

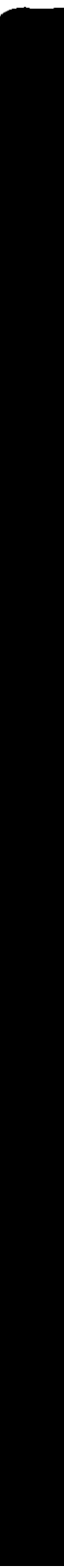
APCO International

Standards Development Committee (SDC)

Standards Development Committee



Information
2007



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APCO ANS Development Information

The APCO International membership and other public safety organizations continue to voice the need for standards benchmarking that reflects the concerns expressed by the public to enhance communications, address interoperability, and safeguard the lives and property of citizens everywhere. The need to develop standards that address such issues has been further highlighted through the importance of Homeland Security and most recently, the vital role of communications before, during, and after natural disasters.

APCO International continues to focus on meeting the needs of its members and the public safety community by promoting and enhancing standards development activities. APCO Standards have been and continue to be essential and influential, initiating the goal of becoming an accredited standards developing organization. This can be achieved through the American National Standards Institute (ANSI). In 2004, APCO International became a member of ANSI. ANSI's goals include enhancing the quality of life by promoting and facilitating voluntary consensus standards and promoting their integrity. They are also the official U.S. representative to the International Standards Organization (ISO).

ANSI membership positions an organization so that it might exert influence over domestic and international policy, benefit from unique networking opportunities, and learn from its peers and competitors. ANSI can also be used as a strategic tool that keeps APCO International in the forefront of the shifting standards scene. Membership in the Institute includes nearly 1,300 organizations from trade associations; the business community; professional and engineering societies, and; federal, state, and testing organizations.

APCO International became an ANSI-accredited standards developer (ASD) in September 2006. In order to become an ANSI ASD, APCO International must comply with the ANSI Essential Requirements for standard development. These requirements provide standards developers with a neutral venue for benchmarking their standards development process. Being an ANSI ASD enables us to further promote our standards process, increase the exposure of our standards, and officially be recognized as an accredited standards developer.

ANSI's procedures for the development and coordination of ANS provide a mechanism for determining the need for standards, ensuring that qualified organizations develop them and that the approval of standards is coordinated. ANSI ensures that access to the standards process – including an appeals mechanism – has been made available to anyone directly or materially affected by the activity under development. It also requires periodic reviews to ensure the standard is a “living” document. ANSI's approval of these standards further verifies that consensus has been achieved. Consensus is a key component of the ANSI Essential Requirements.

Consensus signifies the concurrence of more than a simple majority, but not necessarily unanimity. ANSI promotes three additional "cardinal principles" that further support the consensus process:

Due Process. Any person may participate by expressing a position and its basis, having that position considered, and appealing if adversely affected. Due process allows for equity and fair play.

Openness. Any materially affected and interested party has the opportunity to participate in the consensus process.

Balance. The standards development activity should have a balance of interests and shall not be dominated by any single interest category.

ANSI does not itself develop standards. When ANSI accredits a standards developer, that developer certifies that it will adhere to the cardinal principles identified above. APCO International will continue to use its current approach to developing standards, which is driven through committees of subject matter experts. If APCO International desires, the standard can also be submitted for the APCO ANS process. APCO International will create a Standards Development Committee (SDC) comprised of a balanced and open membership, along with APCO International staff, to facilitate the APCO ANS process. The SDC will serve as the consensus body required by ANSI.

APCO International continues to provide you with more opportunities to get involved and represent your needs. Think about what is important to your organization, as well as how standardization efforts can benefit the public safety communications community as a whole. Recognize the importance of your participation. If you are not being proactive you will have little or no chance of proposing your own ideas for consideration in a national or international standard.

**Similar article was published in APCO's *Public Safety Communications* July 2006.

APCO International as an ANSI-Accredited Standards Developer (ASD)

Scope

APCO International will serve as a conduit to develop standards that will focus on public safety communications including, but not limited to: training and professional development, professional qualifications, education, performance programs, technology, systems, operations, and other related issues.

Rationale

APCO International is a member-driven association that provides leadership, influences public safety communications decisions of government and industry, promotes professional development, and fosters the development and use of technology for the benefit of the public. This membership includes: management and staff of public safety communications centers (PSAPs, consolidated dispatch centers, 9-1-1 centers, emergency management services,) telecommunicators, dispatchers, fire departments, law enforcement, public servants, trainers and educators, engineers, technicians, users and developers of public safety equipment and processes, consultants, manufactures, sales, marketing, and government agencies. The organization exists to serve and support the people who manage, operate, maintain and supply thousands of public safety communication centers across the nation. Many of these resourceful members have worked together along with other organizations to develop public safety communications standards, some of which have been adopted throughout the industry. The APCO membership and other public safety organizations continue to voice the need for standards that reflects the concerns expressed by the public to enhance communications, address interoperability, and safeguard the lives and property of citizens everywhere. The need to develop standards that address such issues have been further highlighted through the importance of Homeland Security and most recently, the vital role of communications before, during, and after natural disasters.

Coordination Efforts

APCO International has developed standards and/or "best practices" through committees of subject matter experts, including representatives of various interests. APCO has collaborated with organizations such as the Commission on Accreditation for Law Enforcement Agencies, Emergency Services Interconnection Forum, National Emergency Number Association, Central Station Alarm Association, Integrated Justice Information Sharing Institute, and Telecommunications Industry Association, among others. APCO International encourages the development of standards in conjunction with other organizations.



ANSI Essential Requirements: Due process requirements for American National Standards

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ANSI Essential Requirements: Due process requirements for American National Standards

1.0 Essential requirements for due process

These requirements apply to activities related to the development of consensus for approval, revision, reaffirmation, and withdrawal of American National Standards (ANS).

Due process means that any person (organization, company, government agency, individual, etc.) with a direct and material interest has a right to participate by: a) expressing a position and its basis, b) having that position considered, and c) having the right to appeal. Due process allows for equity and fair play. The following constitute the minimum acceptable due process requirements for the development of consensus.

1.1 Openness

Participation shall be open to all persons who are directly and materially affected by the activity in question. There shall be no undue financial barriers to participation. Voting membership on the consensus body shall not be conditional upon membership in any organization, nor unreasonably restricted on the basis of technical qualifications or other such requirements.

1.2 Lack of dominance

The standards development process shall not be dominated by any single interest category, individual or organization. Dominance means a position or exercise of dominant authority, leadership, or influence by reason of superior leverage, strength, or representation to the exclusion of fair and equitable consideration of other viewpoints.

1.3 Balance

The standards development process should have a balance of interests. Participants from diverse interest categories shall be sought with the objective of achieving balance.

1.4 Notification of standards development and coordination

Notification of standards activity shall be announced in suitable media as appropriate to demonstrate an opportunity for participation by all directly and materially affected persons.

1.5 Consideration of views and objections

Prompt consideration shall be given to the written views and objections of all participants, including those commenting on the PINS announcement or public comment listing in *Standards Action*.

1.6 Consensus vote

Evidence of consensus in accordance with these requirements and the accredited procedures of the standards developer shall be documented.

1.7 Appeals

Written procedures of an ANSI-Accredited Standards Developer (ASD) shall contain an identifiable, realistic, and readily available appeals mechanism for the impartial handling of procedural appeals regarding any action or inaction. Procedural appeals include whether a technical issue was afforded due process.

1.8 Written procedures

Written procedures shall govern the methods used for standards development and shall be available to any interested person.

1.9 Compliance with normative American National Standards policies and administrative procedures

All ANSI-accredited standards developers (ASDs) are required to comply with the normative policies and administrative procedures established by the ANSI Executive Standards Council or its designee.

2.0 Benchmarks

This section contains information relative to the implementation of the *Essential Requirements* set forth in Section 1.0 of this document and articulates the normative policies and administrative procedures associated with the ANS process.

2.1 Openness

Timely and adequate notice of any action to create, revise, reaffirm, or withdraw a standard, and the establishment of a new consensus body shall be provided to all known directly and materially affected interests. Notice should include a clear and meaningful description of the purpose of the proposed activity and shall identify a readily available source for further information. In addition, the name, affiliation¹ and interest category of each member of the consensus body shall be made available to interested parties upon request.

2.2 Lack of dominance

Unless it is claimed in writing (including electronic communications) by a directly and materially affected party that a single interest category, individual or organization dominated the standards development process, no test for dominance is required.

2.3 Balance

Historically the criteria for balance are that a) no single interest category constitutes more than one-third of the membership of a consensus body dealing with safety-related standards or b) no single interest category constitutes a majority of the membership of a consensus body dealing with other than safety-related standards.

The interest categories appropriate to the development of consensus in any given standards activity are a function of the nature of the standards being developed. Interest categories shall be discretely defined, cover all materially affected parties and differentiate each category from the other categories. Such definitions shall be available upon request. In defining the interest categories appropriate to a standards activity, consideration shall be given to at least the following:

- a) producer;
- b) user;
- c) general interest.

Where appropriate, additional interest categories should be considered.²

Appropriate, representative user views shall be actively sought and fully considered in standards activities. Whenever possible, user participants shall be those with the requisite technical knowledge, but other users may also participate. User participation should come from both individuals and representatives of organized groups. There are several user categories:

1. User-consumer: Where the standards activity in question deals with a consumer product, such as lawn

¹ "Affiliation" refers to the entity that the consensus body member represents (which may or may not be that person's employer). If the consensus body member is serving in an individual capacity, then the name of the individual, that person's employer, sponsor and interest category should be available. Contact information is not required.

² Further interest categories that may be used to categorize directly and materially affected persons consist of, but are not limited to, the following: a) Consumer; b) Directly affected public; c) Distributor and retailer; d) Industrial/commercial; e) Insurance; f) Labor; g) Manufacturer; h) Professional society; i) Regulatory agency; j) Testing laboratory; k) Trade association.

mowers or aerosol sprays, an appropriate consumer participant's view is considered to be synonymous with that of the individual user – a person using goods and services rather than producing or selling them.

2. User-industrial: Where the standards activity in question deals with an industrial product, such as steel or insulation used in transformers, an appropriate user participant is the industrial user of the product.
3. User-government: Where the standards activity in question is likely to result in a standard that may become the basis for government agency procurement, an appropriate user participant is the representative of that government agency.
4. User-labor: Where the standards activity in question deals with subjects of special interest to the American worker, such as products used in the workplace, an appropriate user participant is a representative of labor.

2.4 Notification of standards development and coordination

Notification of standards activity shall be announced in suitable media as appropriate to demonstrate the opportunity for participation by all directly and materially affected persons. At the initiation of a project to develop or revise an American National Standard³, notification shall be transmitted to ANSI using the Project Initiation Notification System (PINS) form, or its equivalent, for announcement in *Standards Action*. A statement shall be submitted and published as part of the PINS announcement that shall include:

- (a) an explanation of the need for the project; and
- (b) identification of the stakeholders (e.g., telecom, consumer, medical, environmental, etc.) likely to be directly impacted by the standard.

Developers are encouraged to consult any relevant international or regional guides that may impact the proposed standard. If the response to sub-section (b) changes substantively as the standard is developed, a revised PINS shall be submitted and published. A PINS form may be submitted, but is not required, at the initiation of a project to reaffirm or withdraw an American National Standard. Comments received in connection with a PINS announcement shall be handled in accordance with these procedures.

A PINS is not required for revisions of an American National Standard that is maintained under continuous maintenance and (1) is registered as such on the ANSI website, (2) has a notice in the standard that the standard is always open for comment and how to submit comments, and (3) has information on the developer's website that the standard is under continuous maintenance and how to submit comments. A PINS is also not required in connection with the decision to maintain an ANS under the stabilized maintenance option.

If a developer receives written comments within 30 days from the publication date of a PINS announcement in *Standards Action*, and said comments assert that a proposed standard duplicates or conflicts with an existing American National Standard (ANS) or a candidate ANS that has been announced previously in *Standards Action*, a mandatory deliberation of representatives from the relevant stakeholder groups shall be held within 90 days from the comment deadline. Such a deliberation shall be organized by the developer and the commenter and shall be concluded before the developer may submit a draft standard for public review. If the deliberation does not take place within the 90-day period and the developer can demonstrate that it has made a good faith effort to schedule and otherwise organize it, then the developer will be excused from compliance with this requirement. The purpose of the deliberation is to provide the relevant stakeholders with an opportunity to discuss whether there is a compelling need for the proposed standards project. The outcome of such a deliberation shall be conveyed in writing by the developer and commenter (ideally as a joint submission) to the ANSI Board of Standards Review (BSR) for consideration should the developer ultimately submit the related candidate standard to ANSI for approval. In the case of ANSI Audited Designators, the Audited Designator shall review the results of the deliberation prior to designating a standard as an ANS. While the outcome is not binding, participants are encouraged to develop a consensus on whether and how the standards development project should proceed.

In addition, proposals for new American National Standards and proposals to revise, reaffirm, or withdraw approval of existing American National Standards shall be transmitted to ANSI using the BSR-8 form, or its equivalent, for listing in *Standards Action* in order to provide an opportunity for public comment. The comment period shall be one of the following:

³ Including the national adoption of ISO and IEC standards as American National Standards.

- A minimum of thirty days if the full text of the revision(s) can be published in *Standards Action*;
- A minimum of forty-five days if the document is available in an electronic format, deliverable within one day of a request, and the source (e.g., URL or an E-mail address) from which it can be obtained by the public is provided to ANSI for announcement in *Standards Action*; or
- A minimum of sixty days, if neither of the aforementioned options is applicable.

Such listing may be requested at any stage in the development of the proposal, at the option of the standards developer, and may be concurrent with final balloting. However, any substantive change subsequently made in a proposed American National Standard requires listing of the change in *Standards Action*.

2.5 Consideration of views and objections

Prompt consideration shall be given to the written views and objections of all participants, including those commenting on the PINS announcement or public comment listing in *Standards Action*.

In connection with an objection articulated during a public comment period, or submitted with a vote, an effort to resolve all expressed objections accompanied by comments related to the proposal under consideration shall be made, and each such objector shall be advised in writing (including electronic communications) of the disposition of the objection and the reasons therefor. If resolution is not achieved, each such objector shall be informed in writing that an appeals process exists within procedures used by the standards developer. In addition, except in the case of Audited Designators, each objection resulting from public review or submitted by a member of the consensus body, and which is not resolved (see definition) must be reported to the ANSI BSR.

When this process is completed in accordance with the written procedures of the standards developer, the standards developer may consider any comments received subsequent to the closing of the public review and comment period, or shall consider them in the same manner as a new proposal. Timely comments that are not related to the proposal under consideration shall be documented and considered in the same manner as submittal of a new proposal. The submitter of the comments shall be so notified.

Each unresolved objection and attempt at resolution, and any substantive change made in a proposed American National Standard shall be reported to the consensus body in order to afford all members of the consensus body an opportunity to respond, reaffirm, or change their vote.

2.6 Evidence of consensus and consensus body vote

Evidence of consensus in accordance with these procedures and the accredited procedures of the standards developer shall be documented. Consensus is demonstrated, in part, by a vote of the consensus body. The developer's procedures shall state specifically how consensus will be determined.

An example of the criteria for consensus includes a requirement that a majority of the consensus body cast a vote (counting abstentions) and at least two-thirds of those voting approve (not counting abstentions). The developer may submit for approval an alternative methodology for determining consensus.

The consensus body vote shall be conducted and reported in accordance with the rules set forth herein. Votes for the approval of a document or portion thereof as a candidate ANS may be obtained by letter, fax, recorded votes at a meeting or electronic means. All members of the consensus body shall have the opportunity to vote. When recorded votes are taken at meetings, members who are absent shall be given the opportunity to vote before or after the meeting.

1. ANSI-Accredited Standards Developers (ASDs) shall not change a vote unless instructed to do so by the voter. If the change of vote was not submitted in writing by the voter, then written confirmation of such a vote change shall be provided to the voter by the developer. It is never appropriate for an ASD to inform voters that if they are not heard from, their negative vote will be considered withdrawn and their vote will be recorded as an abstention or an affirmative. All negative votes that are not changed at the request of the voter shall be recorded and reported to the BSR as outstanding negatives by any ASD that has not been granted the authority to designate its standards as American National Standards without approval by the BSR.

2. ASDs shall record and consider all negative votes accompanied by any comments that are related to the proposal under consideration. This includes negative votes accompanied by comments concerning potential conflict or duplication of the draft standard with an existing American National Standard and negative votes accompanied by comments of a procedural or philosophical nature. These types of comments shall not be dismissed due to the fact that they do not necessarily provide alternative language or a specific remedy to the negative vote.
3. ASDs are not required to consider negative votes accompanied by comments not related to the proposal under consideration, or negative votes without comments. The ASD shall indicate conspicuously on the letter ballot that negative votes must be accompanied by comments related to the proposal and that votes unaccompanied by such comments will be recorded as "negative without comments" without further notice to the voter. If comments not related to the proposal are submitted with a negative vote, the comments shall be documented and considered in the same manner as submittal of a new proposal. If clear instruction is provided on the ballot, and a negative vote unaccompanied by comments related to the proposal is received notwithstanding, the vote may be counted as a "negative without comment" for the purposes of establishing a quorum and reporting to ANSI. However, such votes (i.e., negative vote without comment or negative vote accompanied by comments not related to the proposal) shall not be factored into the numerical requirements for consensus, unless the ASD's procedures state otherwise. The ASD is not required to solicit any comments from the negative voter. The ASD is not required to conduct a recirculation ballot of the negative vote. The ASD is required to report the "no" vote as a "negative without comment" when making their final submittal to the BSR unless the ASD has been granted the authority to designate its standards as American National Standards without approval by the BSR.
4. The ASD shall maintain records of evidence regarding any change of an original vote.
5. Except in regard to votes on membership and officer-related issues, each member of a consensus body should vote one of the following positions (or the equivalent):
 - a) Affirmative;
 - b) Affirmative, with comment;
 - c) Negative, with reasons (the reasons for a negative vote shall be given and if possible should include specific wording or actions that would resolve the objection);
 - d) Abstain.
6. For votes on membership and officer-related issues, the affirmative/negative/abstain method of voting shall be followed. Votes with regard to these issues need not be accompanied by reasons and need not be resolved or circulated to the consensus body.

2.7 Appeals

The provision for appeals is important for the protection of directly and materially affected interests and of standards developers and is required as a part of due process. This section gives general criteria regarding the right to appeal, to whom appeals are made and what may be appealed.

2.7.1 Right to Appeal: Appeals at the standards developer level

The written procedures of an ANSI-Accredited Standards Developer (ASD) shall contain an identifiable, realistic, and readily available mechanism for the impartial handling of procedural appeals regarding any action or inaction. Appeals shall be addressed promptly and a decision made expeditiously. A standards developer may choose to offer an appeals process to address appeals on other than procedural issues. Procedural appeals include whether a technical issue was afforded due process. Appeals procedures shall provide for participation by all parties concerned without imposing an undue burden on them. Consideration of appeals shall be fair and unbiased and shall fully address the concerns expressed.

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

appellant. Appeals of actions shall be made within reasonable time limits; appeals of inactions may be made at any time. Appeals shall be directed to the standards developer responsible for the action or inaction in accordance with the appeals procedures of the standards developer. If a fee for a procedural appeal is charged, then it shall be predetermined, fixed and reasonable. A procedure for requesting a fee waiver or fee reduction shall be available.

2.7.2 Right to Appeal: Appeals at ANSI

Persons who have directly and materially affected interests and who have been or will be adversely affected by any procedural action or inaction by ANSI or by any ANS-related process have the right to appeal. ANSI will not normally hear an appeal of an action or inaction by a standards developer relative to the development of an American National Standard until the appeals procedures provided by the standards developer have been completed. Appeals of actions shall be made within reasonable time limits; appeals of inactions may be made at any time. Such appeals shall be directed to ANSI in accordance with the procedures of the appropriate ANSI board or council (e.g., Board of Standards Review, Executive Standards Council).

3.0 Normative American National Standards Policies

Every ANSI-Accredited Standards Developer (ASD) shall comply with the normative policies contained in this section. The ASD may choose to: 1) include the text that follows, as appropriate, in their accredited procedures along with any additional information as required; or 2) submit to ANSI a written statement of full compliance with these policies in addition to policy statements that satisfy the requirements set-forth in this section.

3.1 ANSI patent policy - Inclusion of Patents in American National Standards

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

If the Institute receives a notice that a proposed American National Standard may require the use of a patented invention, the procedures in this clause shall be followed.

3.1.1 Statement from patent holder

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

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

3.1.2 Record of statement

A record of the patent holder's statement shall be placed and retained in the files of the Institute.

3.1.3 Notice

When the Institute receives from a patent holder the assurance set forth in a) or b) above, the standard shall include a note as follows:

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

By publication of this standard, no position is taken with respect to the validity of this claim or of any patent rights in connection therewith. The patent holder has, however, filed a

statement of willingness to grant a license under these rights on reasonable and nondiscriminatory terms and conditions to applicants desiring to obtain such a license. Details may be obtained from the standards developer.

3.1.4 Responsibility for identifying patents

The Institute shall not be responsible for identifying all patents for which a license may be required by an American National Standard or for conducting inquiries into the legal validity or scope of those patents that are brought to its attention.

3.2 Commercial terms and conditions

Provisions involving business relations between buyer and seller such as guarantees, warranties, and other commercial terms and conditions shall not be included in an American National Standard. The appearance that a standard endorses any particular products, services or companies must be avoided. Therefore, it generally is not acceptable to include manufacturer lists, service provider lists, or similar material in the text of a standard or in an annex (or the equivalent). Where a sole source exists for essential equipment, materials or services necessary to comply with or to determine compliance with the standard, it is permissible to supply the name and address of the source in a footnote or informative annex as long as the words "or the equivalent" are added to the reference. In connection with standards that relate to the determination of whether products or services conform to one or more standards, the process or criteria for determining conformity can be standardized as long as the description of the process or criteria is limited to technical and engineering concerns and does not include what would otherwise be a commercial term.

3.3 Evidence of compliance

ANSI-accredited standards developers shall retain records to demonstrate compliance with all aspects of these and the developer's accredited procedures. Such records shall be available for audit as directed by the ANSI Executive Standards Council (ExSC).

3.3.1 An ANSI-accredited standards developer has three options relative to new, revised or reaffirmed American National Standards maintained under the periodic maintenance option (see 4.7.1):

1. Records shall be retained for one complete standards cycle, or until the standard is revised.
2. Records shall be retained based on the formula established by the ANSI ExSC as set-forth in the *ANSI Auditing Policy and Procedures*.
3. A developer that does not choose option 1 or option 2 will be audited more frequently and shall retain all records for all standards approved⁴ as ANS subsequent to the most recent ANSI audit until completion of the current audit.

3.3.2 An ANSI-accredited standards developer has three options relative to new, revised or reaffirmed American National Standards maintained under the continuous maintenance option (see 4.7.2):

1. Records shall be retained for a minimum of five (5) years or until approval of the subsequent revision or reaffirmation of the complete standard.
2. Records shall be retained based on the formula established by the ANSI ExSC as set-forth in the *ANSI Auditing Policy and Procedures*.

⁴ Approved: the approval process and appeals processes at ANSI have concluded.

3. A developer that does not choose option 1 or option 2 will be audited more frequently and shall retain all records for all standards approved as ANS subsequent to the most recent ANSI audit until completion of the current audit.

3.3.3 An ANSI-accredited standards developer has three options relative to American National Standards maintained under the stabilized maintenance option (see 4.7.3):

1. Records shall be retained until the standard is reaffirmed, revised, or subsequently reviewed in connection with the stabilized maintenance of the standard as an ANS.
2. Records shall be retained based on the formula established by the ANSI ExSC as set-forth in the *ANSI Auditing Policy and Procedures*.
3. A developer that does not choose option 1 or option 2 will be audited more frequently and shall retain all records for all standards approved as ANS subsequent to the most recent ANSI audit until completion of the current audit.

Records concerning withdrawals of all American National Standards shall be retained for at least five years from the date of withdrawal or for a duration consistent with the audit schedule.

3.4 Metric policy

Each ANSI-accredited standards developer shall have on file at ANSI a metric policy. International System of Units (SI) are the preferred units of measurement in American National Standards.

3.5 Interpretations policy

Each ANSI-accredited standards developer shall have on file at ANSI an interpretations policy. Official interpretations of American National Standards shall be made only by the accredited standards developer responsible for maintenance of that standard. ANSI shall not issue, nor shall any person have the authority to issue, an interpretation of an American National Standard in the name of the American National Standards Institute. Requests for interpretations addressed to ANSI shall be referred to the responsible standards developer.

4.0 Normative American National Standards Administrative Procedures

This section articulates the administrative and processing requirements associated with the American National Standards process.

4.1 Accreditation of American National Standards Developers

A standards developer whose procedures meet the requirements of due process and criteria for approval and withdrawal of American National Standards contained herein may apply to ANSI for accreditation. To be accredited by ANSI, the developer's procedures and practices for standards development shall meet the criteria for accreditation as set forth below. The ANSI Executive Standards Council (ExSC) is the accrediting body for developers of American National Standards. Accreditation is a pre-condition for submitting a standard for consideration for approval as an American National Standard.

4.1.1 Criteria for accreditation

Accreditation shall be based on compliance, as determined by the ANSI ExSC, with the following criteria:

- a) the operating procedures used for the development of evidence of consensus for approval, revision, reaffirmation, or withdrawal of standards as American National Standards shall satisfy the essential requirements contained herein;
- b) with respect to American National Standards or candidate American National Standards, including the national adoption of ISO or IEC standards as American National Standards, the applicant shall agree to:
 - 1) provide continuity of administrative oversight and support of its standards activities;

- 2) provide for designation, publication, and maintenance of the standard(s) produced;
 - 3) provide for an appeals mechanism;
 - 4) cooperate with ANSI in standards planning and coordination activities of mutual interest;
 - 5) advise ANSI of the initiation and scope of new standards activities and revisions of existing standards expected to result in candidate American National Standards;
 - 6) submit to ANSI for public comment the requisite information concerning activities related to new candidate American National Standards and the national adoption of ISO or IEC standards as American National Standards as well as the revision, reaffirmation, or withdrawal of American National Standards;
 - 7) consider applicable international standards;
 - 8) comply with the procedures contained herein with respect to the national adoption of ISO and IEC standards as American National Standards; and
 - 9) pay to ANSI all relevant fees.
- c) as appropriate to the extent to which the applicant is involved with standardization, the applicant shall consider participation in international standards activities through ANSI; and
- d) with respect to submitting proposed American National Standards to ANSI for Board of Standards Review (BSR) approval, the applicant shall agree to comply with the normative policies and administrative procedures contained herein.

4.1.2 Application for Accreditation as a Developer of American National Standards

Application to ANSI for accreditation shall be in writing and shall include copies of the pertinent standards developing procedures and other documentation demonstrating compliance with the criteria specified in these procedures. If more than one set of standards developing procedures is used by an applicant, each procedure requires separate review for accreditation. The applicant shall submit its scope for informational purposes only, a description of its present program of standards activities and a list of candidate American National Standards. Also included shall be a statement from the applicant that details their coordination efforts to date and confirms their agreement to attempt to coordinate their standards activities with other ANSI-accredited standards developers and with ANSI.

A notice announcing the application for accreditation shall be published in *Standards Action* with a call for comment. Copies of the pertinent standards developing procedures shall be available from the applicant, upon request.

Following the comment period, the ExSC shall consider the information supplied by the applicant and any comments and responses received, including reports on coordination from the appropriate ExSC designee if any, standards advisors, and the BSR. If comments are submitted that challenge support for an applicant's accreditation, the applicant shall supply evidence of such support for consideration by the commenter and the ExSC. The ExSC shall determine whether accreditation should be approved. The applicant must satisfy the requirements established in the *ANSI Essential Requirements* before accreditation can be granted. If, during the course of the accreditation process, the developer makes a change to their originally submitted scope or to their originally submitted operating procedures, an additional announcement shall be published in *Standards Action*. If, however, the developer makes changes to the originally submitted operating procedures at the specific direction of the ExSC or their designee in order to bring their procedures into compliance with the *ANSI Essential Requirements*, an informational announcement shall be placed in *Standards Action* without additional public review. Accreditation will not be granted to an applicant whose procedures do not satisfy the requirements set forth herein. In the event that accreditation is not granted, the ExSC shall advise the applicant of the reasons, and the applicant shall have the opportunity to reapply. Upon accreditation, the applicant shall be notified and a notice shall appear in *Standards Action*.

4.1.3 Maintenance of accreditation

The ANSI Audit Director, under the supervision of the ExSC, shall arrange for audits of accredited standards developers at selected intervals or, at the request of the ExSC, due to special circumstances (BSR request,

appeals action, etc.) to confirm adherence to the criteria for accreditation and to confirm that the procedures and practices of the accredited standards developer continue to be consistent with those which formed the basis for accreditation. The ANSI Audit Director shall report the audit findings to the ExSC who in turn shall take appropriate action in accordance with the *ANSI Auditing Policy and Procedures*.

If an accredited standards developer does not maintain one or more approved American National Standards, then the developer shall submit their accredited procedures for review and approval by the ExSC on a five-year cycle as well as a justification as to why they have not submitted any standards to ANSI for approval and why their accreditation remains relevant. The ExSC may suspend or withdraw the accreditation if the justification is not provided or is otherwise unsatisfactory.

Accredited standards developers granted authority to designate their standards as American National Standards without BSR approval shall submit to a regular audit in accordance with the *ANSI Auditing Policy and Procedures*. When ANSI issues revised or additional criteria for accreditation, the accredited standards developer shall comply with them within a reasonable time period designated by the ExSC in order to maintain accreditation.

Whenever any revision is made to a standards developer's procedures on record at ANSI, the ExSC shall be notified and provided with a detailed description of the changes. If the changes are considered by the ExSC to be non-substantive, the standards developer will be notified and, upon such notification, may begin to operate under the revised procedures. If the changes are considered by the ExSC to be substantive, notice of these changes shall appear in *Standards Action* with a call for comment. Copies of the revised procedures shall be made available by the applicant to any party, upon request. If a developer submits their procedures in an electronic format and authorizes ANSI to post them on *ANSI Online* for purposes of public review, then the associated call for comment period in ANSI's *Standards Action* shall be 30 days and shall be announced as such.

If the standards developer decides to implement revised procedures prior to the final approval of the ExSC, they may do so provided that a) records concerning the implementation are maintained and available for use by the ANSI Audit Program; b) the developer certifies that the changes are in compliance with the *ANSI Essential Requirements*; and c) the developer accepts responsibility for all actions taken with regard to a candidate American National Standard, including resubmittal, if the ExSC does not approve a particular procedural provision.

Following the comment period, the ExSC shall consider the comments received, the latest status reports, the latest audit of the accredited standards developer, and any available additional information to determine whether to continue the accreditation. Notice of continuance shall be sent to the accredited standards developer and shall appear in *Standards Action*.

When the ExSC requests an accredited standards developer to revise its approved procedures to bring them into compliance with the *ANSI Essential Requirements*, the ExSC shall decide on a case-by-case basis whether reaccreditation, including public review, is also required.

4.1.4 Withdrawal of accreditation

The ExSC may advise and request any accredited standards developer to take corrective action if the conditions upon which accreditation was granted are not maintained. If such action is not taken within the time period designated, the ExSC shall provide at least a thirty day notice to the standards developer stating that, unless specified conditions are corrected, its accreditation and the approval of all American National Standards under all affected accreditations shall be withdrawn. Unless the necessary corrective actions are taken within the specified period, the ExSC shall withdraw the accreditation and approval of all affected American National Standards sponsored by the developer. The standards developer shall be notified of withdrawal of the accreditation and a notice shall appear in *Standards Action*.

4.2 Approval of actions in connection with American National Standards

A standard developed by an ANSI-accredited standards developer may be approved as an American National Standard by the ANSI Board of Standards Review (BSR) or by an ANSI Audited Designator. In either case, the essential due process and consensus criteria defined herein shall apply. In addition, approval assures the user that each American National Standard is generally acceptable to the directly and materially affected interest categories that participated in the development of consensus for the standard.

A proposed new American National Standard or a proposed revision or reaffirmation of an American National

Standard to be approved by the BSR shall be submitted to the secretary of the BSR within one (1) year from the close of the comment period listed in *Standards Action* using the appropriate form provided by ANSI, unless the standards developer notifies the secretary of the BSR in writing of good cause for a different schedule for submittal. Failure to make the submittal within two (2) years from the close of the comment period listed in *Standards Action* shall require consideration by the BSR, i.e., withdrawal, extension for cause, or another listing in *Standards Action*. ANSI-accredited standards developers that have been granted the status of ANSI Audited Designator shall take action in connection with candidate American National Standards in a timeframe that is consistent with that specified for all other ANSI-accredited standards developers.

4.2.1 Approval by the ANSI Board of Standards Review

Approval, withdrawal, revision or reaffirmation of an American National Standard is based on the evidence submitted that the requirements set forth herein have been met.

The ANSI Board of Standards Review (BSR) shall review standards submitted to ANSI with unresolved objections on record. This includes negative consensus body votes as well as public review comments. Standards submitted without objections and identical national adoptions processed in accordance with the expedited procedures contained in the *ANSI Procedures for the National Adoption of ISO and IEC Standards as American National Standards* may be administratively approved by the BSR. The BSR does not have jurisdiction over the standards of ANSI Audited Designators unless an ANSI Audited Designator chooses to submit one or more standards to the BSR for approval.

4.2.1.1 Criteria for approval of an American National Standard

Except as otherwise provided for in the *ANSI Procedures for the National Adoption of ISO and IEC Standards as American National Standards*, with respect to any proposal to approve, revise or reaffirm an American National Standard for which one or more unresolved objections have been reported, the BSR shall evaluate whether:

- a) the standard was developed in accordance with the procedures upon which the developer was granted accreditation, with particular attention given to whether due process was followed, consensus was achieved, and an effort was made to resolve any objections to the standard;
- b) any appeal to the standards developer with respect to the standard was completed;
- c) notice of the development process for the standard was provided to ANSI in accordance with PINS or its equivalent;
- d) any identified significant conflict with another American National Standard was resolved;
- e) other known national standards were examined with regard to harmonization and duplication of content and if duplication exists, there is a compelling need for the standard;
- f) ANSI's patent policy is met, if applicable;
- g) ANSI's policy on commercial terms and conditions is met if applicable;
- h) the standards developer provided the following or evidence thereof:
 1. title and designation of the proposed American National Standard;
 2. indication of the type of action requested (that is, approval of a new American National Standard or reaffirmation, revision, or withdrawal of an existing American National Standard);
 3. a declaration that applicable procedures were followed;
 4. a declaration that the proposed standard is within the scope of the previously registered standards activity;
 5. a declaration that no significant conflicts with another American National Standard have been identified or that any identified significant conflict was addressed in accordance with these procedures;
 6. a roster of the consensus body that indicates: the vote of each member including abstentions and unreturned ballots, if applicable; the interest category of each member; and a summary thereof;

7. a declaration that all appeal actions related to the approval of the proposed standard have been completed;
8. a declaration that the criteria contained in the ANSI patent policy have been met, if applicable; and
9. identification of all unresolved negative views and objections, with names of the objector(s), and a report of attempts toward resolution.

If the BSR determines, based on the weight of the evidence presented, that the above-stated criteria have been satisfied, the standard shall be approved as an American National Standard. The BSR shall deny approval, if, based on the weight of the evidence presented, the BSR determines that the American National Standard:

- a) is contrary to the public interest;
- b) contains unfair provisions;
- c) is unsuitable for national use; or
- d) has a conflict with an existing American National Standard.⁵

Standards approved as American National Standards shall be designated, published, and maintained in accordance with the procedures contained herein. A substantive change that has not been afforded due process in accordance with these procedures may not be made in an approved American National Standard.

The BSR shall not approve standards that duplicate existing American National Standards unless there is a compelling need.

Notice of the BSR's final action on all standards shall be published in *Standards Action*.

4.2.1.2 Reaffirmation of an American National Standard

The due process and consensus requirements defined herein apply to reaffirmations as they do to all approval actions related to American National Standards. The procedures used for reaffirmation of an American National Standard by an accredited standards developer shall be implemented according to the developer's ANSI accredited procedures. Reaffirmations shall provide an opportunity for public comment.

Reaffirmations shall be accomplished without any substantive change to the main text of the standard. All non-substantive changes in the main text of the standard shall be explained, or noted, in a foreword. An American National Standard undergoing an update of references to standards necessary to implement the American National Standard shall be processed as a revision unless the updated reference is only a reaffirmation of the referenced standard. Any substantive changes in such references requires processing as a revision.

The designation of ANSI approval shall clearly indicate if the approval is a reaffirmation.

4.2.1.3 Criteria for withdrawal

4.2.1.3.1 Administrative withdrawal

An American National Standard shall be withdrawn five years following approval, if the standard has not been revised or reaffirmed, unless an extension has been granted by the ExSC or its designee. An American National Standard that has not been reaffirmed or revised within the five-year period, and that has been recommended for withdrawal by the ExSC or its designee, shall be withdrawn at the close of a 30-day public review notice in *Standards Action*. American National Standards that have not been revised or reaffirmed within ten years from the date of their approval as American National Standards shall be withdrawn and such action shall be announced in *Standards Action*.

⁵ As used here, the term "conflict" refers to a situation where, viewed from the perspective of an implementer, the terms of one standard are inconsistent with the terms of another standard such that implementation of one standard necessarily would preclude proper implementation of the other standard in accordance with its terms.

4.2.1.3.2 Withdrawal by ANSI-Accredited Standards Developer

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

4.2.1.3.3 Discontinuance of a standards project

An accredited standards developer may abandon the processing of a proposed new or revised American National Standard or portion thereof if it has followed its accredited procedures. A written justification for such an action shall be made available upon receipt of any written request received by the accredited standards developer within 60 days of the date of the final action.

Appeals of such actions shall be made to the Executive Standards Council based on procedural noncompliance.

4.2.1.3.4 Withdrawal for Cause

Requests for withdrawal of an ANS for cause shall be approved by the BSR only upon a sufficient showing that one or more of the following conditions applies:

- a) a significant conflict with another American National Standard remains;
- b) ANSI's patent policy was violated;
- c) ANSI's requirements for designation, publication, and maintenance were violated;
- d) an American National Standard is contrary to the public interest;
- e) an American National Standard contains unfair provisions;
- f) an American National Standard is unsuitable for national use.

Except in the case of an ANSI Audited Designator, an application for withdrawal of an American National Standard may be submitted to the BSR by any materially interested party or the ExSC. The application shall be accompanied by a filing fee. This fee may be waived or reduced upon sufficient evidence of hardship.

In such cases:

- a) the secretary of the BSR shall refer the request for withdrawal to the standards developer for the developer to review and respond within 30 calendar days to the requester and the secretary of the BSR;
- b) if the standards developer concurs with the proposed withdrawal, public notice shall be given and the standard shall be withdrawn in accordance with the developer's procedures;
- c) if the standards developer does not concur with the proposed withdrawal, the standards developer shall inform the requester and the secretary of the BSR and include reasons;
- d) the requester shall advise the secretary of the BSR, and the developer, within 30 calendar days of their receipt of the developer's response, either that the requester wishes the withdrawal process to continue or not;
- e) if the requester requests continuance of the withdrawal process, the matter shall be referred to the BSR via letter ballot for decision on subsequent action.

Extensions of time to submit documentation related to a withdrawal for cause shall be granted at the discretion of the chairperson of the BSR, or if the chairperson is unavailable, by the secretary of the BSR. Extensions shall be requested prior to the deadline date and shall include a justification therefore.

If the BSR determines, based on the weight of the evidence presented, that one or more of the above-stated

criteria have been satisfied, approval of the standard as an American National Standard shall be withdrawn. If the BSR determines, based on the weight of the evidence presented, that none of the above-stated criteria have been met, then approval of the standard as an American National Standard shall be maintained. The decision of the BSR in this regard shall not be appealed to the BSR, but may be appealed to the ANSI Appeals Board pursuant to section 11, *Appeals Process*, of the *ANSI Appeals Board Operating Procedures*.

4.2.1.4 Final notice

Notice of final action on all standards shall be published in *Standards Action*.

4.2.2 Approval of an American National Standard by an ANSI Audited Designator

A standard may be approved as an American National Standard by the ANSI Board of Standards Review or by an ANSI Audited Designator. An Audited Designator is an ANSI accredited standards developer to whom the ANSI Executive Standards Council has granted the authority to designate their standards as American National Standards without such standards being reviewed and approved by the ANSI Board of Standards Review. Requirements associated with ANSI Audited Designator status and their approval of standards as American National Standards are contained in Section 5 herein.

4.3 Planning, coordination and public notice

ANSI's planning and coordinating activities depend on the cooperation and participation of standards developers and affected interests. Various methods are used to plan and coordinate voluntary standards activities. A considerable amount of planning and coordinating activity routinely takes place at the standards development level by the standards writing consensus bodies or their subgroups. Specific coordination requirements are set-forth in other sections of this document.

Overall responsibility for ANSI's national and international planning and coordinating functions is assigned by the Board of Directors to the Executive Standards Council (ExSC). The ExSC delegates specific activities as opportunity and needs arise, appointing designees or standards advisors, as appropriate.

Coordination usually can be accomplished by standards developers through the implementation of one or more of the following:

- a) clear delineation of scope, purpose, and intended application of each standard;
- b) public notice of standardization activities;
- c) joint and cooperative activities of the individual organizations, including liaison representation;
- d) organization of an independent but representative body acceptable to the involved parties to coordinate standards needs and projects and to develop standards as required;
- e) liaison between national standards developers and the organization responsible for the U.S. position on corresponding international standards; and
- f) use of the ANSI PINS system.

To achieve a consistent set of American National Standards and to represent the United States in non-treaty international standards activities, it is necessary for ANSI to harmonize ongoing standards activity, minimize duplication, and avoid the promulgation of conflicting American National Standards.

The ExSC and/or its designee shall be alert to duplication of national standards activities. The ExSC or its designee shall notify standards developers of any identified potential or existing duplication of standards developing activities and request the standards developers involved to coordinate their activities and report the results.

Potential or existing conflicts identified or brought to the attention of the ExSC or its designee shall be investigated and harmonization initiated, if warranted. This process usually consists of:

- a) appointing an ad hoc group to investigate and report whether harmonization is necessary. The ad hoc group reports on the purpose and application of the standards as well as the structure and issues that led to the conflict;

- b) inviting the organizations involved to develop a harmonization plan, if it is determined that harmonization is necessary. The plan may include liaisons, joint consensus bodies, ad hoc groups, or other activities;
- c) publishing the results of harmonization efforts in *Standards Action* or elsewhere, as appropriate.

4.4 Designation of American National Standards

A standard that is approved as an American National Standard shall have its cover or title page marked with an approval logo⁶ furnished by ANSI or the words "an American National Standard." In addition, American National Standards shall be marked in such a way as to identify the version of the standard or shall be identified by a unique alphanumeric designation in accordance with the guidelines contained herein.

The ANSI approval logo and the words "an American National Standard" shall not be used to identify any standard that has not received approval as an ANS by the ANSI Board of Standards Review or been approved by an accredited standards developer who has been granted authority to designate its standards as American National Standards.

Portions of a published document that were not approved through the full consensus process but contain information that may appear to be requirements necessary for conformance with the approved American National Standard (ANS) shall be (1) clearly identified at the beginning and end of each such portion of the document, or (2) such information shall be overprinted on the cover page. These portions of the document shall be marked with the following, or similar, explanatory language:

"The information contained in this (portion of a document) is not part of this American National Standard (ANS) and has not been processed in accordance with ANSI's requirements for an ANS. As such, this (portion of a document) may contain material that has not been subjected to public review or a consensus process. In addition, it does not contain requirements necessary for conformance to the standard."

American National Standards shall be identified by a unique alphanumeric designation (e.g., ANSI/ASD 123-2004). Multiple designations should be avoided. If a standard has multiple designations, an attempt shall be made by those concerned to arrive at a single designation.

4.5 Publication of American National Standards

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

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

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

4.6 National Adoption of ISO or IEC Standards as American National Standards

ANSI-accredited standards developers that wish to adopt an ISO or IEC standard as an American National Standard shall comply with the requirements set forth in the *ANSI Procedures for the National Adoption of ISO or IEC Standards as American National Standards*.

⁶ An "Approved American National Standard" mark is available from ANSI.

4.7 Maintenance of American National Standards

American National Standards shall be kept current and relevant by means of timely revision, reaffirmation or action to stabilize. Obsolete standards shall be withdrawn. Except in the case of the national adoption of ISO and IEC standards as American National Standards, when the maintenance provisions contained in the *ANSI Procedures for the National Adoption of ISO or IEC Standards as American National Standards* shall apply, standards developers are permitted three options – periodic maintenance, continuous maintenance or stabilized maintenance – as outlined below.

4.7.1 Periodic maintenance of American National Standards

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

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

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

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

4.7.2 Continuous maintenance of American National Standards

Continuous maintenance is defined as the maintenance of a standard by consideration of recommended changes to any part of it according to a documented schedule for consideration and action by the consensus body.

The standard shall be maintained by an accredited standards developer. A documented program for periodic publication of revisions shall be established by the standards developer. Processing of these revisions shall be in accordance with these procedures. The published standard shall include a clear statement of the intent to consider requests for change and information on the submittal of such requests. Procedures shall be established for timely, documented consensus action on each request for change and no portion of the standard shall be excluded from the revision process. In the event that no revisions are issued for a period of four years, action to reaffirm or withdraw the standard shall be taken in accordance with the procedures contained herein.

4.7.3 Stabilized maintenance of American National Standards

A standard that is maintained under the stabilized maintenance option shall satisfy the following eligibility criteria:

- a) the standard addresses mature technology or practices, and as a result, is not likely to require revision; and
- b) the standard is other than safety or health related; and
- c) the standard currently holds the status of American National Standard and has been reaffirmed at least once; and
- d) at least ten years have passed since the approval or last revision of the standard as an ANS; and
- e) the standard is required for use in connection with existing implementations or for reference purposes.

The due process and consensus requirements defined herein apply to the decision to maintain an ANS under the

stabilized maintenance option. A developer who wishes to maintain one or more ANS under the stabilized maintenance option shall include a provision or notification to this effect in its accredited procedures

An ANS maintained under the stabilized maintenance option is not required to be revised or reaffirmed on a routine 5-year cycle; however, it shall be subject to review of such status by the sponsoring standards developer on a 10-year cycle. If it is determined in connection with this review that the standard shall continue to be maintained under the stabilized maintenance option and as such does not require revision or withdrawal, then this shall be communicated to ANSI by the standards developer and a related announcement shall be made in *Standards Action*. Notification to ANSI shall be accomplished via the submittal of an informational announcement if the standard will continue to be maintained under the stabilized maintenance option or will be withdrawn, or via a PINS, if the standard will be revised.

If a recommendation is made at any time by a materially affected and interested party that a standard maintained under the stabilized maintenance option requires revision or should be withdrawn, then that recommendation shall be considered in the same manner as a new proposal but within a maximum of 60 days from receipt. A recommendation should include rationale to begin a revision, and shall not be dismissed due to the fact that it does not necessarily suggest a specific revision. The submitter of such a recommendation shall be responded to in writing by the standards developer within 60 days of the receipt of the recommendation and advised of the decision relative to the maintenance status of the standard.

An ANS that is maintained under the stabilized maintenance option shall include a clear statement of the intent to consider requests for change and information on the submittal of such requests.

The decision to maintain an ANS under the stabilized maintenance option and the process by which it is maintained shall be subject to appeal to the standards developer. A subsequent appeal to ANSI may be made to the ANSI Executive Standards Council based on a claim of procedural non-compliance.

5.0 Normative policies and procedures for ANSI Audited Designators

An ANSI-accredited standards developer who has demonstrated a "consistent record of successful voluntary standards development" may apply to ANSI at any time seeking the authority to designate its standards as American National Standards without approval by the BSR.

5.1 Application for ANSI Audited Designator Status

The applicant shall provide the information specified in a form developed by ANSI for this purpose. A notice announcing the application shall be published in *Standards Action* with a call for comment. Simultaneously, an initial audit of the applicant shall be scheduled, in accordance with the *ANSI Auditing Policy and Procedures*. At the conclusion of these actions, the Executive Standards Council (ExSC) shall consider the information supplied by the applicant, any comments and responses received, the audit results, and the initial audit responses, and will make a decision concerning the disposition of the application. In making a decision on such an application, the ExSC may request any additional information reasonably necessary to clarify issues raised by the application. Thereafter, ANSI shall either approve the application as submitted, approve the application contingent on receipt of certain additional assurances, or deny the application. Any decision to deny the application may thereafter be appealed by the applicant to the ANSI Appeals Board. When an application has been finally approved by ANSI, a notice so indicating shall be made in *Standards Action*.

5.2 Criteria for approval of ANSI Audited Designator Status

In determining whether an accredited standards developer has achieved a "consistent record of successful voluntary standards development," the ANSI ExSC shall consider all evidence reasonably bearing on the issue, including the extent of the notice provided by the applicant concerning its development activities and the integrity of the other due process safeguards used by the applicant in conducting its work. A presumption shall exist that this test has been satisfied where a) the developer has been involved in voluntary standards development work for at least five (5) years, b) during that period, the BSR has approved at least ten of the developer's standards or if ten standards have not been approved, standard(s) totaling at least 100 pages and c) no standard submitted by the developer during the five (5)-year period was finally denied American National Standard status by ANSI due to a failure to adhere to the principles and procedures upon which the developer's accreditation was based. The inability of an applicant to make use of this presumption shall in no way preclude consideration of its application based on all the relevant evidence.

Upon a final decision to grant an accredited standard's developer's application, the developer shall enter into a written agreement with ANSI, which shall include commitments by the developer to meet the requirements listed below. The agreement shall be for a term of no longer than two (2) years. Any additional terms included in the agreement may be modified as circumstances require with the prior approval of ANSI's President and the developer (as long as such additional term(s) do not conflict with any of ANSI's procedures and policies).

The developer shall:

- a) retain membership in ANSI and pay dues to ANSI in accordance with the policies established by ANSI's Board of Directors;
- b) conduct its activities at all times in conformity with the criteria upon which it was accredited;
- c) submit to audits of its operations by ANSI to demonstrate compliance with terms of the delegation and pay the fees associated therewith (see the *ANSI Auditing Policy and Procedures* for further details on the audit requirements);
- d) provide information required by ANSI in connection with PINS or its equivalent, in a timely manner;
- e) provide information required by ANSI in connection with initiating the ANSI public comment period, in a timely manner;
- f) promptly notify ANSI each time that a standard is designated as an American National Standard without BSR review;
- g) not designate as an American National Standard any standard if it:
 - 1) is contrary to the public interest;
 - 2) contains unfair provisions;
 - 3) is unsuitable for national use;
 - 4) has a conflict with an existing American National Standard.
- (h) if a standard is subsequently determined to have been in conflict with an existing American National Standard at the time of approval, the American National Standard designation shall be withdrawn;
- (i) promptly notify ANSI of any suit or claim made against the developer arising from a standard designated as an American National Standard without BSR review, and provide periodic updates sufficient to apprise ANSI of the status of any such suit or claim;
- (j) indemnify ANSI in connection with any suit or claim that may be made against ANSI arising from a standard designated as an American National Standard without BSR review,⁷ which indemnity must include a commitment to advance all reasonable attorneys' fees and expenses incurred in connection with investigating or defending any such suit or claim;⁸
- (k) consider an American National Standard designation for all of its standards; and
- (l) immediately cease to apply the ANS designation to any standard approved after the developer has been notified by ANSI that its accreditation has been suspended and/or withdrawn.

In addition, the Agreement shall provide for termination by ANSI upon any material breach of its terms by the developer, following notice and an opportunity to cure any such breach. The developer shall have the right to appeal any such decision pursuant to ANSI's appeals procedures.

5.3 Renewals

Successive applications to renew a developer's right to designate its standards as American National Standards without BSR review may be made without limitation and shall be reviewed and decided on the same basis as an

⁷ The sufficiency of the indemnity will be evaluated on a case-by-case basis in light of the assets of the applicant. ANSI reserves the right to deny approval to any applicant should ANSI determine an offer of indemnity to be insufficient.

⁸ It is understood that, absent a conflict of interest, the developer may designate its own attorneys as the attorneys for ANSI as well.

initial application, except that in connection with any renewal ANSI shall consider whether during the preceding period the developer has properly fulfilled its obligations as set forth above.

5.4 Requirements

With respect to submitting American National Standards to ANSI without BSR approval, the qualified applicant shall agree to provide to ANSI the following:

- a) title and designation of the American National Standard;
- b) indication of the type of action (that is, approval of a new American National Standard or reaffirmation, revision, or withdrawal of an existing American National Standard);
- c) declaration that applicable procedures were followed;
- d) a declaration that the standard is within the scope of the previously registered standards activity;
- e) a declaration that other national standards have been examined with regard to harmonization and duplication of content, and if duplication exists, there is compelling need for the standard;
- f) a declaration that no significant conflicts with another American National Standard have been identified or that any identified significant conflict with another American National Standard was addressed in accordance with these procedures;
- g) a declaration that all appeal actions related to the approval of the proposed standard have been completed;
- h) a declaration that the criteria contained in the ANSI patent policy have been met, if applicable;
- i) approval date of the American National Standard.

5.5 Complaints

Any complaint, (whether expressed as a complaint, appeal, or request for withdrawal of the ANS designation) concerning any actions or inactions, including approval or disapproval of an American National Standard, by an Audited Designator shall be governed by the provisions of the *Operating Procedures of the ANSI Executive Standards Council*.

Annex A: Definitions

- ANSI Accreditation: The approval by the ANSI Executive Standards Council (ExSC) of the written procedures submitted by a standards developer relative to the development and documentation of evidence of consensus in connection with standards that are expected to be approved as American National Standards. Accreditation by ANSI signifies that the procedures submitted by the standards developer satisfy the essential requirements contained herein.
- ANSI Audited Designator: An Audited Designator is an ANSI-accredited standards developer to whom the ANSI Executive Standards Council has granted the authority to designate their standards as American National Standards without such standards being reviewed and approved by the ANSI Board of Standards Review but such developer is subjected to additional audits.
- Continuous maintenance: Continuous maintenance is defined as the maintenance of a standard by consideration of recommended changes to any part of it according to a documented schedule for consideration and action by the consensus body.
- Consensus: Consensus means substantial agreement has been reached by directly and materially affected interests. This signifies the concurrence of more than a simple majority, but not necessarily unanimity. Consensus requires that all views and objections be considered, and that an effort be made toward their resolution.
- Consensus body: The group that approves the content of a standard and whose vote demonstrates evidence of consensus.
- Periodic maintenance: Periodic maintenance is defined as the maintenance of a standard by review of the entire document and action to revise or reaffirm it on a schedule not to exceed five years from the date of its approval as an American National Standard.
- Proxy: A written and signed document by which a voting member of a consensus body authorizes another person to vote in the member's stead, if allowed by the developer's procedures.
- Resolved: A negative vote cast by a member of the consensus body or a comment submitted as a result of public review where the negative voter agrees to change his/her vote or the negative commenter accepts the proposed resolution of his/her comment.
- Substantive Change: A substantive change in a proposed American National Standard is one that directly and materially affects the use of the standard. Examples of substantive changes are below:
 - "shall" to "should" or "should" to "shall";
 - addition, deletion or revision of requirements, regardless of the number of changes;
 - addition of mandatory compliance with referenced standards.
- Unresolved: Either (a) a negative vote submitted by a consensus body member or (b) written comments, submitted by a person during public review expressing disagreement with some or all of the proposed standard, that have not been satisfied and/or withdrawn after having been addressed according to the developer's approved procedures.

Annex B: Draft American National Standards for trial use

Draft standards intended for subsequent submittal to ANSI for approval as American National Standards may be published by accredited standards developers for trial use and comment in trade or technical journals, or as separate publications for a period of up to three years. The availability of such draft standards shall be registered with ANSI and announced in ANSI's *Standards Action*, other appropriate media and, if practical, may be listed in ANSI's catalog.

Accredited Standards Developers that intend to utilize draft standards for trial use are required to establish procedures for use in connection with their promulgation. Such procedures shall specify how and by whom the decision to promulgate a draft standard for trial use shall be made. Such procedures shall afford materially affected interests the opportunity to challenge the decision to register a draft standard for trial use with ANSI. A copy of such procedures shall be received by ANSI, reviewed and approved by the Executive Standards Council (ExSC) or its designee, and placed on file prior to the submission and announcement of any draft standards for trial use. Draft standards for trial use shall not be issued to address a need for an emergency standard. In addition, draft standards for trial use must be in compliance with the ANSI Patent Policy.

Materially affected interests wishing to initiate a challenge at ANSI to a decision by an Accredited Standards Developer to register with ANSI a draft standard for trial use shall first exhaust all methods of challenge at the Accredited Standards Developer's level prior to submitting an appeal to the ANSI ExSC. The only basis on which such an appeal shall be filed is the alleged failure of the Accredited Standards Developer to follow either its own procedures or any other relevant ANSI requirements. The burden of proof shall be on the appellant. An announcement regarding the appeal will appear in *Standards Action*.

The following statement, or equivalent, shall be included on the front cover of the draft standard for trial use:

"Publication of this draft standard for trial use and comment has been approved by (insert name of accredited standards developer). Distribution of this draft standard for comment shall not continue beyond () months from the date of publication. It is expected that following this () month period, this draft standard, revised as necessary, will be submitted to the American National Standards Institute for approval as an American National Standard. A public review in accordance with established ANSI procedures is required at the end of the trial use period and before a draft standard for trial use may be submitted to ANSI for approval as an American National Standard. This draft standard is not an American National Standard. Suggestions for revision should be directed to"

Use of the ANSI logo or trademark is prohibited on any document that has not been approved as an American National Standard including a draft standard for trial use. If an ANSI-accredited developer complies with these procedures in connection with a draft standard for trial use, it may be referred to as a *Draft American National Standard for Trial Use*. ANSI reserves the right to deny announcement of the availability of a draft standard for trial use that is intended to be submitted for approval as an American National Standard for legal reasons upon advice of its counsel.

Annex C: Procedures for the Development of a Provisional American National Standard (ANS) or a Provisional Amendment to an ANS

C.1 Procedures for the Development of a Provisional American National Standard (ANS) or a Provisional Amendment to an ANS

When an alternative process is not otherwise reflected in an ANSI-Accredited Standards Developer's (ASD's) accredited procedures, these procedures set forth the requirements for the issuance of a Provisional ANS or a Provisional Amendment to an existing ANS and may be used when all of the following circumstances apply:

- When implementation of the Provisional ANS or Provisional Amendment may result in an improvement to the safeguarding of life, and there is a well-established need for the prompt dissemination of information that addresses an emergency situation or other special circumstance;
- When the use of the accredited procedures of the ASD would cause an undue delay in the issuance of a related standard; and
- When an ASD supports the development of a Provisional ANS or a Provisional Amendment with the intention of initiating the processing as an ANS, of the Provisional ANS or the Provisional Amendment to an ANS, within 45 days of its approval date. Processing of the ANS shall be in accordance with the ASD's accredited procedures, including ANSI public review in *Standards Action* and consensus body ballot.

C.1.1 Public notice

An announcement identifying the standard and describing the circumstances that warrant the issuance of a Provisional ANS or Provisional Amendment shall be provided to ANSI in a timely manner for publication in ANSI's *Standards Action* along with relevant developer contact information. The requirements in clause 2.4 *Notification of standards development and coordination* shall not apply with regard to a Provisional ANS or Provisional Amendment that is promulgated in accordance with these procedures.

C.1.2 Minimum consensus body ballot period

A developer using these procedures may utilize the minimum ballot period established by their accredited procedures for an ANS or the consensus body may establish a ballot period that is not less than two weeks.

C.1.3 Approval of a Provisional ANS or a Provisional Amendment to an ANS

Approval of a Provisional ANS or a Provisional Amendment to an ANS requires approval by the consensus body of at least two-thirds of those voting, excluding abstentions.

C.1.4 Comment resolution

All comments accompanying the ballot shall be circulated to the consensus body in order to afford all members an opportunity to respond, reaffirm, or change their vote. For recirculation of comments, a minimum period of not less than one week is required. An attempt to resolve the comments received relative to the Provisional ANS or Provisional Amendment is not required.

C.1.5 Right to appeal

The right to appeal shall not be required in connection with the issuance of a Provisional ANS or Provisional Amendment. After the standard or revision has been issued, if a directly and materially affected party believes that the Provisional ANS or Provisional Amendment should be withdrawn, then the *Withdrawal for cause* procedures detailed in the *ANSI Essential Requirements: Due process requirements for American National Standards* shall apply.

C.1.6 Approval notification to ANSI

Notice of the approval of a Provisional ANS or Provisional Amendment by an ASD shall be submitted to ANSI within 5 days of the approval of the document. The notice shall include the designation and title of the new or affected document the approval date and a certification that the developer has followed these procedures. An informational announcement shall be published in *Standards Action*.

C.1.7 Processing the Provisional ANS as an American National Standard

The ASD shall initiate the processing, as an ANS, of the Provisional ANS, or the revision to an amended ANS, within 45 days of its approval date. This processing shall be in accordance with the ASD's accredited procedures and shall include ANSI public review in *Standards Action* and consensus body ballot.

C.1.8 Withdrawal

A Provisional ANS or Provisional Amendment shall exist for no longer than two years from the date on which it is approved by the ASD. If consensus is achieved and the affected standard (either the Provisional ANS or the ANS as modified by the Provisional Amendment) is published as an ANS, the Provisional ANS or Provisional Amendment is superseded and shall be withdrawn. If consensus is not achieved, the Provisional ANS or Provisional Amendment shall be withdrawn at that time, but no later than two years from the date on which it was approved. A notice of the withdrawal shall be published in ANSI's *Standards Action*.

C.1.9 Identification of a Provisional ANS or Provisional Amendment

A standard or an amendment to a standard promulgated in accordance with these procedures shall be referred to as a Provisional American National Standard or Provisional Amendment, respectively, and identified clearly as such on the cover or title page. In addition, a standard processed as a Provisional American National Standard, shall be identified by a unique alphanumeric designation in accordance with the following guidelines:

ANSI/ABCD 123 (PS), where ABCD reflects the developer's acronym.

And an American National Standard with a provisional amendment shall be identified as follows:

ANSI/ABCD 123 (PA)

The following or similar text shall be included in the foreword of a Provisional Standard or adjacent to a Provisional Amendment when included in the text of an ANS:

"This document or some of the information contained in this document has been processed in accordance with ANSI's requirements for a Provisional American National Standard or Provisional Amendment to an ANS. The same or similar document or amendment (as applicable) will undergo the standards development process set forth in the ASD's accredited procedures. This Provisional ANS or pertinent Provisional Amendment(s) shall be withdrawn on or before the two year anniversary date of its approval as such."

The ANSI approval logo and the words "an American National Standard" shall not be used to identify an entire standard that has not received ANSI approval or been approved by an accredited standards developer who has been granted authority to designate its standards as American National Standards.

C.1.10 Audit of Use of Provisional ANSI Process

Evidence of compliance with these procedures shall be retained. This documentation shall be examined during the next scheduled audit of the developer.

**Association of Public-Safety
Communications Officials, International**

**Standards Development Policies
and Procedures for American
National Standards**

March 1, 2007 DRAFT

**APCO International 351 N.
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APCO International, Inc.**

Association of Public-Safety Communications Officials, International

Standards Development Policies and Procedures

1.0 Standards Development

1.1 American National Standards

The Association of Public-Safety Communications Officials International, Inc. (hereafter referred to as APCO) will follow the established Standards Development Policies and Procedures when developing standards as American National Standards (hereafter referred to as ANS). These requirements are defined in the Essential Requirements of the American National Standards Institute (hereafter referred to as ANSI). Where APCO is silent on an issue, the ANSI Essential Requirements will be the precedent document.

1.2 Other Standards

When developing standards not intended as ANS, APCO will follow its organizational policies, procedures, and processes.

1.3 Priority of Standards

APCO International shall set the priority of and the schedules for the development of standards.

2.0 Standards Development Committee

2.1 Purpose

A Standards Development Committee (hereafter referred to as SDC) will be authorized and established by APCO. The procedures identified in this document will be employed by APCO and the SDC in the development, approval, maintenance, revision, reaffirmation, adoption, and withdrawal of APCO's ANS standards. APCO International shall ensure that the SDC has access to the resources needed to execute the ANS development process in compliance with these policies and procedures. The SDC and all activities of the committee are accountable to APCO International, Inc.

2.2 Scope

The Standards Development Committee of APCO International will be responsible for the development of standards that are to become American National Standards and the approval, maintenance, revision, reaffirmation, adoption and withdrawal of ANS in the field of public safety

communications.

2.3 Responsibilities

The Standards Development Committee (SDC) shall be responsible for all ANS activities. The activities of the SDC shall be performed in accordance with this Standards Development Policy and Procedures.

2.3.1 The responsibilities of the Standards Development Committee shall be to:

2.3.1.1 Facilitate the development, approval, maintenance, revision, reaffirmation, adoption, and withdrawal of APCO's ANS standards.

2.3.1.2 Interpret standards in accordance with the Interpretation Procedure (10.0)

2.3.1.3 Review standards no later than four (4) years after initial approval for periodic maintenance to consider revision, re-approval, or withdrawal to ensure compliance with the five (5) year ANSI cycle.

2.3.1.3.1 If the SDC decides a standard is appropriate for continuous maintenance, the published standard shall include a clear statement of the intent to consider requests for change and information on the submittal of such requests. No portion of the standard shall be excluded from the revision process.

2.3.1.3.1.1 Revisions to a standard under continuous maintenance will be published quarterly (at the least) on APCO International's website. In the event that no revisions are issued for a period of four years, action to reaffirm or withdraw the standard shall be taken in accordance with the procedures contained here in for periodic maintenance.

2.3.1.3.1.2 Each request for change will be reviewed by the SDC through the voting procedures contained herein (5.0) using consensus ballots.

2.3.1.4 Serve as the consensus body for APCO International's ANS and to execute such responsibilities in accordance

with the procedures established within this Standards Development Policy and Procedures and the ANSI Essential Requirements.

2.4 Membership of Standards Development Committee

- 2.4.1 Notification of SDC formation shall be announced in suitable media as appropriate, including the APCO International Website, to provide communications for directly and materially affected persons.
- 2.4.2 APCO and the secretary shall appoint the members of the SDC from an applicant pool. The SDC membership shall be of diverse interest categories with the objective of achieving balance. The committee shall be of sufficient size, but membership will not exceed 30 members. In considering the size limitations, APCO shall use the criteria in 2.4.5 to maintain balance.
- 2.4.3 Individuals wishing to present their candidacy for service on the SDC shall present an application for membership to the Secretary at the APCO International Headquarters Office. Candidates must convey their direct and material interest in the committee's work and must indicate their affiliation and interest category. The applicant must also indicate his/her qualifications and willingness to participate.
- 2.4.4 Members of the committee shall be assigned an interest category. Consideration shall be given to at least the following interest categories:
- Producer: producer of public safety communications equipment, products, processes, systems, services
 - User: user of public safety communications equipment, products, processes, systems, services
 - General Interest: all others including, but not limited to, professional associations/societies, regulatory agency
- 2.4.5 A good faith effort shall be made by APCO to attain a diverse committee membership to ensure reasonable balance without dominance by a single interest category.
- 2.4.5.1 The SDC shall be comprised of varied interest categories in public safety communications with no single interest category represented by a majority of the SDC membership.
- 2.4.5.2 Participation shall be open to persons who are directly and materially affected by the standards activities.
- 2.4.5.3 Participation in the SDC shall not be conditioned upon membership in any organization nor unreasonably

restricted on the basis of technical qualifications or other such requirements.

2.4.5.4 APCO shall seek out participants from diverse interest categories with the objective of achieving balance.

2.4.6 The name, affiliation, and interest category of each member of the consensus body shall be made available to interested parties upon request.

2.4.7 Officers of Standards Development Committee

2.4.7.1 The officers of the SDC shall be the chairperson, vice-chairperson, secretary and co-secretary.

2.4.7.2 APCO shall appoint from the individual members of the SDC, a chairperson and vice-chairperson. Terms shall be for one (1) year and officers are eligible for reappointment.

2.4.7.3 APCO shall appoint a secretary and a co-secretary from the APCO staff to serve on the SDC. The secretary and co-secretary shall be non-voting ex-officio members of the committee and shall not be used to make up a quorum or majority of the committee.

2.4.8 Duties of SDC Officers

2.4.8.1 The duties of the chairperson shall be to:

- prepare an agenda for SDC meetings and preside over those meetings,
- authorize subgroups and chairperson
- form subgroups and assign tasks as appropriate

2.4.8.2 The duties of the vice-chairperson shall be to:

- assist the chairperson in the discharge of his or her duties,
- assume the duties of the chairperson when he/she is unavailable or unable to act,
- carry out assignments made by the chairperson

2.4.8.3 The duties of the secretary shall be to:

- act as liaison to ANSI
- publish approved, revised, and/or reaffirmed standards
- maintain, update, and distribute the SDC rosters
- record and distribute the minutes of all SDC meetings,
- conduct ballots when required
- oversee compliance of the ANSI Essential Requirements
- maintain, distribute, and ensure compliance with

Standards Development Policies and Procedures

- receive applications for SDC membership
- assume a role in the appointment of the members
- maintain all necessary records pertaining to the committee and subgroup activities
- provide administrative support related to the SDC as appropriate
- Develop, adopt, implement, maintain, revise, and withdraw policies and procedures as required by ANSI
- perform other functions that may be materially necessary to the standards process

2.4.8.4 The duties of the co-secretary shall be to:

- act in conjunction with the secretary in the discharge of duties, attendance of meetings, and related activities
- assume the duties of the secretary when the secretary is unavailable or unable to act

2.4.9 Change or termination of membership status

2.4.9.1 SDC members must notify the Secretary within thirty (30) days of any changes in employment affecting representation to the committee and must submit a new application if continued membership on the SDC is desired.

2.4.9.2 APCO shall be authorized to terminate the membership of an individual on the SDC for cause including:

- failure to actively participate in the SDC proceedings or responsibilities:
 - failure to return 25% of ballots
 - failure to attend 25% of meetings
 - missing 3 consecutive meetings

2.4.9.3 SDC members resigning membership from the committee must tender a written resignation to the secretary giving the effective date and reason for resignation.

3.0 Meetings

The SDC shall meet a minimum of twice annually, one of which shall occur at the APCO Annual Conference. The chairperson may find it necessary to call for additional meetings. Meetings may be conducted in person, by teleconference, by web-based means, by other virtual means, or combinations thereof.

3.1 The secretary shall issue a meeting notice to all members specifying the date, time, and place of meetings at least thirty (30) days in advance for face-to-face meetings and at least fifteen (15) days for teleconference and virtual meetings.

- 3.2 The SDC chairperson shall develop an agenda for each meeting and forward it to the secretary at least ten (10) days prior to meetings. The secretary will subsequently communicate the meeting agenda to all members at least five (5) days in advance of the meetings.
- 3.3 Each member is expected to attend each meeting. The secretary shall maintain records of attendance.
- 3.4 The secretary shall record the minutes of meetings and distribute the draft copy to all members within thirty (30) days. The minutes of each meeting shall contain the date of the meeting; a list of members attending; the time the meeting opened and its location; approval of previous minutes, if appropriate; action items; and the time the meeting adjourned.
- 3.5 A minimum of 50% of members present at an announced meeting of the SDC shall be required to constitute a quorum for conducting business at a meeting.
- 3.6 Robert's Rules of Order (latest edition) shall be used to expedite due process on questions of parliamentary procedure not covered in this policy.
- 3.7 Minutes shall require approval by a majority vote of SDC members present at a meeting.
- 3.8 Attendance of an SDC meeting by interested parties as observers shall be permitted provided that they have submitted a written request to the secretary at least (five) 5 days in advance of the meeting. The secretary will forward the request to the chair. Non-committee members shall not have voting privileges.
- 3.9 The SDC chair reserves the right to call for an executive session. Only members of the SDC are to attend executive sessions. Matters related to the technical content of any standards, the disposition of ballots, or public comments shall not be conducted by executive session. Executive sessions shall be permitted for the purpose of considering administrative and sensitive issues.
- 3.10 The chairperson or a majority of the SDC shall have the authority to call for a special meeting in the event of extraordinary circumstances or emergencies. The chairperson or secretary will announce the meeting as soon as practical.

4.0 Subgroups

- 4.1 The SDC is authorized to establish subgroups (such as subcommittees,

work-groups, technical committees, writings groups) to facilitate the work of standards development.

4.1.1 The chairperson and members of a subgroup shall be appointed and subsequently disbanded by the chairperson of the SDC when the assignment(s) are fulfilled.

4.1.2 The officers and members of a subgroup are not required to be members of the SDC.

4.2 Assignment(s) to the subgroup shall be made by the chairperson. The subgroup responsibilities may include, among other activities, the development of content of a standard, assisting the SDC in responding to views and objections, assisting with interpretation of a standard, conducting research, or serving in an advisory function.

4.3 The chairperson of the subgroup shall notify the secretary of the SDC of all meetings, specifying the date, time, and place of meetings and of the activities of the meetings.

4.4 Draft Standards and any proposed substantive change in the content of a standard by a subgroup shall be submitted to the SDC secretary who shall forward it to the SDC for consensus balloting as appropriate.

5.0 Voting Procedures

5.1 Consensus Ballots

5.1.1 Consensus ballots will be used by the SDC for approval, revision, reaffirmation, withdrawal of, or substantial changes to an ANS and/or a candidate ANS. All members of the consensus body shall have the opportunity to vote within the deadline. When recorded votes are taken at meetings, members who are absent shall be given the opportunity to vote before or after the meeting.

5.1.1.1 The deadline for consensus ballots shall be clearly marked and shall be no less than fifteen days (15) for electronic votes or thirty days (30) if paper ballots are used.

5.1.1.2 Proxies are not permitted.

5.1.2 Consensus ballots shall be cast by paper, fax, or by electronic means. Roll-call votes may be used at the discretion of the chairperson. The vote shall be recorded by the secretary.

5.1.3 Consensus ballots may be initiated by the SDC chairperson or by a majority of members present at a meeting.

5.1.4 At least a two-thirds (2/3) majority of the consensus body votes must vote in the affirmative for a ballot to pass (not counting

abstentions).

5.1.4.1 A majority of the consensus body cast a vote (counting abstentions).

5.1.4.2 Negative votes without comment or negative votes accompanied by comments not related to the proposal shall not be factored into the numerical requirements for consensus, but will be factored into the numerical requirements for total ballots submitted for the purposes of establishing a quorum.

5.1.5 Consensus Ballots are required to achieve SDC consensus for:

- approval of a proposed ANS
- approval of substantive changes to a proposed ANS
- reaffirmation of an ANS
- revision of an ANS
- withdrawal of an ANS

5.1.6 Consensus Ballot votes shall be cast with one of the following positions:

- affirmative
- abstain
- negative, with reasons (the reasons for the negative vote shall be submitted in writing to the secretary and if possible should include specific wording or actions that would resolve the objection)
- ballots not returned shall be recorded as "Unreturned Ballots"

5.2 Negative Vote Process (Consensus Ballot)

5.2.1 Negative votes which are not accompanied by reasons shall be recorded as "negative without reasons" and no further action shall be required. Such votes shall not be factored into the numerical requirements for consensus.

5.2.2 Negative votes accompanied by comments not related to the proposal under consideration, shall not be considered in the numerical requirements for consensus.

5.2.3 Negative votes with reasons shall be sent by the secretary to the SDC chairperson; subsequent referrals to a subgroup may be necessary to attempt to resolve the objection.

5.2.4 If comments with the negative ballot are withdrawn by the commenter, the commenter may resubmit the ballot as either an affirmative vote or an abstention.

5.2.5 The SDC may review the negative vote with the voter at a meeting of the SDC or a subgroup, in efforts to resolve the negative vote.

- 5.2.6 Each unresolved consensus body negative vote with comment shall be reported to the consensus body in order to afford all members of the consensus body an opportunity to respond, reaffirm, or change their vote.
- 5.2.7 If in the process of a review, the SDC determines that substantive changes are required, the revised provision shall be re-balloted.
- 5.2.8 All negative votes that are not resolved shall be addressed as follows:
- If the negative vote has been previously answered, the SDC may reference the previous action on the negative vote
 - If the negative vote is not germane to the item being balloted, such must be affirmed by at least two-thirds (2/3) majority of the SDC members returning ballots (excluding abstentions)
- 5.2.9 If a negative vote from a consensus body member is not resolved, the voter will be notified in writing of the right to appeal by means of the APCO appeals procedure.

5.3 Administrative Ballots

- 5.3.1 Administrative ballots will be used for matters not requiring consensus balloting (5.1). Votes with regard to these issues need not be accompanied by reasons and need not be resolved or circulated to the consensus body.
- 5.3.2 Ballots shall be cast by paper, fax, or by electronic means or by verbal votes. The vote shall be recorded by the secretary.
- 5.3.3 Proxies are not permitted.
- 5.3.4 Ballots may be initiated by the SDC chairperson or by a majority of members present at a meeting.
- 5.3.5 Appointments of subgroups and their assignments that are made by the chairperson can be overruled by a majority vote of the members.
- 5.3.6 The deadline for ballots shall be announced by the SDC chairperson. The deadline shall be no more than fifteen (15) days for electronic votes or thirty (30) days if paper ballots are used. The action will proceed once votes indicating a majority affirmative or a majority negative have been received.
- 5.3.7 Votes on administrative ballots shall be recorded as "affirmative", "negative", or "abstain"

5.4 Ballots Distribution and Collection

All paper ballots shall be distributed to members by the secretary, and completed ballots returned by members to the secretary. The secretary shall issue directions for electronic ballots. The secretary shall record the votes and report the results to the chairperson within fifteen (15) days after the deadline.

5.5 Recording of Committee Votes

The results of each vote shall be reported as follows:

- Number of voting members voting affirmatively
- Number of voting members voting negatively with reasons (*does not apply for Administrative Ballots*)
- Number of voting members voting negatively without reasons
- Number of voting members abstaining
- Number of voting members not returning ballots

6.0 Notification of Standards Activity

6.1 Notification of Standards activity shall be announced in suitable media as appropriate, including the APCO International Website, to provide communications for directly and materially affected persons. At the initiation of a project to develop or revise a Standard, notification shall be transmitted to ANSI using the Project Initiation Notification System (PINS) form, or its equivalent, for announcement in ANSI's publication *Standards Action*. A PINS form may be submitted, but is not required, at the initiation of a project to reaffirm or withdraw a Standard.

6.1.1 A PINS is not required for revisions of an ANS that is maintained under continuous maintenance and (1) is registered as such on the ANSI website, (2) has a notice in the standard that the standard is always open for comment and how to submit comments to APCO SDC, and (3) has information on the APCO's website that the standard is under continuous maintenance and how to submit comments. A PINS is also not required in connection with the decision to maintain an ANS under the stabilized maintenance option.

6.2 Comments received within thirty (30) days from the publication date of a PINS announcement and said comments assert that a proposed standard duplicates or conflicts with an existing ANS or a previously announced candidate ANS, will result in APCO initiating a deliberation in accordance with ANSI Essential Requirements.

7.0 Public Review and Comments

7.1 Proposals for new ANS and proposals for revision, reaffirmation, or withdrawal of an ANS shall be transmitted to ANSI using a BSR-8 form for listing in the *Standards Action* in order to provide opportunity for public comment.

- 7.2 All written views and objections that are received from participants shall be considered by the SDC and the commenter shall be notified, in writing, of the Committee's decision or response in accordance with the following section on Public Review and Comments. An effort shall be made to resolve all expressed objections accompanied by comments related to the proposal under consideration.
- 7.3 Negative comments (objections) received during the public review which are not resolved informally, shall be reviewed and considered by the SDC. By two-thirds (2/3) majority of the voting members returning ballots (excluding abstentions), the SDC shall respond in one of three ways in a timely manner:
- 7.3.1 Accepted; the comment has resulted in a change to the proposed Standard.
- 7.3.2 Not accepted; the comment has not resulted in a change to the proposed Standard. The commenter shall be informed as to the reasoning for the decision.
- 7.3.3 Not accepted, but to be considered during the next revision; the commenter shall be informed as to the reasoning for the decision.
- 7.4 Substantive changes made to a Standard during the public review process shall require an additional SDC consensus ballot per Section 5.0 and additional public review per Section 7.0. A substantive change in a Standard is one that directly and materially affects the use of the Standard. Examples are:
- "shall" to "should" or "should" to "shall"
 - The addition, deletion or revision of requirements, regardless of the number of changes
- 7.5 Each unresolved objection and attempt at resolution, and any substantive change made in a proposed American National Standard shall be reported to the consensus body in order to afford all members of the consensus body an opportunity to respond, reaffirm, or change their vote.
- 7.6 If an objection from a public commenter is not resolved, the objector shall be notified in writing of the right to appeal by means of the APCO appeals procedure.
- 7.7 Following the resolution of comments and objections, a BSR-9 form and required documents shall be submitted to ANSI by the secretary requesting BRS approval of the standard.

8.0 Publication

Standards approved as an ANS, shall be published no later than 6 months after approval. A request for an extension of this deadline may be filed with ANSI. APCO shall publish the standard or grant the right of publication to ANSI.

9.0 Appeals Procedure

9.1 Policy

Persons who have directly and materially affected interests and who have been or will be adversely affected by any procedural action or inaction by APCO with regard to the development of a proposed ANS or the revision, reaffirmation, or withdrawal of an existing ANS shall have the right to appeal.

9.2 Complaint

The appellant shall file a written complaint with the SDC secretary within thirty (30) days after the date of notification of action or at any time with respect to inaction. The appellant has the responsibility of demonstrating adverse effects.

9.3 Response

After receipt of the complaint, the SDC chairperson shall respond in writing to the appellant, in an effort to resolve the complaint through an informal process. If feasible, the response to the appellant will occur within thirty (30) days. Otherwise, the appellant will be advised as to the reason for a delay.

9.4 Hearing

If the appellant and the committee chairperson are unable to resolve the written complaint informally in a manner consistent with these procedures, the secretary shall schedule a hearing with an appeals panel on a date agreeable to all participants, giving at least fifteen (15) calendar days notice.

9.5 Appeals Panel

The appeals panel shall be appointed by the SDC chairperson. The appeals panel shall consist of three individuals who have not been directly involved in the matter in dispute and who will not be materially or directly affected by any decision made or to be made in the dispute. The appellant must be notified of the panel's composition and given the opportunity to object to the composition of the panel. Objections must be specific and valid to be considered.

9.6 Conduct of the Hearing

The appellant has the responsibility of demonstrating adverse effects. The respondent has to demonstrate that the SDC and APCO took all actions in compliance with these procedures. Each party may present pertinent arguments, and members of the appeals panel may address questions to individuals.

9.7 Decision

The appeals panel shall render its decision in writing within thirty (30) days, to the secretary presenting the findings of facts and conclusions, with reasons therefore, citing the evidence. The secretary shall notify the appellant and the SDC of the decision of the appeals panel, which shall be binding. The findings may include the following positions:

- finding for the appellant, giving specific issues and facts in regard to which actions or inactions were not taken with subsequent remanding the action to the SDC or APCO
- finding for the SDC or APCO, that all actions or inactions were taken in compliance with these procedures

9.8 Further Appeal

If the appellant gives notice that further appeal to ANSI is intended, full record of the complaint, response, hearing and decision shall be submitted by APCO to ANSI.

10.0 Interpretation Procedure

10.1 Procedures

The SDC shall have the task of addressing issues related to interpretations of APCO ANS standards whenever questions arise regarding the intention of the standards.

10.2 Inquiries

10.2.1 Request for interpretations of Standards shall be submitted in writing to the secretary and shall be forwarded to the SDC chairperson. An inquiry:

- must be in writing and addressed to the SDC Secretary at APCO Headquarters. The secretary shall log the inquiry and forward it to the SDC chairperson.
- should include references to the applicable section(s) of the standard and/or previous interpretation of the standard.

10.3 Process

10.3.1 An interpretation subgroup of at least five individuals from the SDC shall be appointed by the SDC chairperson. All proposed interpretations shall be prepared in writing and shall be submitted to the SDC for final approval.

10.3.2 Approved interpretations shall be sent in writing to the requester by the secretary.

11.0 Metric Policy

The International System of Units (SI), the modernized metric system, is the preferred units of measurement in American National Standards and will be used by APCO when applicable.

12.0 Patent Procedure

APCO has adopted the Patent Policy as outlined in the ANSI Essential Requirements for ANS development.

13.0 Record Retention Procedure

13.1 Policy

It is the policy of APCO International to establish and maintain records of standards development in compliance with ANSI Essential Requirements. Records concerning new, revised, or reaffirmed standards maintained under the periodic maintenance option shall be retained for at least one complete standards cycle (or until the standard is revised). Records concerning new, revised, or reaffirmed standards maintained under the continuous maintenance option shall be retained for a minimum of five (5) years or until approval of the subsequent revision or reaffirmation of the complete standard. Records concerning standards maintained under the stabilized maintenance option shall be retained until the standard is reaffirmed, revised, or subsequently reviewed in connection with the stabilized maintenance of the standard. Records concerning withdrawn standards shall be retained for at least five years from the date of withdrawal.

13.2 Responsibilities

13.2.1 The secretary of the SDC shall be responsible for all record keeping. The records shall be retained by APCO Headquarters.

13.2.2 Committee members shall transmit to the secretary copies of all documents that are required to be retained:

SDC records

- Roster of the consensus body that indicates:
 - Votes of each member including abstentions and unreturned ballots
 - Names of the members, their organization or business affiliation and interest categories
- List of officers
- Meeting attendance
- All meeting minutes
- Copy of ballots and any associated documents

Standards records

- All public or general interest comments or objections with

- name of objector, and APCO's responses
- Proposed standards and revisions submitted to ANSI
- Communications between ANSI and APCO relative to the development of a ANS
- All appeals and results
- Scope of the ANS
- Copy of ballots and any associated documents

14.0 Correspondence

14.1 Purpose

To provide for the use and distribution of various correspondence associate with the ANS development process.

14.2 Standards Committee Correspondence

14.2.1 All official SDC correspondence, including meeting notices, agendas, reports and ballots, shall be distributed by the Secretary. Copies of all other correspondence between SDC members, relating to APCO standards activities, shall be forwarded to the Secretary.

14.3 External Correspondence

14.3.1 The SDC may designate a member(s) to correspond to external parties on its behalf. All external official ANS correspondence must be approved by the SDC and distributed by the Secretary.

14.3.2 Inquiries relating to the SDC and to ANS shall be directed to the Secretary. Committee members should refer individuals who contact them regarding the SDC to the secretary.

15.0 Revisions to APCO Standards Development Policies

15.1 Purpose

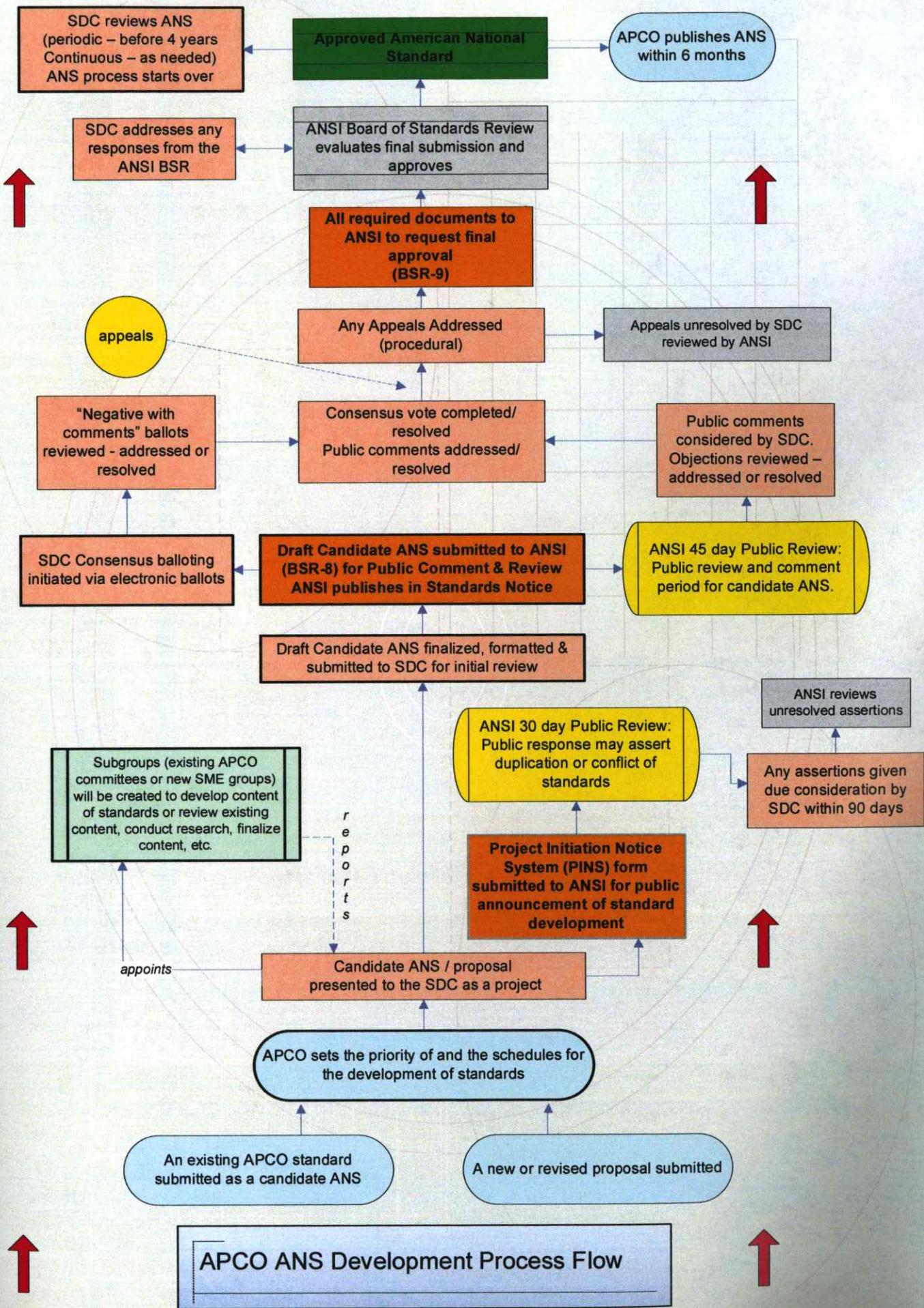
To provide procedures for the proposal of revisions in the APCO ANS Standards Development Policies and Procedures.

15.2 Procedure

15.2.1 APCO may present proposed revisions to these Standards Development Policies and Procedures to the SDC for consultation.

15.3.2 Any revisions to these policies and procedures must be submitted to ANSI for processing, review and approval. Any approved revisions to these Standards Development Policies and Procedures shall be effective upon ANSI approval and publication.

15.3.3 The secretary will distribute any updated versions of these policies and procedures to the SDC.



An existing APCO standard submitted as a candidate ANS

A new or revised proposal submitted

APCO sets the priority of and the schedules for the development of standards

Candidate ANS / proposal presented to the SDC as a project

Project Initiation Notice System (PINS) form submitted to ANSI for public announcement of standard development

ANSI 30 day Public Review: Public response may assert duplication or conflict of standards

Any assertions given due consideration by SDC within 90 days

ANSI reviews unresolved assertions

Draft Candidate ANS finalized, formatted & submitted to SDC for initial review

Draft Candidate ANS submitted to ANSI (BSR-8) for Public Comment & Review ANSI publishes in Standards Notice

SDC Consensus balloting initiated via electronic ballots

ANSI 45 day Public Review: Public review and comment period for candidate ANS.

"Negative with comments" ballots reviewed - addressed or resolved

Consensus vote completed/ resolved Public comments addressed/ resolved

Public comments considered by SDC. Objections reviewed - addressed or resolved

Any Appeals Addressed (procedural)

Appeals unresolved by SDC reviewed by ANSI

All required documents to ANSI to request final approval (BSR-9)

ANSI Board of Standards Review evaluates final submission and approves

SDC addresses any responses from the ANSI BSR

APCO publishes ANS within 6 months

Approved American National Standard

SDC reviews ANS (periodic - before 4 years Continuous - as needed) ANS process starts over

appeals

APCO ANS Development Process Flow

Terms and Definitions 101:

- **Affiliation: (ANSI Definition)** Refers to the entity that the consensus body members represents (which may or may not be that person's employer)
 - **ANS:** American National Standard. The designation for a standard that has completed the ANSI due process requirements through an ANSI-Accredited Standards Developer.
 - **ANSI:** The American National Standard Institute coordinates the development and use of voluntary consensus standards in the United States and represents the needs and views of U.S. stakeholders in standardization forums around the globe.
 - **ANSI Accreditation: (ANSI definition)** The approval by the ANSI Executive Standards Council (ExSC) of the written procedures submitted by a standards developer relative to the development and documentation of evidence of consensus in connection with standards that are expected to be approved as American National Standards. Accreditation by ANSI signifies that the procedures submitted by the standards developer satisfy the essential requirements contained herein.
 - **ASD:** ANSI-accredited standards developer
 - **Balloting:** Is the process for casting and recording votes of the SDC. Ballots may be cast by paper, fax, or by electronic means. Roll-call votes may be used at the discretion of the chairperson. The vote shall be recorded by the secretary. (see voting)
 - **Consensus: (ANSI definition)** Consensus means substantial agreement has been reached by directly and materially affected interests. This signifies the concurrence of more than a simple majority, but not necessarily unanimity. Consensus requires that all views and objections be considered, and that an effort be made toward their resolution.
- **Due Process (ANSI Essential Requirements)** "Due process means that any person (organization, company, government agency, individual, etc.) with a direct and material interest has a right to participate by: a) expressing a position and its basis, b) having that position considered, and c) having the right to appeal. Due process allows for equity and fair play."
- **Consensus body: (ANSI definition)** The group that approves the content of a standard and whose vote demonstrates evidence of consensus. (For APCO, it's the SDC).

- **Interest Category:** The ASD must identify interest categories appropriate to the development of consensus in any given standards activity and are relative to the function of and the nature of the standard(s) being developed. Though the number of interest categories may vary based on the standard development activity, the basic interest categories that will be utilized initially with APCO SDC are:
 - Producer: producer of public safety communications equipment, products, processes, systems, services
 - User: user of public safety communications equipment, products, processes, systems, services
 - General Interest: all others including, but not limited to, professional associations/societies, regulatory agency
- **Resolved:** (ANSI definition) A negative vote cast by a member of the consensus body or a comment submitted as a result of public review where the negative voter agrees to change his/her vote or the negative commenter accepts the proposed resolution of his/her comment.
- **SDO:** Standards developing organizations.
- **Standards Development Committee (SDC):** Designation for the committee that APCO will authorize as responsible for all ANS activities. The activities of the SDC must be conducted in accordance with the Standards Development Policy and Procedures and Essential Requirements of ANSI.
- **Subgroup:** The SDC is authorized to establish subgroups (such as subcommittees, work-groups, technical committees, writings groups) to facilitate the work of standards development. Assignments will be made to the subgroups.
- **Substantive Change:** (ANSI definition) A substantive change in a proposed American National Standard is one that directly and materially affects the use of the standard. Examples of substantive changes are below:
 - “shall” to “should” or “should” to “shall”;
 - addition, deletion or revision of requirements, regardless of the number of changes;
 - addition of mandatory compliance with referenced standards.
- **Unresolved:** (ANSI definition) Either (a) a negative vote submitted by a consensus body member or (b) written comments, submitted by a person during public review expressing disagreement with some or all of the proposed standard, that have not been satisfied and/or withdrawn after having been addressed according to the developer’s approved procedures.
- **Voting:** All members of the Consensus Body (the SDC) will have the opportunity to vote on matters before the committee requiring a vote. Voting on a “consensus ballot” requires at least a two-thirds vote of the voting membership in order to take an action. Voting on a “administrative ballot” requires at least a majority vote of the voting membership in order to take an action. (Consensus Ballots are cast for approval, revision, reaffirmation, withdrawal of, or substantial changes to an ANS and/or candidate ANS standards. Administrative ballots are cast for matters not requiring consensus.)

Robert's Rules of Order Motions Chart

Based on *Robert's Rules of Order Newly Revised (10th Edition)*

Part 1, Main Motions. These motions are listed in order of precedence. A motion can be introduced if it is higher on the chart than the pending motion. § indicates the section from Robert's Rules.

§	PURPOSE:	YOU SAY:	INTERRUPT?	2ND?	DEBATE?	AMEND?	VOTE?
§21	Close meeting	I move to adjourn	No	Yes	No	No	Majority
§20	Take break	I move to recess for ...	No	Yes	No	Yes	Majority
§19	Register complaint	I rise to a question of privilege	Yes	No	No	No	None
§18	Make follow agenda	I call for the orders of the day	Yes	No	No	No	None
§17	Lay aside temporarily	I move to lay the question on the table	No	Yes	No	No	Majority
§16	Close debate	I move the previous question	No	Yes	No	No	2/3
§15	Limit or extend debate	I move that debate be limited to ...	No	Yes	No	Yes	2/3
§14	Postpone to a certain time	I move to postpone the motion to ...	No	Yes	Yes	Yes	Majority
§13	Refer to committee	I move to refer the motion to ...	No	Yes	Yes	Yes	Majority
§12	Modify wording of motion	I move to amend the motion by ...	No	Yes	Yes	Yes	Majority
§11	Kill main motion	I move that the motion be postponed indefinitely	No	Yes	Yes	No	Majority
§10	Bring business before assembly (a main motion)	I move that [or "to"] ...	No	Yes	Yes	Yes	Majority

Part 2, Incidental Motions. No order of precedence. These motions arise incidentally and are decided immediately.

§	PURPOSE:	YOU SAY:	INTERRUPT?	2ND?	DEBATE?	AMEND?	VOTE?
§23	Enforce rules	Point of Order	Yes	No	No	No	None
§24	Submit matter to assembly	I appeal from the decision of the chair	Yes	Yes	Varies	No	Majority
§25	Suspend rules	I move to suspend the rules	No	Yes	No	No	2/3
§26	Avoid main motion	I object to the consideration of the	Yes	No	No	No	2/3

	altogether	question					
§27	Divide motion	I move to divide the question	No	Yes	No	Yes	Majority
§29	Demand a rising vote	I move for a rising vote	Yes	No	No	No	None
§33	Parliamentary law question	Parliamentary inquiry	Yes	No	No	No	None
§33	Request for information	Point of information	Yes	No	No	No	None

Part 3, Motions That Bring a Question Again Before the Assembly.

No order of precedence. Introduce only when nothing else is pending.

§	PURPOSE:	YOU SAY:	INTERRUPT?	2ND?	DEBATE?	AMEND?	VOTE?
§34	Take matter from table	I move to take from the table ...	No	Yes	No	No	Majority
§35	Cancel previous action	I move to rescind ...	No	Yes	Yes	Yes	2/3 or Majority with notice
§37	Reconsider motion	I move to reconsider ...	No	Yes	Varies	No	Majority

Robert's Rules of Order

www.robertsrules.org

Roberts Rules, [full text](#) (1915 version)

[Introduction to Robert's Rules](#)

[Quick Chart of Motions](#)

[Chart of Motions in Arabic](#)

Robert's Rules of Order - Summary Version

For Fair and Orderly Meetings & Conventions

Provides common rules and procedures for deliberation and debate in order to place the whole membership on the same footing and speaking the same language. The conduct of ALL business is controlled by the general will of the whole membership - the right of the deliberate majority to decide. Complementary is the right of at least a strong minority to require the majority to be deliberate - to act according to its considered judgment AFTER a full and fair "working through" of the issues involved. Robert's Rules provides for constructive and democratic meetings, to help, not hinder, the business of the assembly. Under no circumstances should "undue strictness" be allowed to intimidate members or limit full participation.

The fundamental right of deliberative assemblies require all questions to be thoroughly discussed before taking action!

The assembly rules - they have the final say on everything!
Silence means consent!

- Obtain the floor (the right to speak) by being the first to stand when the person speaking has finished; state Mr./Madam Chairman. Raising your hand means nothing, and standing while another has the floor is out of order! Must be recognized by the Chair before speaking!
- Debate can not begin until the Chair has stated the motion or resolution and asked "are you ready for the question?" If no one rises, the chair calls for the vote!
- Before the motion is stated by the Chair (the question) members may suggest modification of the motion; the mover can modify as he pleases, or even withdraw the motion without consent of the seconder; if mover modifies, the seconder can withdraw the second.
- The "immediately pending question" is the last question stated by the Chair!
Motion/Resolution - Amendment - Motion to Postpone
- The member moving the "immediately pending question" is entitled to preference to the floor!
- No member can speak twice to the same issue until everyone else wishing to speak has spoken to it once!
- All remarks must be directed to the Chair. Remarks must be courteous in language and deportment - avoid all personalities, never allude to others by name or to motives!
- The agenda and all committee reports are merely recommendations! When presented to the assembly and the question is stated, debate begins and changes occur!

The Rules

- **Point of Privilege:** Pertains to noise, personal comfort, etc. - may interrupt only if necessary!
- **Parliamentary Inquiry:** Inquire as to the correct motion - to accomplish a desired result, or raise a point of order
- **Point of Information:** Generally applies to information desired from the speaker: "I should like to ask the (speaker) a question."
- **Orders of the Day (Agenda):** A call to adhere to the agenda (a deviation from the agenda requires Suspending the Rules)
- **Point of Order:** Infraction of the rules, or improper decorum in speaking. Must be raised immediately after the error is made
- **Main Motion:** Brings new business (the next item on the agenda) before the assembly
- **Divide the Question:** Divides a motion into two or more separate motions (must be able to stand on their own)
- **Consider by Paragraph:** Adoption of paper is held until all paragraphs are debated and amended and entire paper is satisfactory; after all paragraphs are considered, the entire paper is then open to amendment, and paragraphs may be further amended. Any Preamble can not be considered until debate on the body of the paper has ceased.
- **Amend:** Inserting or striking out words or paragraphs, or substituting whole paragraphs or resolutions
- **Withdraw/Modify Motion:** Applies only after question is stated; mover can accept an amendment without obtaining the floor
- **Commit /Refer/Recommit to Committee:** State the committee to receive the question or resolution; if no committee exists include size of committee desired and method of selecting the members (election or appointment).
- **Extend Debate:** Applies only to the immediately pending question; extends until a certain time or for a certain period of time
- **Limit Debate:** Closing debate at a certain time, or limiting to a certain period of time
- **Postpone to a Certain Time:** State the time the motion or agenda item will be resumed
- **Object to Consideration:** Objection must be stated before discussion or another motion is stated
- **Lay on the Table:** Temporarily suspends further consideration/action on pending question; may be made after motion to close debate has carried or is pending
- **Take from the Table:** Resumes consideration of item previously "laid on the table" - state the motion to take from the table
- **Reconsider:** Can be made only by one on the prevailing side who has changed position or view
- **Postpone Indefinitely:** Kills the question/resolution for this session - exception: the motion to reconsider can be made this session
- **Previous Question:** Closes debate if successful - may be moved to "Close Debate" if preferred
- **Informal Consideration:** Move that the assembly go into "Committee of the Whole" - informal debate as if in committee; this committee may limit number or length of speeches or close debate by other means by a 2/3 vote. All votes, however, are formal.
- **Appeal Decision of the Chair:** Appeal for the assembly to decide - must be made before other business is resumed; NOT debatable if relates to decorum, violation of rules or order of business
- **Suspend the Rules:** Allows a violation of the assembly's own rules (except Constitution); the object of the suspension must be specified

Introduction to Robert's Rules of Order

1. What is Parliamentary Procedure?
 2. Why is Parliamentary Procedure Important?
 3. Example of the Order of Business
 4. Motions
 5. Types of Motions
 6. How are Motions Presented?
 7. Voting on a Motion
-

What Is Parliamentary Procedure?

It is a set of rules for conduct at meetings, that allows everyone to be heard and to make decisions without confusion.

Why is Parliamentary Procedure Important?

Because it's a time tested method of conducting business at meetings and public gatherings. It can be adapted to fit the needs of any organization. Today, Robert's Rules of Order newly revised is the basic handbook of operation for most clubs, organizations and other groups. So it's important that everyone know these basic rules!

Organizations using parliamentary procedure usually follow a fixed order of business. Below is a typical example:

1. Call to order.
2. Roll call of members present.
3. Reading of minutes of last meeting.
4. Officers reports.
5. Committee reports.
6. Special orders --- Important business previously designated for consideration at this meeting.
7. Unfinished business.
8. New business.
9. Announcements.
10. Adjournment.

The method used by members to express themselves is in the form of moving motions. A motion is a proposal that the entire membership take action or a stand on an issue. Individual members can:

1. Call to order.
2. Second motions.
3. Debate motions.
4. Vote on motions.

There are four Basic Types of Motions:

1. Main Motions: The purpose of a main motion is to introduce items to the

membership for their consideration. They cannot be made when any other motion is on the floor, and yield to privileged, subsidiary, and incidental motions.

2. **Subsidiary Motions:** Their purpose is to change or affect how a main motion is handled, and is voted on before a main motion.
3. **Privileged Motions:** Their purpose is to bring up items that are urgent about special or important matters unrelated to pending business.
4. **Incidental Motions:** Their purpose is to provide a means of questioning procedure concerning other motions and must be considered before the other motion.

How are Motions Presented?

1. **Obtaining the floor**
 - a. Wait until the last speaker has finished.
 - b. Rise and address the Chairman by saying, "Mr. Chairman, or Mr. President."
 - c. Wait until the Chairman recognizes you.
2. **Make Your Motion**
 - a. Speak in a clear and concise manner.
 - b. Always state a motion affirmatively. Say, "I move that we ..." rather than, "I move that we do not ...".
 - c. Avoid personalities and stay on your subject.
3. **Wait for Someone to Second Your Motion**
4. **Another member will second your motion or the Chairman will call for a second.**
5. **If there is no second to your motion it is lost.**
6. **The Chairman States Your Motion**
 - a. The Chairman will say, "it has been moved and seconded that we ..." Thus placing your motion before the membership for consideration and action.
 - b. The membership then either debates your motion, or may move directly to a vote.
 - c. Once your motion is presented to the membership by the chairman it becomes "assembly property", and cannot be changed by you without the consent of the members.
7. **Expanding on Your Motion**
 - a. The time for you to speak in favor of your motion is at this point in time, rather than at the time you present it.
 - b. The mover is always allowed to speak first.
 - c. All comments and debate must be directed to the chairman.
 - d. Keep to the time limit for speaking that has been established.
 - e. The mover may speak again only after other speakers are finished, unless called upon by the Chairman.
8. **Putting the Question to the Membership**
 - a. The Chairman asks, "Are you ready to vote on the question?"
 - b. If there is no more discussion, a vote is taken.
 - c. On a motion to move the previous question may be adapted.

Voting on a Motion:

The method of vote on any motion depends on the situation and the by-laws of policy of your organization. There are five methods used to vote by most organizations, they are:

1. By Voice -- The Chairman asks those in favor to say, "aye", those opposed to say "no". Any member may move for a exact count.
2. By Roll Call -- Each member answers "yes" or "no" as his name is called. This method is used when a record of each person's vote is required.
3. By General Consent -- When a motion is not likely to be opposed, the Chairman says, "if there is no objection ...". The membership shows agreement by their silence, however if one member says, "I object," the item must be put to a vote.
4. By Division -- This is a slight verification of a voice vote. It does not require a count unless the chairman so desires. Members raise their hands or stand.
5. By Ballot -- Members write their vote on a slip of paper, this method is used when secrecy is desired.

There are two other motions that are commonly used that relate to voting.

1. Motion to Table -- This motion is often used in the attempt to "kill" a motion. The option is always present, however, to "take from the table", for reconsideration by the membership.
2. Motion to Postpone Indefinitely -- This is often used as a means of parliamentary strategy and allows opponents of motion to test their strength without an actual vote being taken. Also, debate is once again open on the main motion.

Parliamentary Procedure is the best way to get things done at your meetings. But, it will only work if you use it properly.

1. Allow motions that are in order.
2. Have members obtain the floor properly.
3. Speak clearly and concisely.
4. Obey the rules of debate.

Most importantly, *BE COURTEOUS*.

ANSI Style Guide-sheet – 2003

A. General style guide-lines:

- Heavy emphasis on technical integrity rather than on cosmetic "look", i.e., a spelling error wouldn't usually damage the functional integrity of a document but a missing figure or inaccurate Normative Reference would have serious impact.

- Strive for consistency throughout document : consistency of formatting, presentation, capitalization, terms, etc.

B. Strongly recommended items for adherence:

1. No requirements in informative (and some normative –e.g., scope; terms and definitions) text:

No requirements in the foreword, introduction, scope, terms and definitions, informative annexes, notes, examples, footnotes to text, notes to figures, notes to tables.

2. Correct use of "shall", "should" and "must", i.e., correct form of requirements and recommendations:

The correct verb form for indicating a requirement is "shall". The correct verb form for indicating a recommendation is "should". Universally accepted "standarrese" does not recognize "must". Use "shall" for indicating a mandatory aspect or an aspect on which there is no option.

3. Full and complete Normative References:

Make sure all standards on which the document is contingent are fully and correctly listed, with availability footnotes, where necessary. Any document cited in the standard as being indispensable for the application of the standard needs to be listed in Normative References. Informative references - those for information only, or for use as background reading, are to be listed in a Bibliography, which comprises the final annex (appendix). (Note: preferred term for this component of a standard is "annex".)

C. Completeness and consistency of document

Confirm that:

- All pages, figures and tables, included and numbered correctly. Clauses/subclauses, footnotes numbered consistently
- Cross references - to other documents and to other parts of standard, cited correctly.
- Running heads/designation correct - year added not 200x
- Symbols and names of units shall not be mixed - e.g., use "km" or "kilometers" consistently, not a mix of both
- Variables and quantities to be indicated in italics, in accordance with widely accepted mathematical style

Please contact the ANSI Publishing Department for help interpreting/applying the above recommendations, or with any further questions regarding style/format.

Metric Units (SI)

The international system of units consists of a set of units together with a set of prefixes. The units of SI can be divided into two subsets. There are the seven base units. Each of these base units are nominally dimensionally independent. From these seven base units several other units are derived. In addition to the SI units there are also a set of non-SI units accepted for use with SI.

SI base units		
Name	Symbol	Quantity
<u>metre</u>	m	<u>Length</u>
<u>kilogram</u>	kg	<u>Mass</u>
<u>second</u>	s	<u>Time</u>
<u>ampere</u>	A	<u>Electrical Current</u>
<u>kelvin</u>	K	<u>Thermodynamic temperature</u>
<u>mole</u>	mol	<u>Amount of substance</u>
<u>candela</u>	cd	<u>Luminous intensity</u>

A prefix may be added to units to produce a multiple of the original unit. All multiples are integer powers of ten. For example, *kilo-* denotes a multiple of a thousand and *milli-* denotes a multiple of a thousandth hence there are one thousand millimetres to the metre and one thousand metres to the kilometre. The prefixes are never combined: a millionth of a kilogram is a *milligram* not a *microkilogram*.

<u>SI-Prefixes</u>										
Name	<u>yotta</u>	<u>zetta</u>	<u>exa</u>	<u>peta</u>	<u>tera</u>	<u>giga</u>	<u>mega</u>	<u>kilo</u>	<u>hecto</u>	<u>deca</u>
Symbol	Y	Z	E	P	T	G	M	k	h	da
Factor	10 ²⁴	10 ²¹	10 ¹⁸	10 ¹⁵	10 ¹²	10 ⁹	10 ⁶	10 ³	10 ²	10 ¹
Name	<u>deci</u>	<u>centi</u>	<u>milli</u>	<u>micro</u>	<u>nano</u>	<u>pico</u>	<u>femto</u>	<u>atto</u>	<u>zepto</u>	<u>yocto</u>
Symbol	d	c	m	μ	n	p	f	a	z	y
Factor	10 ⁻¹	10 ⁻²	10 ⁻³	10 ⁻⁶	10 ⁻⁹	10 ⁻¹²	10 ⁻¹⁵	10 ⁻¹⁸	10 ⁻²¹	10 ⁻²⁴

SI writing style

- Symbols for units are written in lower case, except for symbols derived from the name of a person. For example, the unit of pressure is named after Blaise Pascal, so its symbol is written "Pa" whereas the unit itself is written "pascal".
 - The one exception is the litre, whose original symbol "l" is unsuitably similar to the numeral "1" or the uppercase letter "I" (depending on the typographic font used), at least in many English-speaking countries. The American National Institute of Standards and Technology recommends that "L" be used instead, a usage which is common in the U.S., Canada, Australia, and New Zealand (but not elsewhere). This has been accepted as an alternative by the CGPM since 1979. The cursive "ℓ" is occasionally seen, especially in Japan and Greece, but this is not currently recommended by any standards body.
- The SI rule for pluralising units is that symbols of units are not pluralised, for example "25 kg" (not "25 kgs").
 - The American National Institute of Standards and Technology has defined guidelines for using the SI units in its own publications and for other users of the SI^[3]. These guidelines give guidance on pluralizing unit names: the plural is formed by using normal English grammar rules, for example, "henries" is the plural of "henry". The units lux, hertz, and siemens are exceptions from this rule: they remain the same in singular and plural.

Note that this rule only applies to the full names of units, not to their symbols.

- Symbols do not have an appended period/full stop (.) unless at the end of a sentence.
- Symbols are written in upright Roman type (m for metres, L for litres), so as to differentiate from the italic type used for mathematical variables (*m* for mass, *l* for length).
- A space separates the number and the symbol, e.g. "2.21 kg", " $7.3 \times 10^2 \text{ m}^2$ ", "22 °C" [1]. Exceptions are the symbols for plane angular degrees, minutes and seconds (°, ' and "), which are placed immediately after the number with no intervening space.
- Spaces may be used to group decimal digits in threes, e.g. "1 000 000" or "342 142" (in contrast to the commas or dots used in other systems, e.g. "1,000,000" or "1.000.000"). This is presumably to reduce confusion because a comma is used as a decimal in many countries while others use a period. In print, the space used for this purpose is typically narrower than that between words.
- The 10th resolution of CGPM in 2003 declared that "the symbol for the decimal marker shall be either the point on the line or the comma on the line". In practice, the decimal point is used in English, and the comma in most other European languages.
- Symbols for derived units formed from multiple units by multiplication are joined with a space or centre dot (·), e.g. "N m" or "N·m".
- Symbols formed by division of two units are joined with a solidus (/), or given as a negative exponent. For example, the "metre per second" can be written "m/s", " m s^{-1} ", " $\text{m} \cdot \text{s}^{-1}$ " or $\frac{\text{m}}{\text{s}}$. A solidus should not be used if the result is ambiguous, i.e. " $\text{kg} \cdot \text{m}^{-1} \cdot \text{s}^{-2}$ " is preferable to " $\text{kg}/\text{m} \cdot \text{s}^2$ ". (Taylor (§ 6.1.6) specifically calls for the use of a solidus.^[3] Many computer users will type the / character provided on American computer keyboards, which in turn produces the Unicode character U+002F, which is named solidus. Taylor does not offer suggestions about which mark should be used when more sophisticated typesetting options are available.)
- In countries using ideographic writing systems such as Chinese and Japanese, often the full symbol of the unit, including prefixes, is placed in one square.

Dimensionless derived units

The following SI units are actually dimensionless ratios, formed by dividing two identical SI units. They are therefore considered by the BIPM to be derived. Formally, their SI unit is simply the number 1, but they are given these special names, for use whenever the lack of a unit might be confusing.

Dimensionless SI units

Name	Symbol	Quantity	Definition
<u>radian</u>	rad	<u>Angle</u>	The unit of angle is the angle subtended at the centre of a circle by an arc of the circumference equal in length to the radius of the circle. There are 2π radians in a circle.
<u>steradian</u>	sr	<u>Solid angle</u>	The unit of solid angle is the solid angle subtended at the centre of a sphere of radius r by a portion of the surface of the sphere having an area r^2 . There are 4π steradians on a sphere.

Derived units with special names

Base units can be put together to derive units of measurement for other quantities. Some have been given names.

Named units derived from SI base units

Name	<u>Symbol</u>	<u>Quantity</u>	Expression in terms of other units	Expression in terms of <u>SI base units</u>
<u>hertz</u>	Hz	<u>Frequency</u>	1/s	s^{-1}

<u>newton</u>	N	<u>Force, Weight</u>	$\text{m}\cdot\text{kg}/\text{s}^2$	$\text{m}\cdot\text{kg}\cdot\text{s}^{-2}$
<u>joule</u>	J	<u>Energy, Work, Heat</u>	$\text{N}\cdot\text{m}$	$\text{m}^2\cdot\text{kg}\cdot\text{s}^{-2}$
<u>watt</u>	W	<u>Power, Radiant flux</u>	J/s	$\text{m}^2\cdot\text{kg}\cdot\text{s}^{-3}$
<u>pascal</u>	Pa	<u>Pressure, Stress</u>	N/m^2	$\text{m}^{-1}\cdot\text{kg}\cdot\text{s}^{-2}$
<u>lumen</u>	lm	<u>Luminous flux</u>	$\text{cd}\cdot\text{sr}$	cd
<u>lux</u>	lx	<u>Illuminance</u>	lm/m^2	$\text{m}^{-2}\cdot\text{cd}$
<u>coulomb</u>	C	<u>Electric charge or flux</u>	$\text{s}\cdot\text{A}$	$\text{s}\cdot\text{A}$
<u>volt</u>	V	<u>Electrical potential difference, Electromotive force</u>	$\text{W}/\text{A} = \text{J}/\text{C}$	$\text{m}^2\cdot\text{kg}\cdot\text{s}^{-3}\cdot\text{A}^{-1}$
<u>ohm</u>	Ω	<u>Electric resistance, Impedance, Reactance</u>	V/A	$\text{m}^2\cdot\text{kg}\cdot\text{s}^{-3}\cdot\text{A}^{-2}$
<u>farad</u>	F	<u>Electric capacitance</u>	C/V	$\text{m}^{-2}\cdot\text{kg}^{-1}\cdot\text{s}^4\cdot\text{A}^2$
<u>weber</u>	Wb	<u>Magnetic flux</u>	J/A	$\text{m}^2\cdot\text{kg}\cdot\text{s}^{-2}\cdot\text{A}^{-1}$
<u>tesla</u>	T	<u>Magnetic flux density, magnetic induction</u>	$\text{V}\cdot\text{s}/\text{m}^2 = \text{Wb}/\text{m}^2 = \text{N}/\text{A}\cdot\text{m}$	$\text{kg}\cdot\text{s}^{-2}\cdot\text{A}^{-1}$

<u>henry</u>	H	<u>Inductance</u>	$V \cdot s/A = Wb/A$	$m^2 \cdot kg \cdot s^{-2} \cdot A^{-2}$
<u>siemens</u>	S	<u>Electric conductance</u>	$1/\Omega$	$m^{-2} \cdot kg^{-1} \cdot s^3 \cdot A^2$
<u>becquerel</u>	Bq	<u>Radioactivity</u> (decays per unit time)	$1/s$	s^{-1}
<u>gray</u>	Gy	<u>Absorbed dose</u> (of ionizing radiation)	J/kg	$m^2 \cdot s^{-2}$
<u>sievert</u>	Sv	<u>Equivalent dose</u> (of ionizing radiation)	J/kg	$m^2 \cdot s^{-2}$
<u>katal</u>	kat	<u>Catalytic activity</u>	mol/s	$s^{-1} \cdot mol$
<u>degree Celsius</u>	$^{\circ}C$	<u>Thermodynamic temperature</u>	$T_{^{\circ}C} = T_K - 273.15$	

Other quantities and units

Compound units derived from SI units			
Name	Symbol	Quantity	Expression in terms of SI base units
<u>square metre</u>	m^2	<u>area</u>	m^2

<u>cubic metre</u>	m^3	<u>volume</u>	m^3
<u>metre per second</u>	$\text{m}\cdot\text{s}^{-1}$	<u>speed, velocity</u>	$\text{m}\cdot\text{s}^{-1}$
<u>metre per second squared</u>	$\text{m}\cdot\text{s}^{-2}$	<u>acceleration</u>	$\text{m}\cdot\text{s}^{-2}$
metre per second cubed	$\text{m}\cdot\text{s}^{-3}$	<u>jerk</u>	$\text{m}\cdot\text{s}^{-3}$
radian per second	$\text{rad}\cdot\text{s}^{-1}$	<u>angular velocity</u>	s^{-1}
newton second	$\text{N}\cdot\text{s}$	<u>momentum, impulse</u>	$\text{kg}\cdot\text{m}\cdot\text{s}^{-1}$
newton metre second	$\text{N}\cdot\text{m}\cdot\text{s}$	<u>angular momentum</u>	$\text{kg}\cdot\text{m}^2\cdot\text{s}^{-1}$
newton metre	$\text{N}\cdot\text{m}$	<u>torque, moment of force</u>	$\text{kg}\cdot\text{m}^2\cdot\text{s}^{-2}$
reciprocal metre	m^{-1}	<u>wavenumber</u>	m^{-1}
<u>kilogram per cubic metre</u>	$\text{kg}\cdot\text{m}^{-3}$	<u>density, mass density</u>	$\text{kg}\cdot\text{m}^{-3}$
cubic metre per kilogram	$\text{kg}^{-1}\cdot\text{m}^3$	specific volume	$\text{kg}^{-1}\cdot\text{m}^3$
mole per cubic metre	$\text{m}^{-3}\cdot\text{mol}$	amount (-of-substance) concentration	$\text{m}^{-3}\cdot\text{mol}$
cubic metre per mole	$\text{m}^3\cdot\text{mol}^{-1}$	molar volume	$\text{m}^3\cdot\text{mol}^{-1}$

joule per kelvin	$\text{J}\cdot\text{K}^{-1}$	<u>heat capacity, entropy</u>	$\text{kg}\cdot\text{m}^2\cdot\text{s}^{-2}\cdot\text{K}^{-1}$
joule per kelvin mole	$\text{J}\cdot\text{K}^{-1}\cdot\text{mol}^{-1}$	molar heat capacity, molar entropy	$\text{kg}\cdot\text{m}^2\cdot\text{s}^{-2}\cdot\text{K}^{-1}\cdot\text{mol}^{-1}$
joule per kilogram kelvin	$\text{J}\cdot\text{K}^{-1}\cdot\text{kg}^{-1}$	<u>specific heat capacity, specific entropy</u>	$\text{m}^2\cdot\text{s}^{-2}\cdot\text{K}^{-1}$
joule per mole	$\text{J}\cdot\text{mol}^{-1}$	molar energy	$\text{kg}\cdot\text{m}^2\cdot\text{s}^{-2}\cdot\text{mol}^{-1}$
joule per kilogram	$\text{J}\cdot\text{kg}^{-1}$	specific energy	$\text{m}^2\cdot\text{s}^{-2}$
joule per cubic metre	$\text{J}\cdot\text{m}^{-3}$	energy density	$\text{kg}\cdot\text{m}^{-1}\cdot\text{s}^{-2}$
newton per metre	$\frac{\text{N}\cdot\text{m}^{-1}}{\text{J}\cdot\text{m}^{-2}}$	<u>surface tension</u>	$\text{kg}\cdot\text{s}^{-2}$
watt per square metre	$\text{W}\cdot\text{m}^{-2}$	heat flux density, irradiance	$\text{kg}\cdot\text{s}^{-3}$
watt per metre kelvin	$\text{W}\cdot\text{m}^{-1}\cdot\text{K}^{-1}$	<u>thermal conductivity</u>	$\text{kg}\cdot\text{m}\cdot\text{s}^{-3}\cdot\text{K}^{-1}$
<u>square metre per second</u>	$\text{m}^2\cdot\text{s}^{-1}$	kinematic <u>viscosity</u> , <u>diffusion coefficient</u>	$\text{m}^2\cdot\text{s}^{-1}$
<u>pascal second</u>	$\frac{\text{Pa}\cdot\text{s}}{\text{N}\cdot\text{s}\cdot\text{m}^{-2}}$	dynamic <u>viscosity</u>	$\text{kg}\cdot\text{m}^{-1}\cdot\text{s}^{-1}$
coulomb per cubic metre	$\text{C}\cdot\text{m}^{-3}$	electric charge density	$\text{m}^{-3}\cdot\text{s}\cdot\text{A}$

ampere per square metre	$\text{A}\cdot\text{m}^{-2}$	electric current density	$\text{A}\cdot\text{m}^{-2}$
siemens per metre	$\text{S}\cdot\text{m}^{-1}$	<u>conductivity</u>	$\text{kg}^{-1}\cdot\text{m}^{-3}\cdot\text{s}^3\cdot\text{A}^2$
siemens square metre per mole	$\text{S}\cdot\text{m}^2\cdot\text{mol}^{-1}$	molar conductivity	$\text{kg}^{-1}\cdot\text{s}^3\cdot\text{mol}^{-1}\cdot\text{A}^2$
farad per metre	$\text{F}\cdot\text{m}^{-1}$	<u>permittivity</u>	$\text{kg}^{-1}\cdot\text{m}^{-3}\cdot\text{s}^4\cdot\text{A}^2$
henry per metre	$\text{H}\cdot\text{m}^{-1}$	<u>permeability</u>	$\text{kg}\cdot\text{m}\cdot\text{s}^{-2}\cdot\text{A}^{-2}$
volt per metre	$\text{V}\cdot\text{m}^{-1}$	<u>electric field strength</u>	$\text{kg}\cdot\text{m}\cdot\text{s}^{-3}\cdot\text{A}^{-1}$
ampere per metre	$\text{A}\cdot\text{m}^{-1}$	<u>magnetic field strength</u>	$\text{A}\cdot\text{m}^{-1}$
candela per square metre	$\text{cd}\cdot\text{m}^{-2}$	<u>luminance</u>	$\text{cd}\cdot\text{m}^{-2}$
coulomb per kilogram	$\text{C}\cdot\text{kg}^{-1}$	exposure (X and gamma rays)	$\text{kg}^{-1}\cdot\text{s}\cdot\text{A}$
gray per second	$\text{Gy}\cdot\text{s}^{-1}$	absorbed dose rate	$\text{m}^2\cdot\text{s}^{-3}$

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1	12/19/2006	12/25/2006	5-Jan	3/6/2007	2/19/2007	2/4/2007
2	12/26/2006	1/1/2007	12-Jan	3/13/2007	2/26/2007	2/11/2007
3	1/2/2007	1/8/2007	19-Jan	3/20/2007	3/5/2007	2/18/2007
4	1/9/2007	1/15/2007	26-Jan	3/27/2007	3/12/2007	2/25/2007
5	1/16/2007	1/22/2007	2-Feb	4/3/2007	3/19/2007	3/4/2007
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10	2/20/2007	2/26/2007	9-Mar	5/8/2007	4/23/2007	4/8/2007
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13	3/13/2007	3/19/2007	30-Mar	5/29/2007	5/14/2007	4/29/2007
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20	5/1/2007	5/7/2007	18-May	7/17/2007	7/2/2007	6/17/2007
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24	5/29/2007	6/4/2007	15-Jun	8/14/2007	7/30/2007	7/15/2007
25	6/5/2007	6/11/2007	22-Jun	8/21/2007	8/6/2007	7/22/2007
26	6/12/2007	6/18/2007	29-Jun	8/28/2007	8/13/2007	7/29/2007
27	6/19/2007	6/25/2007	6-Jul	9/4/2007	8/20/2007	8/5/2007
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32	7/24/2007	7/30/2007	10-Aug	10/9/2007	9/24/2007	9/9/2007
33	7/31/2007	8/6/2007	17-Aug	10/16/2007	10/1/2007	9/16/2007
34	8/7/2007	8/13/2007	24-Aug	10/23/2007	10/8/2007	9/23/2007
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42	10/2/2007	10/8/2007	19-Oct	12/18/2007	12/3/2007	11/18/2007
43	10/9/2007	10/15/2007	26-Oct	12/25/2007	12/10/2007	11/25/2007
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