optional, voluntary statement on
5 contributions to Formulating Groups. Such a statement might take the form shown on
6 ANNEX G.

7 No Formulating Group may establish rules which would have the effect of excluding
8 contributions based on an early disclosure policy which is more restrictive than that
9 stated within this Section 6.5.1.

10 *6.5.2 Patents Discovered Subsequent to TIA Publication*

11 By its terms, the TIA Patent Policy applies with equal force to situations involving
12 Essential Patent(s) whenever discovered, whether before, during, or subsequent to the
13 publication of a TIA Publication. Once disclosure is made, the holder will be requested
14 to provide the same assurance to TIA as is required in situations where Essential
15 Patent(s) exist or are known prior to the approval of a proposed TIA Publication.

16 Thus, if notice is given of an Essential Patent that may be required for the practice of a
17 TIA Publication, patent holders will be requested to provide the assurances set forth in
18 Sections 2a) or 2b) in Annex H unless such assurances were previously given, or the
19 TIA Publication may be considered for withdrawal by the TSSC.

20 **6.6 Balloting of Standards**

21 Standards shall be produced by consensus (See Definitions and Terms Section).
22 Consensus is achieved through a process of discussion, correspondence, draft
23 contributions, and revision, all leading to the final result. Final adoption of text shall be
24 by the organizations in good standing listed on the quorum list of the Formulating
25 Group or those identified in the establishment of the voting pool.

26 *6.6.1 Balloting of TIA Standards*

27 The TIA Standards Secretariat will issue a broadcast email (using the TIA database) to
28 all interested parties identified on the Ballot Authorization form by the lead formulating
29 group, or from the formulating group Chair. This email will include the instructions and
30 password for the interested parties identified to review and vote on the ballot. Balloting
31 of TIA standards will be no less than 30-days, and may be extended at the chair's
32 discretion.

1 *6.6.2 Balloting of Standards Proposals*

2 When consensus is reached within the Formulating Group and has been formalized by
3 a vote, the Chair shall forward the text of the Standards Proposal to the Standards and
4 Technology Department for issuance as a Standards Proposal balloting with a
5 completed Ballot Authorization Form.

6 The TIA Standards Secretariat will disseminate the information to the established voting
7 panel (See Section 6.6.2.1). Balloting of American National Standards will normally be
8 for 60 days, and in no case for less than 45-days.

9 For an American National Standard, the Standards Proposal must receive at least a 45-
10 day public review period. This public review period is announced in ANSI's Standards
11 Action. The Standards Proposal cannot be published prior to the close of the ANSI
12 Public Review period.

13 *6.6.2.1 Establishment of Voting Panel*

14 The total pool of persons receiving and casting ballots must not be dominated by any
15 one interest category. This pool may include voting, supplemental, government, and
16 liaison representatives on the mailing list of the Formulating Group, as well as other
17 persons known to have an interest in the subject of the Standard. These parties have
18 agreed in advance to receive and review ballots on the subject. Even during the public
19 review and comment period, the one company (or organization), one vote rule applies.
20 Any party with a direct and material interest in the Standards Proposal may send
21 comments to the TIA Standards Secretariat for review and resolution by the originating
22 formulating group during the public review period.

23 If the formulating group Chair wishes to expedite the process before the actual
24 approved SP text is ready to be forwarded by the editor to the Standards Secretariat,
25 the Chair shall send notification to the TIA Standards Secretariat. This notification
26 should state that "SP-xxxx was approved for ballot and that the text will be forthcoming.
27 In the interim, TR/FO-xx would like to request that voting panel registration be opened
28 for SP-xxxx." TIA Standards Secretariat will assume the voting registration period is for
29 15 days unless the Chair requests a longer period.

30 If no prior notice is sent by the formulating group Chair, the 15 calendar day registration
31 will begin when the Ballot Authorization form and the text for the SP Ballot is received
32 and checked by the TIA Standards Secretariat.

33 The TIA Standards Secretariat will issue a solicitation for registration (using the TIA
34 database) to all interested parties identified on the Ballot Authorization form by the lead
35 formulating group, or from the formulating group Chair.

36 The solicitation will contain instructions for registering to vote or receive a "FOR
37 REVIEW ONLY" copy of the standards proposal. The registration period will be open for
38 at least 15 calendar days. A confirmation will be sent by the TIA Standards Secretariat
39 to those who complete and return the registration form. At the conclusion of the

1 designated registration period the registration will be closed and the voting panel
2 determined. Those parties who **respond to the solicitation for registration by the**
3 **registration close date** will form the voting panel for that particular SP ballot and be
4 **eligible to vote**.

5 Those parties who **do not respond** to the solicitation for registration by the registration
6 close date **will not be eligible to vote** on the proposed SP text. Provided that the TIA
7 Standards Secretariat has received the text for the Standards Proposal, the document
8 to be balloted will be posted to the TIA website the next business day. Those individuals
9 who form the voting panel will receive notification from the TIA Standards Secretariat
10 with the password and instructions to access the ballot and download the document.

11 Should more than one person from an interested company or organization request to
12 receive the ballot, the TIA Standards Secretariat will notify all identified parties that more
13 than one person has requested a ballot. (See Section 3.2.3.1) It will be up to those
14 individuals to determine who will cast that company or organization's vote and who will
15 receive the informational copy of the document. As a default, if the TIA Standards
16 Secretariat does not receive a reply, then the person with voting privileges at the
17 formulating group meetings will be designated as the voting person. If there is no
18 designated person with voting privileges at the formulating group level, then the TIA
19 Standards Secretariat will send the ballot to the person with the last name that comes
20 first in the alphabet. The others will be given the opportunity to download and review
21 the document.

22 Should a person be on travel and miss the cut off date for voter registration, the
23 interested person should send an email to the TIA Standards Secretariat stating that
24 they are interested in voting on the document and declare their company's classification
25 (user, producer, user/producer, or general interest). Upon receipt of this information the
26 TIA Standards Secretariat will respond to the email with the appropriate password for
27 the document being voted on. This process will be honored until such time as the ballot
28 closes. There will be no extension of time for late registrants.

29

30 Outside interested parties will be afforded the opportunity to comment on the document
31 through the ANSI Comment and Review Period.

32 Only those companies who return ballots will receive a complimentary copy of the
33 published document.

34 *6.6.2.2 Submission of a Standards Proposal (SP)*

35 The material submitted to the Standards and Technology Department shall be prepared
36 in accordance with the *TIA Style Manual*. It shall be accompanied by a statement of the
37 background and intended purpose of the Standard, and any other information that will
38 improve industry's understanding of the proposal. The Standards and Technology
39 Department Staff will obtain from the Chair a tabulation of the interest categories
40 represented on the mailing list of the Formulating Group, and will combine this data with

1 information about the remainder of the balloting panel to determine whether there is a
2 dominant interest category. Where domination by one group appears to exist, the Staff
3 shall contact the Chair to seek additional candidates for the balloting.

4 Upon review of the proposed Standards document by the Standards and Technology
5 Department and approval by the TIA General Counsel or an attorney authorized by TIA
6 General Counsel, and upon determination that a balanced balloting panel is likely to
7 exist, a ballot will be added to the text of the Standards Proposal and the ballot and text
8 will be circulated for review and comment to companies, organizations, and individuals
9 who are known to have, or who have indicated that they have, a direct interest in the
10 subject in accordance with Section 6.6.2.1.

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

15 Simultaneously with issuance with the Standards Proposal, ANSI is notified (by use of
16 its BSR-8 form) of the availability of the Standards Proposal for comment. ANSI
17 publishes notice of the Standards Proposal in *ANSI Standards Action*, based on the
18 ANSI established Publication Schedule, for a 45-day or 60-day public review period
19 during which the public may request copies of the proposal. Balloting of an ANS
20 Standard is not complete until this public review period expires.

21 **6.7 Ballot Response Options**

22 Both TIA Standards and ANS Standards have identical ballot response options. Parties
23 responding to either type of ballot have three options, plus abstention.

24 *6.7.1 TIA Standards*

25 Parties responding to a Letter Ballot for approval of a TIA Standard or a TSB have the
26 following ballot response options:

27 **Approve without comment.** Indicates agreement with the proposed text.

28 **Approve with comment.** Indicates general agreement, but suggests
29 enhancements or changes to the proposed text that, if not acted on, would not
30 cause the party to change their vote. Comments shall be acknowledged by the
31 Formulating Group Chair, and shall be considered during the comment resolution
32 process (See Section 6.10). Comments not adopted may be deferred to the next
33 revision of the TIA Standard.

34 **Disapprove (Comments mandatory).** Indicates disagreement with the
35 proposed text for the technical reasons stated. Comments shall be specific as to
36 the points or omissions being objected to, and shall state what changes or
37 actions would resolve the objection. Comments shall be acknowledged by the

1 Formulating Group Chair and shall be considered during the comment resolution
2 process (See Section 6.10).

3 The ballot is recorded on the ballot summary as incomplete and no action is
4 taken. Disapprove ballots received with nonspecific comments or which do not
5 state what changes or actions would resolve the objection shall be counted as
6 incomplete. If, after being contacted by the TIA Standards Secretariat, the
7 originator fails to furnish their specific written objections or fails to state what
8 changes or actions would resolve the objections, the ballot is recorded as
9 incomplete on the ballot summary.

10 **"Abstain" (with or without stated reasons for the abstention).** A company
11 may return a ballot indicating that it has chosen to abstain from voting. A
12 returned ballot indicating abstention shall be counted as a response for the
13 purpose of meeting Membership continuation criteria (See Section 3.2.5).

14 An unreturned ballot for a TIA Standard shall not be recorded on the final voting
15 tally on TIA forms.

16 6.7.2 ANS Standards

17 Parties responding to a Standards Proposal (SP) Ballot for approval of ANS have the
18 following ballot response options:

19 **Approve without comment.** Indicates agreement with the proposed SP text.

20 **Approve with comment.** Indicates general agreement, but suggests
21 enhancements or changes to the proposed SP text that, if not acted on, would
22 not cause the party to change their vote. Comments shall be acknowledged by
23 the Formulating Group Chair, and shall be considered during the comment
24 resolution process (See Section 6.10). Comments not adopted may be deferred
25 to the next revision of the Standard.

26 **Disapprove (Comments mandatory).** Indicates disagreement with the
27 proposed SP text for the technical reasons stated. Comments shall be specific
28 as to the points or omissions being objected to, and shall state what changes or
29 actions would resolve the objection. Comments shall be acknowledged by the
30 Formulating Group Chair and shall be considered during the comment resolution
31 process (See Section 6.10).

32 Disapprove ballots received without comments shall be counted as incomplete.
33 The ballot is recorded on the ballot summary as incomplete and no action is
34 taken. Disapprove ballots received with nonspecific comments or which do not
35 state what changes or actions would resolve the objection shall be counted as
36 incomplete. If, after being contacted by the TIA Standards Secretariat, the
37 originator fails to furnish their specific written objections or fails to state what
38 changes or actions would resolve the objections, the ballot is recorded as
39 incomplete on the ballot summary.

1 **"Abstain" (with or without stated reasons for the abstention).** A company
2 may return a ballot indicating that it has chosen to abstain from voting. A
3 returned ballot indicating abstention shall be counted as a response for the
4 purpose of meeting Membership continuation criteria (See Section 3.2.5).

5 An unreturned ballot for a Standards Proposal shall be recorded on the final voting tally
6 as "not returned" on ANS forms.

7 **6.8 Types of Ballot Comments**

8 **6.8.1 Substantive Changes/Technical Changes**

9 A substantive change in a Standard is one that directly and materially affects the use of
10 the Standard. Examples of substantive changes:

- 11 (1) "shall" to "should"; "should" to "shall";
- 12 (2) addition, deletion or revision of requirements, regardless of the number of
13 changes;
- 14 (3) addition of mandatory compliance with referenced Standards

15 **6.8.2 Editorial Changes**

16 A editorial change in a Standard is one that corrects typographical errors, grammatical
17 errors, or clarifies a concept without making a substantive change.

18 An Erratum may be issued after publication to correct a manifest mistake ~~or~~ omission in
19 the original text or an error subsequently discovered.

20 Any other changes to a TIA Standard or ANS Standard may be made only by revision or
21 addendum. (See Section 7.2.1)

22 **6.8.3 Non-Technical or Non-Germane Comments**

23 TIA Engineering Committees are expected to limit themselves to technical matters, and
24 to leave commercial considerations to others.

25 Problems arise when ballots are cast on Standards Proposals, with comments attached
26 that are not technical in nature or are not germane to the document being balloted.

27 The Technical Committee has the authority to create a standing committee to address
28 non-technical Standards related matters, and that such a Committee be comprised of
29 the Chair of the Technical Committee, the Chairs of the Sections and Divisions of the
30 related Engineering Committees, Association Staff, and Association counsel, where
31 appropriate.

1 The Technical Committee Chair will act as the Chair of the Standing Committee, which
 2 shall be known as "The Standing Committee on Non-Technical Standards-Related
 3 Matters."

4 It is intended that the Membership of the Standing Committee will vary depending on
 5 which TR or FO Committee referred the comment. In each case, the Chairs of the TIA
 6 Division and Section sponsoring that TR or FO Committee will serve, along with the
 7 Technical Committee Chair, Staff, and TIA General Counsel where appropriate.

8 The following process will be followed for resolution of non-technical or non-germane
 9 comments attached to ballots:

10 Approve with comment: The Committee Chair should acknowledge the comment,
 11 and where appropriate, advise the person making the comment that non-
 12 technical matters are outside the purview of the Committee. If the Chair deems it
 13 appropriate, or upon a majority vote of the Committee, the non-technical or non-
 14 germane comment(s) may be sent to the Standing Committee on Non-Technical
 15 Standards-Related Matters for consideration and recommendation. The
 16 Standing Committee on Non-Technical Standards-Related Matters shall render
 17 its decision by majority vote and in writing within 30 days of the submittal, stating
 18 findings of fact and conclusions, with reasons therefor, based on a
 19 preponderance of the evidence.

20 Unless there are other technical comments, the ballot should be counted as
 21 "affirmative without comments".

22 Disapprove with comment: The Committee Chair should acknowledge the
 23 comment, and advise the person making the comment that such matters are
 24 outside the purview of the Committee. Non-technical or non-germane comments
 25 accompanying a negative ballot shall be forwarded to the Standing Committee on
 26 Non-Technical Standards-Related Matters for consideration and
 27 recommendation. The ballot should be counted as "negative with comments".
 28 The person casting the ballot should be advised that the non-technical or non-
 29 germane comments have been forwarded to the Standing Committee on Non-
 30 Technical Standards-Related matters for consideration and recommendation.

31 **6.9 Processing Ballot Comments**

32 *6.9.1 TIA Standards*

33 If no negative ballots have been received by the close of the balloting period, the TIA
 34 Standards Secretariat, after receiving the final text and supporting documentation from
 35 the Chair and/or Editor, will proceed to process the proposal.

36 If negative ballots have been received, the TIA Standards Secretariat advises the Chair
 37 of comments via email. The chair shall provide a means for the originator of the
 38 negative comment to indicate whether the response is satisfactory or not. The

1 response letter will give the negative commentor 5-business days to complete the form
2 and submit it the TIA Standards Secretariat. The Chair will contact the TIA Standards
3 Secretariat at the end of the 5-day period to verify if the change form has been received.
4 If the form has not been received the TIA Standards Secretariat will send a registered
5 letter to the originator of the negative comment or requesting the change form be sent to
6 the TIA Standards Secretariat within 5-business days. If the TIA Standards Secretariat
7 does not receive the change form the document will be forwarded for publication with
8 the continuing objection.

9 6.9.2 ANS Standards

10 If no negative ballots have been received by the close of the balloting period, the TIA
11 Standards Secretariat, after receiving the final text and supporting documentation from
12 the Chair and/or Editor, will proceed to process the proposal.

13 If negative ballots have been received, the TIA Standards Secretariat advises the Chair
14 of comments via email. The chair shall provide a means for the originator of the
15 negative comment to indicate whether the response is satisfactory or not. The
16 response letter will give the negative comment or 5-business days to complete the form
17 and submit it the TIA Standards Secretariat. The Chair will contact the TIA Standards
18 Secretariat at the end of the 5-day period to verify if the change form has been received.
19 If the form has not been received the TIA Standards Secretariat will send a registered
20 letter to the originator of the negative comment or requesting the change form be sent to
21 the TIA Standards Secretariat within 5-business days. If the TIA Standards Secretariat
22 does not receive the change form the document will be forwarded for publication with
23 the continuing objection.

24 6.10 Comment Resolution

25 Purely editorial comments, once acknowledged, do not require further coordination with
26 the originator.

27 Technical comments received with a "Approve" ballot shall be acknowledged when
28 received, and the originator shall be advised, in writing, of the disposition of the
29 comments. If the Formulating Group adopts the comments, resulting in technical
30 | changes, the proposed Standard shall be recirculated [and relisted for public review](#)
31 (See Section 6.11 below).

32 Objections accompanying a "Disapprove" ballot shall be acknowledged when received,
33 and the Chair of the Formulating Group shall attempt to resolve the negative ballot in
34 one of the following ways:

- 35 (1) by explaining to the originator the rationale followed by the Formulating Group in
36 arriving at the proposed Standard. The Chair shall maintain a detailed written
37 record of all correspondence and contacts on this matter;

1 (2) by proposing changes to the proposed Standard which are editorial only and
2 which do not result in changes in the technical requirements of the proposed
3 Standard. Such revisions shall be supported by a consensus within the
4 Formulating Group;

5 **Note:** If the originators of negative ballots agree to withdraw their objections without
6 technical changes in the proposed Standard, they will be asked to do so in writing, and
7 to return the response form to the TIA as proof that the negative has been withdrawn.
8 This action will be reflected in the meeting summary. When all objections are
9 withdrawn, processing will continue as in Section 6.12 below.

10 (3) by proposing revisions to the technical requirements of the proposed Standard
11 which would remove the objections of the originator. Such revisions shall be
12 supported by a consensus within the Formulating Group. If the revisions result in
13 changes in the technical requirements of the proposed Standard, the proposed
14 Standard shall be recirculated [and relisted for public review](#)(See Section 6.11
15 below).

16 If the originator of a disapprove ballot does not return the response form to TIA within 5
17 business days to indicate agreement or disagreement with the rationale followed by the
18 Formulating Group in arriving at the proposed Standard, then processing will continue,
19 as in Section 6.12 below.

20 If one or more unresolved "Disapprove" ballots remain in spite of reasonable efforts to
21 resolve them, and if a consensus is believed to exist, a default ballot shall be issued as
22 described in Section 6.11.2, below.

23 Copies of all acknowledgments and correspondence with originators of comments shall
24 be furnished to the TIA Standards Secretariat. This file is necessary when the TIA
25 submits the Standard Proposal for TSSC and ANSI approval.

26 **6.11 Recirculation of Ballots**

27 Text for a ballot shall be recirculated if revisions have been made which change the
28 technical requirements or increase the range of products to which the Standard applies.
29 There are two types of recirculation ballots: Complete Re-ballot and Default Ballot.

30 *6.11.1 Complete Re-ballot of TIA Standard*

31 If, as the result of a major rewriting of large sections of a proposed TIA Standard, the
32 revisions are so broad as to merit a complete re-balloting, a new ballot is prepared and
33 issued as in Section 6.6.1. The identifying number of the new ballot will be that of the
34 original with a suffix letter added (e.g., PN-1111-A).

35 When a document is balloted to become a TIA document (i.e., TSB or TIA), the re-ballot
36 will be sent to all ballot recipients that received the original ballot.

1 *6.11.2 Default Ballot of TIA Standard*

2 A default ballot, which is a form of a 30-day Letter Ballot, may be issued whenever;

3 (1) limited technical changes are made to a proposed Standard in order to resolve a
4 negative ballot, or;

5 (2) when all reasonable efforts have been exhausted without success to resolve a
6 continuing objection, and yet a clear consensus is believed to exist.

7 A default ballot for a TIA Standard allows those parties to reaffirm or change their
8 response, based upon the changes made. New objections may not be raised on
9 sections of the document that has not been the subject of the default ballot. Failure to
10 return a default ballot leaves the recorded vote on the document “as originally cast.”

11 *6.11.3 Complete Re-ballot on an ANS Standard*

12 If, as the result of a major rewriting of large sections of Standards Proposal, the
13 revisions are so broad as to merit a complete re-balloting, a new ballot is prepared and
14 issued as in Section 6.6.2. The identifying number of the new Standards Proposal will
15 be that of the original with a suffix letter added (e.g., SP-1111-A).

16 *6.11.4 Default Ballot on an ANS Standard*

17 A default ballot is a form of a re-ballot that may be issued for a 30-day or 60-day period
18 whenever;

19 (1) limited technical changes are made to the Standards Proposal in order to resolve a
20 comment from either a “Approve, with comment” vote or a “Disapprove” vote, or;

21 (2) when all reasonable efforts have been exhausted without success to resolve a
22 negative vote, and yet a consensus exists to publish the Standards Proposal
23 without change.

24 A default ballot is sent to those parties who received the original ballot and allows those
25 parties, regardless of their current voting status in the Formulating Group, to reaffirm or
26 change their response based on the changes made, or the statement of objections
27 accompanying the unresolved negative ballots, if any. Other members of the Voting
28 Panel who did not respond to the first ballot will also be sent the default ballot and given
29 an opportunity to vote only on the new matter. New objections may not be raised to
30 unchanged material that has not been the subject of a negative ballot.

31 If the amount of changed material in a default ballot can be reproduced in ANSI
32 Standards Action, (approximately 2 pages) then a 30-day public review notice will be
33 requested by TIA Standards Secretariat to ANSI for publication in ANSI Standards
34 Action. If the amount of changed material cannot be reproduced in ANSI Standards
35 Action, then a 45 or 60-day public review notice will be given by TIA Standards

1 Secretariat to ANSI for publication in ANSI Standards Action. Formulating Groups may
2 request a 45-day ANSI public review only if the document is available electronically.

3 *6.11.5 Necessary Documentation for Default Ballots*

4 The following information will be included with all default ballots for TIA Standards or
5 ANS Standards:

- 6 (1) a summary page of the changes made to the document;
- 7 (2) either the document in its entirety with changes clearly marked, or only the changed
8 pages with the changes clearly marked;

9 In the event of a continuing objection, a final default ballot is issued to determine
10 support within the Formulating Group for the continuing objection(s), and shall include a
11 ballot summary from each of the default/re-ballot stages and a copy of all response
12 letters to the continuing objector(s).

13 When the results of the default ballot show a consensus in favor of adoption of the
14 proposed Standard, the TIA will proceed toward approval of the Standard as described
15 in Section 6.12, below. If unresolved negative ballots still remain at this time, full
16 documentation of the objections and of the efforts to resolve them shall be provided to
17 the Vice President, Standards and Technology Department for review and consideration
18 by the TSSC. The TSSC shall take action as it deems appropriate.

19 *6.11.6 Negative Ballots, Right to Appeal Notification*

20 If after rebalotting under Section 6.11, any Negative Ballots with unresolved Negative
21 Comments remain, then all parties with Unresolved Negative Ballots, shall be advised in
22 writing, including electronic means, of the efforts of the Formulating Group to resolve
23 the Negative Comments and those parties shall be advised of their right to file a
24 Complaint or Appeal under A.5 of Annex A of this Manual.

25 **6.12 Standards Approval**

26 *6.12.1 TIA Standards Approval*

27 TIA Standards are approved by the TSSC as outlined in Section A4 of Annex A of this
28 Manual.

29 When the TIA Standards Secretariat, with approval of the TSSC, has verified the
30 proposed text has been prepared in full compliance with the rules, policies and legal
31 guides of the TIA, the Chair of the TSSC shall approve the proposed text as a TIA
32 Standard.

1 **6.12.2 ANS Standards Approval**

2 Standards Proposals are approved as ANS Standards by the TSSC as outlined in
3 Section A4 of Annex A of this Manual.

4 When the TIA Standards Secretariat, with approval of the TSSC, has verified the
5 Standards Proposal has been prepared in full compliance with the rules, policies and
6 legal guides of the TIA, the relevant documentation shall be submitted to ANSI. The
7 TIA Standards Secretariat shall submit the ANSI BSR-9 form and relevant
8 documentation to ANSI to obtain approval from the Board of Standards Review (BSR)
9 to designate the document as an American National Standard.

10 **6.12.3 Declaration as an ANS Standard**

11 After receipt of ANSI BSR's Notification of Approval, the material therein is declared to
12 be an ANS¹¹. Notification is issued to the industry by the Standards and Technology
13 Department through the TIA Communications Department and other media means.

14 **6.12.4 Publication of ANS Standards**

15 A proposed new American National Standard, proposed revision or reaffirmation of an
16 American National Standard to be approved by the Board of Standards Review (BSR)
17 shall be submitted to the Secretary of the BSR by the TIA Standards Secretariat within 1
18 year from the close of the comment period listed in *Standards Action* using the
19 appropriate form provided by ANSI, unless the standards developer notifies the
20 Secretary of the BSR in writing of good cause for a different schedule for submittal. If a
21 document cannot be published within one year from the close of the comment period
22 listed in *Standards Action*, then the Formulating Group may petition the BSR for up to
23 an additional year to publish. Failure to make the submittal within two years from the
24 close of the comment period listed in *Standards Action* shall require consideration by
25 the BSR, i.e., withdrawn, extension for cause, or another listing in *Standards Action*
26 (See ANSI Procedures, Section 1.2.12, Consideration of Standards Proposal).

27 **7 Maintenance of Standards**

28 **7.1 Revision, Reaffirmation or Withdrawal of Standards**

29 The Formulating Group, or its parent consensus body if the former no longer exists, is
30 responsible for the maintenance of TIA standards, specifications, and bulletins as well

¹¹ Prior to 1988, TIA Standards have an "EIA" or "RS" (Recommended Standard) prefix. From 1988 to 1992, such documents had an "EIA/TIA" prefix. In 1992, the prefix was changed to "TIA/EIA". Beginning in 2001, the prefix will be shortened to just "TIA". If the document was approved by ANSI as an American National Standard, then "ANSI" is added in front of the TIA designation (i.e., ANSI/TIA-xxx).

1 as ANS standards. Maintenance of a standard takes the form of a periodic review
 2 wherein the Formulating Group shall determine whether the document in question
 3 should be reaffirmed, revised, or withdrawn.

4 Unless otherwise noted, all ANS standards shall be reviewed every five years. The
 5 Formulating Group shall initiate action to

6 (1) **revise** the Standard to incorporate additional language or delete language that
 7 will change its technical content or meaning;

8 (2) **reaffirm** that a review of the Standard resulted in a decision that the technical
 9 content is valid and does not need change; or

10 (3) **withdraw** the Standard following determination that the technical content is no
 11 longer of value.

12 ***Note:** Revisions require that a Standards Proposal be developed and processed*
 13 *in the same manner as that of a new proposed ANS Standard. Reaffirmation*
 14 *and withdrawals shall use the same project number that was used to publish the*
 15 *document. Reaffirmation shall use an extension of RF with a numeric extension*
 16 *depicting the number of reaffirmation (i.e., SP-1234-RF(1)[first reaffirmation]).*
 17 *Withdrawals shall use an extension of WD (i.e., SP-1234-WD)*

18 *TIA Standards, at the discretion of the formulating group may choose either a*
 19 *Letter Ballot or vote during an official formulating group meeting to reaffirm or*
 20 *withdraw a standard. Revisions require the same process as that for the*
 21 *development of a new TIA Standard.*

22

23 7.2 Procedures to Initiate Five Year Review

24 The TIA Standards Secretariat automatically shall issue to the formulating committee
 25 Chair and the responsible Standards and Technology staff member a notice requesting
 26 the document to be reviewed. The review notice process shall commence 24 months
 27 prior to the end of the fifth year. Where appropriate, the Standards and Technology
 28 Department Staff shall provide the Chair with a summary of all comments not
 29 incorporated into the Standard during its prior development period five years earlier.

30 If the review process (reaffirmation, revision, or withdrawal) cannot be completed within
 31 the five-year period, it is the obligation of the chair to request an extension for the
 32 review. This is done by sending correspondence to the TIA Standards Secretariat
 33 requesting an extension. The TIA Standards Secretariat shall complete an ANSI
 34 BSR11 (Request for Extension of Time) and submit it to ANSI for approval. The request
 35 from the committee shall include a specific date by which the review will be completed
 36 and submitted to ANSI for approval. The committee can request an extension for up to
 37 five years (for a total of 10 years review). If the document has not completed the ANSI
 38 BSR Review by the end of the 10th year, then ANSI will cancel the project and notify the

1 TIA Standards Secretariat. The committee will then have to start the ANSI approval
2 process from the beginning. The BSR11 must be completed in order to extend the
3 review period. If the BSR11 is not requested by the end of the five year review period,
4 ANSI will cancel the project.

5 The review process will be five years for all documents and standards. TSBs and TIA
6 Standards will be reaffirmed at a committee meeting. The disposition for reaffirmation
7 shall be reported in the official committee meeting report, and the appropriate form filled
8 out online and sent to the TIA Standards Secretariat. At the committee's request a
9 Letter Ballot may be issued to reaffirm these documents. Revisions and withdrawals
10 shall follow the current procedures for revisions and withdrawals of standards and
11 documents.

12 *7.2.1 Procedures for Revision for American National Standards*

13 The process of revising a Standard is similar to the development of a new Standard in
14 that consensus shall be reached by industry ballot on changes to the technical content
15 or meaning of the Standard. Usually the revision takes the form of a complete revision
16 and reissuance of the Standard.

17 Revision of or addition to the technical content of an existing TIA Standard or ANS
18 Standard, even in the form of an addendum, requires that the procedures for the
19 development of a new Standard be followed. (See Sections 6.3 through 6.12.)

20 **Note:** *When additional technical requirements need to be added to an existing*
21 *Standard without changing the previously published requirements, or when only*
22 *one or two portions of a large existing Standard need to be revised, a*
23 *Formulating Group may propose an **addendum** instead of a complete revision.*
24 *When the Standard is next revised, the addendum is incorporated in the revision.*

25 When a revision of an American National Standard is approved, it will be reprinted with
26 the same TIA number, but with a suffix revision letter. The date carried on the front
27 cover of the revised Standard will be the date of the revision. When issued, an
28 addendum will carry the same number as the Standard, followed by a dash and a
29 numerical suffix.

30 *7.2.1.1 Substantive Change*

31 A substantive change in a Standard is one that directly and materially affects the use of
32 the Standard. Examples of substantive changes :

- 33 (1) "shall" to "should"; "should" to "shall";
- 34 (2) addition, deletion or revision of requirements, regardless of the number of
35 changes;
- 36 (4) addition of mandatory compliance with referenced Standards

1 7.2.1.2 Editorial Change

2 Once approved as an American National Standard, no changes shall be made in a
3 Standards document without going through the full consensus, comment and balloting
4 process prescribed for a Standards Proposal. A TIA Standard also shall go through the
5 consensus process for changes, but it need not be submitted for a public review
6 process at ANSI. The only exception to this rule allowed by ANSI is the issuance of an
7 erratum to correct a manifest mistake or omission in the original text or an error
8 subsequently discovered, and that only where the error should have been obvious to
9 the user of the Standard.

10 Any other changes to a TIA Standard or ANS Standard may be made only by revision or
11 addendum. (See Section 7.2.1.)

12 7.2.2 Procedures for Reaffirmation of American National Standards

13 A Formulating Group shall recommend reaffirmation of a Standard if it finds the
14 technical content valid and does not require change.

15 Reaffirmation shall be accomplished without any substantive change to the main text of
16 the Standard.

17 Reaffirmation requires a formal industry balloting process. The procedures for the
18 development of a new ANS shall be followed. (See Sections 6.3 through 6.12.) Copies
19 of the Standard will not normally be distributed with the industry ballots, but scanned
20 electronic copies may be requested through the Standards Secretariat.

21 7.2.3 Procedures for Withdrawal of American National Standards

22 A Formulating Group shall recommend withdrawal of a Standard if it determines that the
23 Standard is no longer required to meet the purpose for which it was written. (See
24 Section 6.2.)

25 Withdrawal requires a formal industry balloting process. The procedures for the
26 development of a new ANS shall be followed. (See Sections 6.3 through 6.12.) Copies
27 of the Standard will not be distributed with the industry ballots, but scanned electronic
28 copies may be requested through the Standards Secretariat.

29 8 TIA Standards, Specifications and Bulletins

30 8.1 TIA Standards and Specifications

31 A Formulating Group may prepare a TIA Standard or TIA Specification that is not an
32 American National Standard (ANS) on any subject matter within its Scope when the
33 Formulating Group determines such a document will satisfy the requirement for

1 standardization. [These non-ANS documents were formerly known as Interim or Trial
2 Use Standards] If not prepared by a Formulating Group, it must be submitted via a
3 parent body that is a Formulating Group. Project initiation and development is the same
4 as for an ANS Standard, except to demonstrate the consensus of the Formulating
5 Group (See Section 6.7.1) for balloting options. No public review or Standards Proposal
6 to ANSI is required to approve a TIA Standard. The final document and comment
7 resolution record are reviewed by the full TSSC only if there are continuing objections,
8 otherwise, the TSSC has delegated the review to the TIA Standards Secretariat.

9 A TIA Standard shall contain an introductory statement indicating that public review via
10 the TIA Standards Proposal and comment resolution process was not conducted.

11 **8.2 Bulletins**

12 TIA Bulletins may be proposed by Formulating Groups to publicize material that,
13 although not a published Standard, may have significant value to industry or users.
14 Approval of a proposed Bulletin requires a two-thirds affirmative vote on a 30-day Letter
15 Ballot (See Section 6.7 for balloting options). Negative ballots shall be accompanied by
16 comments, and all comments must be considered by the Formulating Group, not all
17 negative comments need be resolved if a 2/3 affirmative vote has been achieved.

18 Once approved by the Formulating Group, Bulletins require the approval of the TSSC
19 Chair prior to publication.

20 On occasion, a Bulletin may be used to bring important information to the attention of
21 industry and the public prior to the publication of a Standard on the same subject, but a
22 Bulletin is not a Standard, and must bear a statement to that effect.

23 A Bulletin shall not modify or amend an existing Standard.

24 Reaffirmation of a Bulletin may be accomplished by a recorded vote in the Meeting
25 Report demonstrating a consensus for the reaffirmation. The fact that a reaffirmation
26 vote will be taken shall have been listed on the published agenda for the meeting.
27 Alternatively, a Letter Ballot may also be used for reaffirmation of a Bulletin. After a
28 reaffirmation vote, a letter must be sent by the Chair and to the TIA Standards
29 Secretariat reporting the reaffirmation.

30 **9 Published Documents**

31 **9.1 General**

32 Documents published by the Standards and Technology Department are issued through
33 the authority of the Chair of the TSSC and fall into broad categories of TIA Standards
34 and other documents listed below.

1 **9.2 TIA Standards and Technology Department Documents**

- 2 ♦ Standards and Specifications (ANS)
- 3 ♦ Standards and Specifications (non-ANS)
- 4 ♦ Bulletins (non-ANS)
- 5 ♦ Standards Proposals
- 6 ♦ Engineering Publications
- 7 ♦ Workshop Proceedings
- 8 ♦ Index of Standards and Engineering Publications
- 9 ♦ Roster of Engineering Committees
- 10 ♦ Formal Interpretations of TIA Standards and Specifications
- 11 ♦ Committee Scope Manual
- 12 ♦ Style Manual
- 13 ♦ Engineering Manual

14 This list may be modified from time to time.

15 Some documents are not for distribution beyond the Formulating Groups such as:

- 16 ♦ Letter Ballots proposing adoption of TIA Standard
- 17 ♦ Meeting Reports
- 18 ♦ Legal Requests
- 19 ♦ Working documents and meeting contributions

20 **9.3 Subscriptions and Sale of Documents**

21 The Standards and Technology Department makes finished documents and some draft
22 standards available. TIA Standards and Specifications, ANS Standards, Bulletins, and
23 Standards Proposals are available for sale from TIA's publisher (<http://global.ihs.com>)
24 and other parties. Catalogs are available from the publisher for free and a listing of all
25 Project Numbers, Standards Proposals, and Published Documents is maintained on the
26 TIA web site. TIA's publisher also makes documents available in CD-ROM, and on-line
27 delivery format for a subscription fee. Site licenses can be arranged.

1 A limited number of existing TIA Publications are provided to Formulating Groups as
2 needed for Committee work. Requests should be made directly to the TIA Standards
3 Secretariat.

4 Committee rosters and mailing lists are made available for use of Committee Chairs and
5 Members in the course of TIA business but remain the property of the TIA. Standards
6 and Technology Department policy does not permit distribution to or use of its lists by
7 other outside parties.

8 **10 Interpretation of TIA Published Documents**

9 The TIA Staff and Formulating Group Members may from time to time be called upon by
10 users or would-be users of TIA Standards and Specifications, and ANS Standards and
11 other documents¹² to provide guidance in the application or understanding of these
12 documents. While the TIA encourages a helpful attitude toward users of such TIA
13 Publications, Staff and Formulating Group Members are cautioned that since use of the
14 Standards is voluntary, their interpretation should be left to the user, except as provided
15 below.

16 **Caution:** *An interpretation shall not be used as a means to change the*
17 *requirements of a TIA published document (either ANS or non-ANS).*

18 **10.1 Request for Formal Interpretation**

19 When a Member of the public, having a direct and material interest in a TIA Publication,
20 wishes a formal interpretation of any provisions of the TIA Publication, he or she may
21 request the Standards and Technology Department in writing for such an interpretation.
22 The request shall include as a minimum the following information:

- 23 (1) the name, address, email and telephone number of the person requesting the
24 interpretation;
- 25 (2) a statement demonstrating the requestor's direct and material interest in the
26 document
- 27 (3) the number, issue, and issue date of the document in question;
- 28 (4) a statement of the question(s)

¹² Experience has shown that it is useful in such cases to determine whether the inquiring party has in their possession a current copy of the Standard in question.

1 **10.2 Processing an Interpretation Request**

2 Upon receipt of a written request, the Standards and Technology Department shall
3 review the request for proper form, contacting the requester if necessary. The
4 Department will then forward the request to the appropriate Formulating Group Chair. If
5 the Formulating Group is a Subcommittee no longer in existence, then the request shall
6 be forwarded to the Parent Committee. If the Formulating Group is an Engineering
7 Committee that is no longer in existence, then the Standards and Technology
8 Department will consult with the TSSC and appropriately route the request to the
9 subject matter experts within TIA's existing structure of Engineering Committees.

10 The Formulating Group Chair shall acknowledge receipt of the request in writing to the
11 requester and provide an estimate of the time required for response to the request. The
12 Chair shall place the request on the agenda of the next regularly scheduled meeting of
13 the Formulating Group and distribute copies of the request to Members of the
14 Formulating Group. The Chair may add their comments if desired.

15 The Formulating Group shall attempt to form a consensus on a reply to the requester.
16 The reply may include clarifying explanations or other comments of the Formulating
17 Group. If a consensus is formed, the Chair shall forward the agreed-upon reply to the
18 Standards and Technology Department for formal transmittal to the requester. The
19 request and the reply will be retained with the records of the Standard in the
20 Department files, and copies will be furnished to the Formulating Group for
21 consideration when the Standard is next considered for revision or reaffirmation.

22 Failure to form a consensus on a request for interpretation is an indication of serious
23 trouble with the subject Standard, and the Standard should be scheduled for prompt
24 study and revision.

25 Formal interpretations will not be provided on Standards Proposals or Committee Letter
26 Ballots.

27 **11 Correspondence and Records**

28 **11.1 Standards Secretariat Record Retention**

29 TIA has developed a document retention policy to maintain and control important TIA
30 records, eliminate unnecessary or duplicative documents, and save space. The
31 determinative factors in deciding whether to discard documents should be the practical
32 value of the document and any legal reason for keeping it.

33 For each document, the following criteria are used:

34 (1) There is some practical reason for keeping it.

35 (a) Will it be referred to as it is part of an on-going project, or

- 1 (b) Does it have historical value and will someone know how to access it?
- 2 (2) There is a valid legal reason for keeping it.
 - 3 (a) It affects the obligations of TIA
 - 4 (b) It is the official record of committee action
 - 5 (c) It may be discoverable in pending litigation.
- 6 (3) The document falls within a category for which TIA has set retention periods:
 - 7 (a) Complaints – See correspondence, general.
 - 8 (b) Correspondence, agreements – At signing of agreement, discard all
 - 9 correspondence except that having special significance regarding
 - 10 interpretation of agreement.
 - 11 (c) Correspondence, general – Maintain correspondence relevant to the
 - 12 development of standard.
 - 13 (d) TIA Printed Publications – maintain at least one copy (hard and soft) of TIA
 - 14 publications in the EIA Library. (Soft copy of published documents are
 - 15 required as of January 1999) [All required documents \(ballots, ballot](#)
 - 16 [summaries, response letters, and blue cards\) are retained for five years after](#)
 - 17 [the withdrawal of the document.](#)
 - 18 (e) Mailing Lists – as a rule, mailing lists should be destroyed when modified.
 - 19 However, when mailing lists are part of standards development balloting
 - 20 process, refer to standards-setting documents.
 - 21 (f) Meeting Reports – Discard committee meeting reports after ten (10) year
 - 22 period.
 - 23 (g) Other Records – Contact the TIA General Counsel or an attorney authorized
 - 24 by TIA General Counsel.
 - 25 (h) Standards Setting Background – maintain all required documents for the
 - 26 issuance of a standard shall be retained for ~~one complete standards cycle, or~~
 - 27 ~~until the standard is revised, reaffirmed, or withdrawn (except meeting~~
 - 28 ~~reports);~~ [five years after the withdrawal of the document.](#)

29 **11.2 Formulating Group Handling of Correspondence**

30 The Chair of each Formulating Group shall ensure prompt and proper handling of
31 correspondence concerning the activities of their group. This is vital to the satisfactory
32 operation of TIA Formulating Groups.

1 The Formulating Group Chair shall send copies of all correspondence to the staff
2 responsible in the TIA Standards and Technology Department.

3 A Formulating Group Chair shall send copies of all correspondence to the next higher
4 Chair in the Committee and to the staff person responsible in the TIA Standards and
5 Technology Department.

6 When the Chair is responding to correspondence on which others have been copied,
7 the Chair shall in addition send copies of the response to all recipients of the original
8 correspondence.

9 Formulating Group correspondence shall be on TIA Committee Correspondence
10 letterhead (See Annex F) and shall be signed by the Chair or Secretary with their title in
11 the TIA Formulating Group.

12 Upon receiving a comment on a TIA Standards Proposal originated by their Formulating
13 Group, the Chair or their designee shall acknowledge the comment to its originator
14 regardless of its nature. This notification may be in the form of an email or via letter on
15 official TIA correspondence letterhead.

16 The Chair shall maintain a complete file of meeting reports, correspondence, and other
17 records. These files shall be turned over by the Chair to their successor upon leaving
18 office. If the Formulating Group is dissolved, records should be turned over to the next
19 higher Chair in case of a Subcommittee or Working Group, or to the Standards and
20 Technology Department in the case of an Engineering Committee.

21 Chairs, in corresponding with government bodies or agencies, shall comply with the
22 requirements of Section 12.3 of this Manual.

23 To provide an audit trail, the Standards and Technology Department will maintain its
24 files for a period of at least 5 years for meeting announcements, published agenda, and
25 10 years for meeting reports.

26 **12 Relations with Other Organizations**

27 It is TIA policy to work cooperatively with other organizations in the development of
28 standards and other technical documents needed by the industry. (See Statements of
29 Policy Section) Appropriate formal liaisons shall be established, preferably at the
30 direction of the Chair, whenever work of the Formulating Group may concern another
31 organization, within or outside of TIA. Those organizations seeking liaison with a TIA
32 formulating group must do so in writing to the formulating group Chair, with a copy to
33 the Vice President, Standards and Technology.

34 **12.1 Avoidance of Duplication of Effort**

35 Standardizing activities by TIA Formulating Groups should primarily be directed toward
36 the preparation of documents pertaining to telecommunications products within their

1 Scopes. Adequate liaison should be maintained with professional societies and other
2 Standards bodies in order to avoid unnecessary duplication of effort and to permit
3 complementary activities. When appropriate, Joint Standard Documents may be
4 developed as specified in Section 6.1.1.

5 **12.2 References**

6 TIA Formulating Groups are encouraged to make reference to any pertinent Standards
7 of other Standards bodies. As specified in the *TIA Style Manual*, such references
8 should indicate whether they are “normative” or “informative” and for normative
9 references. The Patent Policy of the other Standards body shall be consistent with the
10 TIA and ANSI Policies in order to be considered as normative references in a Standard
11 developed by TIA.

12 **12.3 Public Pronouncements**

13 Generally, Formulating Group Members are not permitted to speak in the name of the
14 Telecommunications Industry Association or to transmit outside the
15 Telecommunications Industry Association any document which appears to present a
16 public position on behalf of the Association or any of its parts. These functions are
17 specifically reserved for the TIA Board of Directors. However, a Chair may request prior
18 clearance from the Standards and Technology Department to make a statement on
19 technical matters for publication or oral presentation on behalf of the Formulating Group
20 or the TIA. Both the nature of the event or publication and the text of the statement
21 shall be cleared through the Standards and Technology Department and the TIA
22 General Counsel or an attorney authorized by TIA General Counsel prior to publication
23 or presentation.

24 For liaison purposes, Formulating Groups may exchange working technical documents
25 with other comparable technical organizations so long as it is made clear that the
26 document is a working paper and does not represent the policy of the
27 Telecommunications Industry Association, its product-oriented Divisions, or its standing
28 committees. The use of "Committee Correspondence" letterhead (See Annex F) is
29 required for such exchanges. When in doubt, Chairs should consult the Vice President
30 Standards and Technology or the TIA General Counsel or an attorney authorized by TIA
31 General Counsel. Persons engaging in such correspondence shall comply with the TIA
32 Legal Guides.

33 If a Formulating Group desires to conduct a survey to determine industry interest in a
34 particular subject, the proposed questionnaire shall be submitted to the Standards and
35 Technology Department for review and approval.

36 **12.4 International Commonality**

37 During the development of a TIA Standards Proposal, the TIA Formulating Group
38 should review and compare the proposed technical content with any similar

1 International Electrotechnical Commission (IEC), International Organization for
2 Standardisation (ISO) Standards, or with the International Telecommunication Union
3 ITU-T and ITU-R Recommendations. Where similar international standards exist, a
4 determination shall be made regarding the extent to which the TIA Standards Proposal
5 can be based upon an existing international standard. Where similar international
6 standards do not exist, it shall be recognized during the development of the TIA
7 Standards Proposal that the resulting standard may represent a basis for an U.S.
8 position in the development of an international standard.

9 The TIA maintains contact with the U.S. Secretariats for many international Technical
10 Advisory Groups (TAG) and with the U.S. National Committees for IEC, and the ANSI
11 International Committee. In addition, TIA staff participates in preparatory work for the
12 ITU as well as direct participation in many Study Groups at ITU-T and ITU-R. The
13 Standards and Technology Department Staff can provide information on how a draft TIA
14 Standards Proposal may be reviewed by these groups.

15 Direct participation on TAGs may require payment of TAG Administrator Fee and
16 International Participation Fees (IPF) to ANSI or the TAG Administrator. In addition,
17 some domestic SDO voting members are also invoiced IPF if the domestic formulating
18 group makes significant contributions to the international standards process.

19 **13 Complaints and Appeals**

20 **13.1 Informal Complaints**

21 At any point in the standards development process that a Member of a Formulating
22 Group believes the Engineering Manual process is not being followed, the person with
23 the complaint should feel free to bring the matter to the attention of the Department
24 staff. If after investigating the matter, the objection is sustained, staff will take remedial
25 action to correct the problem. If the complaint involves actions the staff took or failed to
26 take, then such an informal complaint can be directed to the TIA Technical Committee
27 Chair or the TIA President for investigation and possible remedial action. If the matter
28 requires a clarification or interpretation of the Engineering Manual, an Advisory Note will
29 be issued by the staff after approval by the Technical Committee.

30 **13.2 Formal Appeals**

31 Persons who have directly and materially affected interests and who feel that they have
32 been or will be adversely affected by a TIA Publication within the TIA's jurisdiction, or by
33 the lack of such a TIA Publication, have the right to formally appeal substantive or
34 procedural actions [or inactions](#) of the TIA Standards and Technology Department and
35 its Formulating Groups. The appeals procedure is described in detail in Section A5 of
36 Annex A to this Manual.

1 **14 Changes to TIA Engineering Manual**

2 From time to time the TIA Engineering Manual requires modification as a result of
3 changes made by ANSI in its procedures, or as a result of problems experienced by TIA
4 with a particular Section of the Manual. Some areas of change may also be highlighted
5 as part of normal review of processes and procedures to make the standards process
6 more efficient and effective or as a result of issues discovered during a routine ANSI
7 audit.

8 Such proposed modifications should be brought to the attention of the Vice President,
9 Standards and Technology or the TIA Technical Committee Chair. The revised
10 language shall be drafted by such person or ad hoc group as designated by the TIA
11 Technical Committee Chair. This proposed text for updating the Manual or an Advisory
12 Note shall then be circulated among members of the TSSC for comments and
13 suggestions and balloted within the Technical Committee to achieve approval of the
14 revised text. Upon such approval, the updated Manual or the Advisory Note shall be
15 effective within TIA and sent to ANSI for its review. Depending on the nature of the
16 change, ANSI may call for public review period in its Standards Action on the revision or
17 make such other requests as it deems appropriate.

18 After ANSI approval, the revised Manual can become effective.

19

1 **Annex A - Technical Standards Subcommittee (TSSC)**

2 **A1. Scope of the Technical Committee and The TSSC**

3 The Technical Committee of the TIA is charged by the Board of Directors with
4 overseeing the Association's engineering activities and the Standards and Technology
5 Department.

6 A specialized Subcommittee of the Technical Committee, known as the **Technical**
7 **Standards Subcommittee (TSSC)**, oversees the manner in which the various
8 Engineering Committees carry out their Standards and Specifications programs and
9 acts as a final procedural review body in the development of a TIA Standard or
10 Specification.

11 The roles of the TSSC and the product Divisions differ in that the Divisions have the
12 responsibility to provide guidance and direction, which is advisory and not mandatory,
13 for their respective Engineering Committees, while the TSSC is responsible for
14 reviewing the manner in which these activities are carried out.

15 **A2. Responsibilities**

16 The TSSC is specifically responsible for the following functions:

- 17 (1) to review, confirm, or deny the stated justification of need for any requested TIA
18 Standards project.
- 19 (2) to act as a procedural review body, to review the comment resolution action on
20 all TIA Standards Proposals, and to give final approval for their publication as TIA
21 Standards;
- 22 (3) to resolve disputes between Formulating Groups, if possible;
- 23 (4) to monitor projects of other Standards Developing Organizations for overlap with
24 TIA projects;
- 25 (5) to oversee the relations between the Standards and Technology Department
26 and its Engineering Committees and other portions of the TIA and other trade
27 associations, technical societies, national and international standards
28 organizations, and governmental bodies;
- 29 (6) to approve recommendations for TIA Engineering Awards to individuals who
30 have performed outstandingly in TIA engineering activities.

31 **A3. Membership**

32 The membership of the TSSC consists of the following:

- 1 (1) the Chair of the TIA Technical Committee, who is also Chair of TSSC;
- 2 (2) the Vice Chair of the TIA Technical Committee, who is also the Vice Chair of the
3 TSSC, and who will act in the Chair's absence
- 4 (3) the Chair of each Division, or a duly delegated representative;
- 5 (4) the Chair (or in the Chair's absence the Vice Chair) of each Engineering
6 Committee;
- 7 (5) limited number of persons, not exceeding six, to act as members-at-large, as
8 appointed by the TSSC. Members-at-large should be of such national distinction
9 and experience as to aid and complement the TSSC in its procedural reviews
10 and managerial functions.
- 11 The term of office of the members-at-large shall be one year. They shall be
12 eligible for reappointment.
- 13 (6) the Vice President responsible for Standards activities, *ex officio*. The Vice
14 President Standards and Technology or a designated representative is the
15 Secretary of the TSSC.

16 **A4. Operation of the Technical Standards Subcommittee (TSSC)**

17 The TSSC shall operate through meetings held in person, by telephone, or by other
18 suitable telecommunications means, and through mail or electronic distribution of
19 documents and ballots.

- 20 (1) The TSSC shall hold at least one meeting per year at such time and place as
21 directed by the Chair. As many additional meetings as shall be deemed
22 necessary in the judgment of the Chair and the Vice President Standards and
23 Technology may be called by the Chair to carry out the TSSC's responsibilities.
24 The meeting can be held concurrently with a Technical Committee meeting if the
25 Chair so elects. All members of TIA and its Engineering Committees may
26 participate but not vote at TSSC meetings. However, the Chair may restrict
27 attendance at all or part of a meeting to TSSC members.
- 28 (2) A meeting notice and agenda for each meeting shall be issued by the Secretary
29 to each Member of the TSSC not less than one month prior to the meeting date.
30 The notice of the meeting shall also be posted on the TIA website. In emergency
31 situations, the time requirements may be waived.
- 32 (3) The Chair (or Vice Chair) shall preside, and the Secretary shall keep the minutes
33 or reports of all meetings. The Chair may designate a presiding officer pro tem if
34 he or she or the Vice Chair will not be present.
- 35 (4) A quorum of the TSSC shall be a majority of the voting Members or their
36 designated representatives. A simple majority of those present shall be

- 1 adequate for taking action on all matters. A representative may be designated in
2 writing by a TSSC Member to vote on their behalf. Failure to attend two
3 consecutive meetings shall cause loss of voting status unless non-attendance
4 was excused by the Chair. Failure to return a TSSC ballot also counts as missed
5 meeting.
- 6 (5) When matters are referred to the TSSC for action by letter ballot, a two-thirds
7 majority of the eligible voters is required to take action except as otherwise
8 provided.
- 9 (6) The Secretary shall be responsible for the circulation of all documents and ballots
10 that come to the Subcommittee in the conduct of its business. The Secretary has
11 the authority to delegate the responsibility of circulation of ballots to the TIA
12 Standards Secretariat.
- 13 (7) The TSSC may authorize or the Chair may appoint such special Task Groups as
14 the responsibilities of the TSSC may require.
- 15 (8) The TSSC reviews and approves as appropriate all requests for new projects as
16 forwarded by the TIA Standards Secretariat. TSSC Members have five (5)
17 business days to indicate if they have a problem with a particular project request.
18 If there are none, the Standards Secretariat will assign the Project Number and
19 notify the requesting Formulating Group. This process helps ensure that TIA
20 Engineering Committees and Subcommittees do not undertake overlapping
21 projects. If a problem develops that can be handled intra-Committee, the Chair
22 of that Committee should resolve it. If the issue is inter-Committee, the Chairs
23 involved should try to resolve it, failing that, the TSSC can attempt a resolution or
24 escalate the matter to the Chair of the Technical Committee for resolution.
- 25 (9) If the TIA Standards Secretariat receives notification from other SDOs of
26 particular Project Initiation Notification System (PINS) Forms of interest to TIA,
27 then the information shall be forwarded to the TSSC for review and to monitor
28 duplication with TIA's Standards activities. Depending on the issues raised,
29 appropriate action may be required.
- 30 (10) In acting to approve or disapprove a new or revised Standards Proposal for the
31 TIA, the TSSC shall act in a procedural and policy review capacity only, without
32 regard to technical subject matters, to ensure that:
- 33 (a) the Proposal has been prepared in accordance with the rules of the
34 Standards and Technology Department and the Legal Guides therefor;
- 35 (b) the Proposal includes a valid justification of need;
- 36 (c) all known parties having a substantial interest in the subject have been
37 given a fair opportunity to be heard and to express approval or
38 disapproval or comment including, if warranted, an opportunity to briefly
39 present their views directly to the TSSC;

- 1 (d) a proper tabulation of approve, approve with comment, disapprove with
2 comment, and abstain has been submitted;
- 3 (e) all comments accompanying favorable returns have been acknowledged
4 and have received consideration;
- 5 (f) all unfavorable comments submitted with substantive technical reasons
6 have been considered by the responsible Committee, and that its Chair
7 has diligently attempted to resolve such comment either through
8 personal meeting or correspondence;
- 9 (g) there is evidence of consensus of all parties of interest. (Unanimity of
10 opinion is not required.)

11 **A5. Appeals**

12 Persons who have directly and materially affected interests and who have been or will
13 be adversely affected by a Standard or Specification within the TIA's jurisdiction, or by
14 the lack thereof, shall have the right to formally appeal substantive or procedural actions
15 of the TIA Standards and Technology Department and its Formulating Groups. Parties
16 are encouraged to file informal complaints to the Vice President, Standards and
17 Technology early in the process if they believe the TIA standardization process is not
18 being followed.

19 **A5.1 Complaints**

20 The Appellant shall file a written complaint with the Standards and Technology
21 Department within 30 days after the date of notification of action or at any time with
22 respect to inaction. The complaint shall state the nature of the objection(s) including
23 any adverse effects, the clause(s) of these procedures or the Standard(s) that are at
24 issue, actions or inactions that are at issue, and the specific remedial action(s) that
25 would satisfy the Appellant's concerns. Previous efforts to resolve the objection(s) and
26 the outcome of each shall also be noted. A copy of the complaint shall be served on the
27 Respondent by the Appellant concurrent with the filing at TIA.

28 **A5.2 Response**

29 Within 30 days after receipt of the complaint, the Respondent (TIA, Formulating Group
30 Chair or Department representative) shall respond in writing to the Appellant,
31 specifically addressing each allegation of fact in the complaint to the extent of the
32 Respondent's knowledge. A copy of the response shall be filed with the Standards and
33 Technology Department.

1 **A5.3 No Further Filings**

2 No further filings beyond the Complaint and Response are allowed unless an Appeals
3 Panel authorizes additional filings.

4 **A5.4 Hearing**

5 If the Appellant and the Respondent are unable to resolve the written complaint
6 informally in a manner consistent with these procedures, the Standards and Technology
7 Department shall schedule a hearing with an Appeals Panel if requested to do so by the
8 Appellant, and provided the Appellant has paid the \$1,000 Appeals Fee to TIA and
9 agrees to pay one-half of all expenses related to the Appeals Panel. Each side shall
10 bear its own attorney's fees incident to the Appeal. Typically such hearings will be held
11 within 3 months after filing of the Response or any additional documents permitted by
12 the Panel. The hearing shall be on a date agreeable to all participants and the Appeals
13 Panel or at least ten (10) business day's notice.

14 **A5.5 Appeals Panel**

15 TIA will provide to Appellant a list of individuals who have agreed to be considered as
16 candidates to serve on TIA Appeals Panels. This list will include individuals with
17 standards experience. The Appeals Panel shall consist of three individuals who have
18 not been directly involved in the matter in dispute and who will not be materially or
19 directly affected by any decision made or to be made in the dispute. At least two
20 Members of the Appeals Panel shall be acceptable to the Appellant, and at least two
21 shall be acceptable to the Respondent. A questionnaire seeking background
22 information and potential bias shall be served on possible candidates for the Appeals
23 Panel. Copies of the completed questionnaires shall be delivered to the parties to the
24 Appeal. (Note for reviewers: model questionnaire to be included in the next revision of
25 the Manual) Initially, each side, starting with the Appellant, shall alternately strike a
26 name from the list, until only one remains and that candidate shall be the Chair of the
27 Appeals Panel and the Member acceptable to both sides. After that Member is chosen,
28 each side will select one additional Member from the list. If a disinterested Appeals
29 Panel cannot be seated from the list maintained by TIA in a reasonable amount of time,
30 the matter may be referred to the ANSI Executive Standards Council or its designee,
31 which shall appoint the members of the Appeal Panel. Members of the Appeals Panel
32 will be compensated for their reasonable expenses and time in preparation for and
33 during their attendance at the Hearing and for time spent on the decision phase of the
34 Appeal.

35 **A5.6 Preparation for the Hearing**

36 In preparation for the Hearing, each Member of the Appeals Panel will be provided the
37 Complaint filed per Section A5.1 and Response filed per A5.2, along with a copy of the
38 TIA Engineering Manual, Advisory Notes, and the record of the matter at issue. No
39 other filings are allowed unless authorized by a majority of the Panel. The Appeals

1 Panel may serve Questions on the Respondent or Appellant before the Hearing to help
2 focus the issues. Each side can file a brief Response not in excess of five pages in
3 length to any Answers provided by the other side in accordance with the schedule
4 established by the Panel.

5 **A5.7 Communications with the Appeals Panel**

6 No party shall communicate with any member of the Appeals Panel (except by invitation
7 of the Panel, upon notice therefore to all parties) an except for presentations at a
8 Hearing as provided in these rules.

9 **A5.8 Conduct of Hearing**

10 The Appellant has the burden of demonstrating improper actions or inactions
11 complained of, adverse effects of such improper actions or inactions, and the efficacy of
12 the requested remedial action. If the Appellant has met its burden, the Respondent has
13 the burden of demonstrating that the Formulating Group, Chair, TSSC, and the
14 Department took all actions in compliance with the version of these procedures in effect
15 during the time period in question and that the requested remedial action would be
16 ineffective ,detrimental or is otherwise unwarranted.

17 The hearing shall be conducted in an informal manner and subject to such rules as the
18 Appeal Panels may determine. The Appeals Panel and the parties shall not be bound
19 by any formal rules of evidence.

20 Each party may have up to 5 persons in attendance at the Hearing.

21 Each party shall present its views through a person of its choosing, without interruption
22 for up to one hour, saving a part of the time for rebuttal if desired. The Appellant shall
23 go first. Members of the Appeals Panel shall then have up to thirty minutes of questions
24 directed to each side, 30 minutes each side. Parties may suggest questions that they
25 believe the Panel should ask the other side, but all questions must come from the Panel
26 and there shall be no cross-examination or direct questioning or interruption of one side
27 by the other. After a recess of one hour, the Respondent shall deliver a Closing
28 Statement for not more than 15 minutes in length followed by a Closing Statement of
29 the Appellant. The Panel may again pose questions to either side for 30 minutes total.
30 Each side will then have 5 minutes for a Summation, starting with the Appellant. The
31 Chair of the Panel shall enforce the time limits.

32 Representatives of other interested parties shall be allowed to observe the Hearing and
33 will not be allowed to directly participate, except with the permission of the Appeals
34 Panel.

35 Any documents requested by the Appeals Panel during the Hearing shall be provided to
36 the Chair of the Panel within 10 days of the Hearing.

1 Closing briefs shall be filed only if specifically requested by the Appeals Panel and in
2 time frame requested.

3 **A5.9 Decision**

4 The Appeals Panel shall render its decision by majority vote and in writing within 30
5 days of the Hearing, stating findings of fact and conclusions, with reasons therefor,
6 based on a preponderance of the evidence. The decision shall reference the
7 controlling sections of the Engineering Manual.

8 Consideration may be given to the following positions, among others, in formulating the
9 decision:

- 10 (1) finding for the Appellant, remanding the action to the Committee or the
11 department with a specific statement of the issues and facts in regard to which
12 fair and equitable action was not taken;
- 13 (2) finding for the Respondent, with a specific statement of the facts that
14 demonstrate fair and equitable treatment of the Appellant and the Appellant's
15 objections;
- 16 (3) finding that new, substantive evidence has been introduced, and remanding the
17 entire action to the Committee or the Department for the appropriate
18 reconsideration.

19 **A5.10 Further Appeal**

20 If the matter under Appeal relates to a TIA Standard or Specification, a TIA Bulletin, or
21 other non-ANSI matter, then either side may seek further Appeal to the TIA Executive
22 Committee any portion of the Appeals Panel decision. The full record of the complaint,
23 response, hearing documents, and decision shall be submitted to the TIA Executive
24 Committee for its review on further Appeal.

25 The Executive Committee shall make its decision on the record before it with no further
26 hearings except that it may, if it deems it appropriate, allow each party to make a written
27 or oral statement with the oral statement limited to fifteen minutes on behalf of each
28 party.

29 If the matter under appeal relates to a TIA Standard or Specification that has been or
30 expected to be recognized as an American National Standard, further appeal may be
31 made directly to ANSI. If the Appellant gives notice that further appeal to ANSI is
32 intended, a full record of the complaint, response, hearing, and decision shall be
33 submitted by the department to ANSI.

34

1 **Annex B - TIA Legal Guides**

2 **Part I – General Guides Applicable to All TIA Activities**

3 This PART I includes general guides applicable to all Telecommunications Industry
4 Association activities. They are required to be read and followed by all Members of the
5 Association and Staff, Chairs and Members of all Committees, Sections, Divisions, and
6 other TIA sponsored groups.

7 It is the policy of the TIA strictly to comply with the antitrust laws and regulations of the
8 United States and any other jurisdiction applicable to TIA meetings, programs, or
9 activities. Any discussion or conduct in violation of such laws or regulations is contrary
10 to TIA policy and shall be avoided.

11 *Section A. Improper Activities and Programs*

12 TIA activities or programs relating to any of the following subjects are **improper** and are
13 **not permitted**:

14 (1) **Restraint of Trade Agreements.** The establishment of prices, production
15 quotas, or uniformity of conduct, the allocation of customers or markets,
16 Standard terms or conditions of sale, boycotts, or other competitive restraints are
17 improper activities. Therefore, any activities within, or in conjunction with,
18 Association meetings relating to any of these matters are improper and
19 Committee Chairs, Staff, and participants should take affirmative action to assure
20 that no such discussions are initiated or pursued.

21 (2) **Prices and Pricing Policies.** Any consideration or discussion of product prices
22 or industry pricing policies is improper and therefore not permitted. This applies
23 to all discussions and casual remarks relating to individual company prices,
24 changes in prices, or general price levels whether involving formal or informal
25 exchanges between participating representatives. Such discussions are
26 improper and must be avoided.

27 (3) **Terms and Conditions of Purchase and Sale.** Any discussion at, or in
28 conjunction with, TIA meetings of terms and conditions of purchase and sale,
29 including but not limited to warranty and warranty periods, discounts, allowances,
30 or terms of credit, or the formulation of uniform or Standard terms and conditions
31 of purchase or sale, uniform basing points or zoning prices, or the recommenda-
32 tion thereof for voluntary use by the Membership also is improper and is
33 prohibited. It is usually proper, however, to discuss and propose comments and
34 recommendations to Government agencies relating to general contract
35 provisions, or modifications thereof, or other procurement practices or policies
36 proposed or adopted by such agencies.

- 1 (4) **Costs.** Programs or activities involving the exchange of information relating to
2 individual company costs of production or distribution and any formulas for
3 computing such costs are improper. Discussions at TIA meetings of industry
4 costs are not permitted.
- 5 (5) **Future Plans.** Programs involving the exchange of future plans of individual
6 companies affecting the design, research and development, production, and
7 distribution or marketing of products are also improper. Any discussions at TIA
8 meetings relating to such programs are not permitted. This does not preclude
9 normal new product introductions or announcements at TIA sponsored trade
10 shows.
- 11 (6) **Boycotting Customers or Products.** Any activity involving the blacklisting or
12 boycotting of customers, competitors, suppliers, or others or establishment of
13 patterns of uniform dealing is improper. Therefore, there shall be no activities
14 relating to any form of boycotting or any activity that may be interpreted as such.

15 *Section B. Procedures for Conducting Activities*

- 16 (1) **Notices and Agendas.** Notices and agendas for TIA meetings shall be
17 prepared in advance and distributed prior to the date of the meeting. Agendas
18 shall not include any subjects that are stated as improper for consideration or
19 discussion under the rules established in these Legal Guides. All agendas
20 otherwise shall be in conformity with the rules established in the TIA Engineering
21 Manual and any rules which may be established by the TIA General Counsel or
22 an attorney authorized by TIA General Counsel. Any exceptions must be
23 specifically approved by the TIA General Counsel or an attorney authorized by
24 TIA General Counsel or an attorney authorized by the TIA General Counsel or an
25 attorney authorized by TIA General Counsel. Whenever feasible, background
26 information which would be helpful in the consideration of items on the agenda
27 should be distributed in advance of meetings.
- 28 (2) **Conduct of Meetings.** All meetings shall be conducted in such a way as to
29 assure ample opportunity and freedom in the exchange of ideas and an equal
30 voice in all decisions by parties entitled to vote thereon. Committee Chairs and
31 TIA Staff personnel shall make sure that all actions and discussions at meetings
32 are kept within the bounds of proper Association activity. Committee Chairs
33 should immediately rule out of order discussion deemed improper or
34 questionable under the policies set forth herein until the propriety of such
35 discussion has been determined by General Counsel. If any doubt exists
36 concerning the propriety of a program, either from a legal or policy point of view,
37 it shall not become final or effective until after review by General Counsel.
38 Committee Chairs should follow the published agenda and not depart therefrom
39 except for a good and legitimate reason, in which event the reports should record
40 the reasons for such departure.

1 (3) **Voting in Committees.** All Committees other than Engineering Committees
2 shall adopt rules consistent with these Guides and other rules, policies and by-
3 laws adopted by the TIA to ensure that each company represented shall be
4 entitled to vote in a manner which will give equal weight to the vote of each
5 company represented on the Committee, regardless of the number of
6 representatives from any one company, if there should be more than one.
7 Engineering Committees shall follow the rules set forth in the TIA Engineering
8 Manual.

9 (4) **Preparation and Review of Reports.** Reports of all meetings shall be taken
10 and recorded. Reports shall include the time and place of the meeting, a list of
11 all Committee Members and non-Members attending, a statement of all matters
12 discussed and actions taken with appropriate reasons therefore, and a record of
13 all voting. The votes of participants need not be identified by company or
14 individual.

15 All meeting reports shall be approved by the TIA General Counsel or an attorney
16 authorized by TIA General Counsel or an attorney authorized by the TIA General
17 Counsel or an attorney authorized by TIA General Counsel before distribution. Upon
18 approval, they should be distributed to all Members of the Committee and any other TIA
19 Members desiring or requesting copies.

20 **Part II – Special Guides Applicable to Engineering Standardization Programs**

21 This PART II contains legal policies applying specifically to the operations and conduct
22 of all TIA engineering Standardization and related programs. It details the general
23 policies of the TIA and supplements the procedures contained in Standards and
24 Technology Department "Engineering Manual" ("Manual"). In addition to the rules
25 established in this PART II, all engineering Standardization programs are required to be
26 conducted in accordance with the rules set forth in PART I of these Legal Guides.

27 *Section A. Limitations On Standardization Programs*

28 TIA Standardization programs shall be confined to the formulation of Standards within
29 the rules set forth in this PART II defining or describing the dimension, quality, reliability,
30 operating characteristics, performance, compatibility, interoperability, nomenclature, or
31 any combination of these, and similar factors relating to telecommunications products,
32 processes, systems, and procedures or those useful in the provision of communications
33 services. These programs include not only those sponsored or initiated by the TIA and
34 its Members but also those recommended by Government agencies.

35 *Section B. Statement of Policy*

36 The following statement of policy, reflecting the basic objectives of all Standardization
37 programs, shall be included in all TIA Standards:

1 "TIA Standards are designed to serve the public interest by eliminating
 2 misunderstandings between manufacturers and purchasers, facilitating
 3 interoperability, interchangeability and improvement of products, and assisting
 4 the purchaser in selecting and obtaining the proper telecommunications product
 5 for their particular need. Existence of such Standards shall not in any respect
 6 preclude any Member or non-Member of the TIA from manufacturing or selling
 7 products not conforming to such Standards.

8 "Except as provided in the Engineering Manual, Standards are proposed
 9 or adopted by the TIA without regard to whether their proposal or adoption
 10 may in any way involve patents on articles, materials, or processes. By
 11 such action, the TIA does not assume any liability to any patent owner, nor
 12 does it assume any obligation whatever to parties adopting TIA Standards,
 13 to parties manufacturing or selling products or services conforming to such
 14 Standards or to users of such products or services. Other TIA rules
 15 respecting Standards where patents are involved are contained in the
 16 Manual and should be read in conjunction with these Guides-PV.
 17 Furthermore, in all cases specific requirements and restraints expressed
 18 elsewhere in these Guides must govern."

19 *Section C. Basic Rules for Conducting Programs*

20 All TIA Standardization programs shall be conducted in accordance with the following
 21 basic rules:

- 22 (1) They shall be carried on in good faith under policies and procedures which will
 23 assure fairness and unrestricted participation;
- 24 (2) Participation shall be extended to all technically qualified Members of the
 25 industry, including representatives of user groups where appropriate, irrespective
 26 of Membership in the TIA;
- 27 (3) Each program shall be shown to serve one or more of the public interest
 28 objectives as provided in Section D of this PART II;
- 29 (4) They shall not involve any agreement, expressed or implied, to adhere, or require
 30 adherence to a Standard or the use of any coercion, directly or indirectly, with
 31 respect thereto;
- 32 (5) They shall not be proposed for or indirectly result in:
 - 33 (a) effectuation of a price fixing arrangement, facilitating price uniformity or
 34 stabilization, or restricting competition, giving a competitive advantage to
 35 any manufacturer, excluding competitors from the market, limiting or
 36 otherwise curtailing production, or
 - 37 (b) reducing product variations except where required to meet one or more of
 38 the objectives set forth in Section D of this PART II; and

- 1 (6) Personnel participating in such programs as the representatives of Members of
2 the industry should be technical personnel.

3 *Section D. Selecting a Program*

4 All Standardization programs must be shown to serve a legitimate public interest
5 objective and that objective should be specifically stated in the context of the Standard.
6 To assure this, the program should relate to the achievement of one or more of the
7 following objectives:

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

15 *Section E. Notice of Meetings*

16 Advance notice shall be given to all participating representatives as to the matter to be
17 considered for Standardization and the nature of the action being contemplated.
18 Procedures should provide reasonable means for making available all data,
19 Specifications, and other technical information relating to a product, process or
20 technology proposed for Standardization to all persons participating in or contributing to
21 the program involved irrespective of their Membership in the TIA. Committee activities
22 should be limited to discussions of the engineering and technical aspects of
23 Standardization or the procedures relating thereto.

24 *Section F. Special Rules for Conducting Standardization Programs*

- 25 (1) **Voluntary Adherence to Standards.** Adherence to Standards shall be entirely
26 voluntary and within the discretion of individual manufacturers. Any agreement,
27 expressed or implied, or any coercion, direct or indirect, to adhere or to require or
28 compel adherence to a Standard is **not permitted**.
- 29 (2) **Engineering and Technical Considerations.** All Standardization activity shall
30 be confined to the technical and engineering considerations in the establishment
31 of a Standard and these considerations shall relate to one of the legitimate
32 objectives as provided in Section D of this PART II.
- 33 (3) **Commercial Standards.** Standardization relating to the commercial aspects of
34 products, such as conditions or terms defining commercial relationships between

- 1 manufacturer and buyer with respect to engineering Standards is **not permitted**.
2 This type of activity is the proper concern of each interested company acting
3 individually and is not a proper Association activity. (See Section A(3), PART I of
4 these Guides.)
- 5 (4) **Standards Involving Quality or Performance.** Generally, Standards relating to
6 quality or performance of products should not specify or describe the
7 characteristics of such products in terms of maximum quality or maximum
8 performance. This does not preclude Standards stated in terms of maximum or
9 minimum - maximum characteristics which are prescribed for the sole purpose of
10 indicating that the product meets certain limited requirements and is designed to
11 serve limited technical functions and purposes. Such Standards generally
12 involve product differentiation as distinguished from product quality. Standards
13 may include suggested specific AQL's (Acceptable Quality Level) for guidance
14 purposes with the actual AQL to be agreed upon between the manufacturer and
15 the user, or include ranges of AQL's for the same purpose.
- 16 (5) **Revision of Standards.** Any revision of an existing Standard shall conform to
17 the same procedures and policies applicable to the initiation of the original
18 Standard. Such revision should be clearly justified as to legitimacy of objective
19 and that objective should be stated in the revision.
- 20 (6) **Interpretation of Standards.** The interpretation of Standards, insofar as it may
21 relate to a specific product or manufacturer, is a proper matter for individual
22 company concern and should not be undertaken by TIA Staff Members or any
23 person acting in the capacity of a TIA Engineering Committee Member. TIA Staff
24 comments, if any, shall be limited to an explanation or clarification of technical
25 language or provisions in a Standard but not related to its application to specific
26 products or manufacturers. Means are provided in the Engineering Manual for
27 the rendering of formal interpretations of TIA Standards, which interpretations will
28 be available to all interested parties.
- 29 (7) **Acceptability of Standards.** All proposed Standards recommended by TIA
30 Engineering Committees or task groups shall be submitted for final review and
31 approval in accordance with the TIA Standards and Technology Department's
32 Engineering Manual.
- 33 (8) **Final Adoption.** Final adoption of proposed Standards shall be in accordance
34 with the Standards and Technology Department's Engineering Manual. In the
35 process of adopting a Standard, consideration shall be given to all comments of
36 industry and user interests where applicable irrespective of TIA Membership, and
37 industry consensus must be demonstrated. If there is no consensus on the
38 adoption of a proposed Standard, or if due process has not been afforded all
39 commentators, the program involving such Standard should be abandoned or
40 referred to an appropriate Formulating Group for further consideration.

1 *Section G. Procedures for Commenting on Military Specifications and Products*

2 In offering comments or recommendations to elements of the Department of Defense on
3 Military Standardization documents, the following procedures shall be followed:

4 (1) Participation shall be unrestricted and extended to all companies which have
5 made known their interest regardless of Membership in the TIA or on the
6 cognizant Committee or Committees;

7 (2) Adequate notice of meetings shall be given all Committee Members and all other
8 companies or representatives known to have an interest and shall include all
9 issues to be discussed;

10 (3) Comments and recommendations shall be offered merely as such, limited to the
11 technical aspects of the Specifications, and shall reflect any divergence of views
12 among those participating;

13 (4) Copies of comments and recommendations shall be sent to all company
14 representatives known to have an interest;

15 (5) All submissions to the military departments shall contain a statement that the
16 comments and recommendations reflect only the views of the group participating;
17 and

18 (6) They shall be reviewed and submitted by TIA Staff in accordance with
19 established procedures.

20 (7) All applicable laws and regulations shall be strictly adhered to.

21

1 **Annex C - ANSI PINS Form and TIA Internal PN Form**

2 New ANSI Standards Activities Tracking Systems – Project Initiation Notification System
3 (PINS) Form can be found at:

4 http://www.tiaonline.org/standards/sfg/procedures/new_ansi_form.cfm

5 Existing ANSI Standards Activities Tracking Systems – Project Initiation Notification
6 System (PINS) Form can be found at:

7 http://www.tiaonline.org/standards/sfg/procedures/ansi_form.cfm

8 New TIA Standards and Technology Department Project Request and Authorization
9 Form can be found at:

10 http://www.tiaonline.org/standards/sfg/procedures/new_pn_request_form.cfm

11 Existing TIA Standards and Technology Department Project Request and Authorization
12 Form can be found at:

13 http://www.tiaonline.org/standards/sfg/procedures/pn_request_form.cfm

14 Ballot Authorization Form can be found at:

15 <http://www.tiaonline.org/standards/sfg/procedures/ballot.cfm> TIA Publication
16 Authorization Form can be found at:

17 <http://www.tiaonline.org/standards/sfg/procedures/publication.cfm>

18
19 TIA Change Vote Form “Blue Card” can be found at:

20 http://www.tiaonline.org/standards/sfg/procedures/blue_card.cfm

21

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1 **Annex D - Sample Meeting Notice & Agenda**

2

Organization: TIA-TR-15
High Frequency Communications
Systems and Equipment

Chair: Willard P. Smith
202-457-4912, wsmith@anywhere.com

Date: 14 June, 2002

Time: 9:00 a.m.

Place: Toledo Towers Hotel
Toledo, OH
(900) 238-1056

Agenda:

1. Call to Order
2. Approval of Meeting Report (Meeting 53)
3. Subcommittee Reports
4. Consideration of PN-4035 (High Speed Interface) for circulation as a Standards Proposal.
5. Set future meeting schedule
6. Other Business – (i.e., Reaffirmation of Chairs)
7. Adjournment

3

1 **Annex E - Sample Meeting Report**

2 **Telecommunications Industry Association**

3 Standards and Technology Department

4 Meeting Report, Meeting Number 54

5 Committee TR-15 High Frequency Communications Systems and Equipment

6 14 June 2002 Toledo Towers Hotel Toledo, OH

7 Quorum Members Present

<u>Name</u>	<u>Organization Represented</u>
Willard P. Smith (Chair)	Afgo Communications
Moe Diehl	Acme
Joe Morgan	Uvicom
Douglass de Jesus	Ephemerex
Tom Nissan	Holorex
Fred Once	De Coriolis Data Systems

8

9 Quorum Members Absent

<u>Name</u>	<u>Organization Represented</u>
David LeBest	Demovox
Enid Howard	Southern ComTel
Arnold Lafitte	Duro Inc

10

11 Others:
12 (None)

13 1. Call to Order

14 The meeting was called to order at 9:00 am, on Friday, June 14, 2002, by Chair Willard P. Smith. The
15 meeting was held at the Toledo Towers Hotel, Toledo, OH. The Chair announced that a quorum was
16 present. The Chair inquired whether any attendee was aware of any patents that had not yet been
17 disclosed that might relate to any of the pending standards in the Committee. Moe Diehl advised that he
18 believed MicroFirm held at least 2 essential patents on the high-speed interface described in PN-4035.
19 The Chair indicated he/she will have the TIA Standards Secretariat follow up with MicroFirm.

20 2. Meeting Report

21 The Meeting Report of Meeting Number 53 was accepted with editorial corrections.

22 3. Subcommittee Reports

23 The Chair of Subcommittee TR-15.1, Ephemeral Interfaces, reported that the Subcommittee had
24 completed work on project PN-4035, Ephemeral Communications, High-speed Interface, and had voted

1 unanimously to request that it be issued for public comment as a Standards Proposal. Since the final
2 draft of PN-4035 had been mailed to all TR-15 members in advance of the meeting, and the Proposal had
3 been included in the published agenda, the Chair called for discussion prior to a vote to issue a
4 Committee Letter Ballot to approve PN-4035 as an SP. Mr. Once asked the Subcommittee Chair to
5 explain the need for dual backsignals on the F3 and Q5 leads, when it seemed that either one would do.
6 The Chair explained the Subcommittee's rationale, which concerned time delays on satellite circuits. Mr.
7 Once withdrew his objection. The Committee then voted 6-0 for release of the letter ballot.

8 There were no action items from the other Sub-committees. Two draft documents from TR-15.2 were
9 distributed for information.

10 4. Future Meetings

11 The next meeting will take place September 4-7 at the Sunnyside Hilton, Sunnyside, GA and will be hosted
12 by Demovox and Uvicom.

13 The schedule for the next meeting is as follows:

<u>Tues, 9/04</u>	<u>Wed, 9/05</u>	<u>Thurs, 9/06</u>	<u>Fri, 9/07</u>
TR-15.4	TR-15.3	TR-15.1	TR-15.2
TR-15.2.1	TR-15.2.1	TR-15	

14 5. Other Business

15 All of the Subcommittee Chairs reported they had completed the Reaffirmation process. The Committee
16 unanimously voted to Reaffirm Willard Smith again, he has been ably leading this Committee for 23
17 years.

18 There was no other business.

19 6. Adjournment

20 The meeting was adjourned at 5:00 pm. This meeting was conducted in accordance with the TIA Legal
21 Guide and TIA Engineering Manual.

22

23 /Signature/
24
25

26 Willard P. Smith, Chair TR-15 High Frequency Communications Systems and Equipment

27 /Signature/
28

29 Tom Nissan, Secretary

30 LEGAL APPROVAL: John Doe, Esq.

31 Document Register

32 Committee: TR-15 Year: 2001

<u>Document Number</u>	<u>Title</u>	<u>Source</u>
TR-15/2001/06/001	PN-4035 High Speed Interface	TR-15.1
TR-15/2001/06/002	IS for Automode Procedures	TR-15.2
TR-15/2001/06/003	Modem (GSTN) Beyond 14400 bit/s	TR-15.2

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2 **Note:** This is a minimum set of information for the document register. Other
3 information, such as meeting report references may be added.

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2 **Annex F - Committee Correspondence**

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BUILDING GLOBAL COMMUNICATIONS

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The Telecommunications Industry Association represents the communications sector of  **EIA**
26

1 **ANNEX G - CONTRIBUTION TEMPLATE**

2 Contributors shall place on the cover page of any written contribution intended for
3 inclusion in a TIA Publication the following two paragraphs:

4 The contributor grants a free, irrevocable license to the
5 Telecommunications Industry Association (TIA) to incorporate text
6 or other copyrightable material contained in this contribution and
7 any modifications thereof in the creation of a TIA Publication; to
8 copyright and sell in TIA's name any TIA Publication even though it
9 may include all or portions of this contribution; and at TIA's sole
10 discretion to permit others to reproduce in whole or in part such
11 contribution or the resulting TIA Publication. This contributor will
12 also be willing to grant licenses under such copyrights to third
13 parties on reasonable, non-discriminatory terms and conditions for
14 purpose of practicing a TIA Publication which incorporates this
15 contribution.

16 This document has been prepared by (Company) to assist the TIA Engineering
17 Committee. It is proposed to the Committee as a basis for discussion and is not to be
18 construed as a binding proposal on (Company). (Company) specifically reserves the
19 right to amend or modify the material contained herein and nothing herein shall be
20 construed as conferring or offering licenses or rights with respect to any intellectual
21 property of (Company) other than provided in the copyright statement above.

22

23 In addition, the contributor may also place on the cover page of any written contribution
24 intended for inclusion in a TIA Publication one of the following statements:

25 I. The individual presenting this contribution knows of patents, or published
26 pending patent applications, the use of which may be essential to the practice of all or
27 part of this contribution when incorporated in a TIA Publication. And the company
28 represented by this individual is willing to grant a license to applicants for such
29 intellectual property contained in this contribution in a manner consistent with 2a) or 2b)
30 of Annex H of the TIA Engineering Manual.

31 II. The company represented by this individual may have patents or published
32 pending patent applications, the use of which may be essential to the practice of all or
33 part of this contribution incorporated in a TIA Publication and the company represented
34 by this individual is willing to grant a license to applicants for such intellectual property
35 contained in this contribution in a manner consistent with 2a) or 2b) of Annex H of the
36 TIA Engineering Manual.

37

38

1 **ANNEX H - STATEMENT FROM PATENT HOLDER**

2 Date: _____

3 Reference Document: _____
 4 (refer to Project Number, Standards Proposal Number, reserved or actual document
 5 number or title) (One form per document)

6 Company Name: _____

7 Address: _____

8 _____

9 _____

10 Contact Person regarding patents and intellectual property matters:

11 _____

12 (Name Printed)

13 Title: _____

14 Telephone: _____ Fax: _____

15 E-mail: _____

16 On behalf of the above company, and being authorized by the company to make such
 17 representations, we indicate the following:

18 With respect to any Essential Patents or published pending patent applications
 19 necessary for the practice of the above Reference Document as it exists on this date,
 20 upon approval as a TIA Publication (mark with an "X" those applicable):

21 (1) The undersigned company states:

22 _____ It does not hold and does not anticipate holding any Essential Patent(s) or
 23 published pending patent application(s) necessary for the practice of which would
 24 be required for compliance with the proposed TIA Publication.

25 (2) The undersigned company states one of the following:

26 _____ a) A license under any Essential Patent(s) or published pending patent
 27 application(s) held by the undersigned company will be made available without
 28 compensation to applicants only and to the extent necessary for the practice of
 29 the TIA Publication;

30 Or

31 _____ b) A license under any Essential Patent(s) or published pending patent
 32 application(s) held by the undersigned company will be made available under
 33 reasonable terms and conditions that are demonstrably free of any unfair
 34 discrimination to applicants only and to the extent necessary for the practice of
 35 the TIA Publication.

1 (3) Either (2a) or (2b), whichever is selected above, **may be modified** by marking
2 one or both of the following:

3 The commitment to license above selected will be made available only on a
4 reciprocal basis. The term "reciprocal" means that the licensee is willing to
5 license the licensor in compliance with either (2a) or (2b) above as respects the
6 practice of the TIA Publication.

7 The undersigned company hereby limits its commitment to license under either
8 (2a) or (2b) above to the patents and published pending patent applications
9 identified by issuance and filing dates and numbers on Exhibit "A" attached
10 hereto, and represents that Exhibit "A" contains all the undersigned's known
11 Essential Patents and published pending patent applications, as of this date,
12 necessary to practice the Reference Document. The undersigned company
13 undertakes to advise TIA of any Essential Patent(s) or published pending patent
14 applications of the undersigned which become known to the undersigned after
15 this date and to notify TIA whether a license will be made available with respect
16 thereto in accordance with the TIA Patent Policy. Nothing in this statement
17 requires the undersigned company to make a patent search.

18 (4) The undersigned company states:

19 It declines to give the assurances set forth in (1), (2a) or (2b) above.

20 Agreed on behalf of the above company:

21 _____

22 (Signature)

23 _____

24 (Name printed)

25 _____

26 (Date)

27 [This form is located at <http://www.tiaonline.org/standards/sfg/procedures/ipr.cfm> and
28 can be used to submit patent holder statements.]

29 For definitions of terms used in this statement, please refer to TIA's Engineering Manual
30 dated June 1, 2001.

31

1 ANNEX I - NUMBERING OF DOCUMENTS

Examples	Explanation of Numbering	Explanation of Characters
SP-1234	Initial publication or base document.	
SP-1234.XXX	With the creation of a base document, several parts can be created. Note: <i>You must have a base document to have sub-parts. Each part can be balloted separately and revised separately; however, base document must be updated appropriately to reflect changes made to the parts.</i>	Committee's discretion as to the use of a hyphen or dot after base document. Also the discretion of the committee as to how many characters will be used in the extension.
SP-1234-AD1 SP-1234-AD2	Addendum 1 to base document Addendum 2 to base document	
SP-1234-RV1 SP-1234-RV2	Revision 1 of TIA-999-A Revision 2 of TIA-999-B	
SP-1234-AD1-RV1 SP-1234-AD1-RV2	Revision A of addendum 1 to TIA-999 Revision B of addendum 1 to TIA-999	
SP-1234-RV1-AD1 SP-1234-RV1-AD2	Addendum 1 to revision A of TIA-999 Addendum 2 to revision A of TIA-999	
SP-1234-URV	Revision and upgrade of a TSB or IS to ANS Status	
SP-1234-UG	Upgrade of a TSB or IS to ANS Status	
SP-1234-RF1 SP-1234-RF2	Reaffirmation of TIA-999 first time Reaffirmation of TIA-999 second time	
SP-1234-WD	Withdrawal of a TSB, IS, or ANS document	

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Note: *Every time a document is revised, it incorporates all addenda from the previous revision. For example, if TIA-999 had two addenda (TIA-999-1 and TIA-999-2) then revision A of TIA-999 would incorporate the previous version and all its addenda.*

1 **Note:** *Every time a part is modified (revised or rescinded), the text of the*
2 *umbrella document must be modified accordingly.*

3 These procedures allow the same project number (PN) to be associated with the life of
4 a document. For example, PN-1234 would be assigned to a new TIA-999. If a revision
5 is proposed for TIA-999, the same project number (PN-1234) can be used again with
6 the addition of the letter "A" (PN-1234-A) using the nomenclature described in the above
7 table. If an addendum is proposed for TIA-999, the project number would be
8 PN-1234-1.

9
10 The same nomenclature also will be used for Standards Proposals (SP). The
11 advantage of having the same PN/SP number associated with the life of a document is
12 ease of tracking related parts.