Procedures for the Development of American National Standards

National Institute of Standards and Technology Information Technology Laboratory (NIST/ITL)

November 15, 2011
American National Standards Institute (ANSI) Accredited Standards Developer -- NIST/ITL
Effective November 15, 2008, NIST/ITL has been administratively reaccredited by ANSI under these procedures.

NIST/ITL Procedures for the Development of American National Standards

1 General

The National Institute of Standards and Technology/Information Technology Laboratory (hereafter referred to as NIST/ITL) has developed these procedures for developing evidence of consensus for the approval, reaffirmation, revision, or withdrawal of American National Standards through the use of a canvass process. In addition to these procedures, the latest edition of the ANSI Essential Requirements: Due process requirements for American National Standards shall be the final controlling document for all procedural and policy issues.

NIST/ITL (and its predecessor organizations) has been accredited by ANSI as a standards developer since October 5, 1984 for the following scope of activities:

"Standards and guidelines for information exchange relating to automatic data processing and related systems".

2 Notification of standards development

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

2.1 Project Initiation Notification System (PINS) form

At the initiation of a project to develop or revise an American National Standard, notification shall be transmitted by NIST/ITL to ANSI using the Project Initiation Notification System (PINS) form for listing in Standards Action. 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 the appropriate sections of clause 5.

2.2 BSR-8 form

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:

a) A minimum of 30 calendar days if the full text of the revision(s) can be published in Standards Action; or
b) A minimum of 45 calendar 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
c) A minimum of 60 calendar days, if neither of the aforementioned options is applicable.
3 Development of canvass list or consensus body

3.1 NIST/ITL shall develop a list of potential canvassees consisting of organizations (e.g., companies, government agencies, standards developers, individuals, etc.) known to be, or who have indicated that they are, directly and materially affected by the standard. Each canvassee shall nominate one principal representative and may nominate one or more alternate representatives. No individual shall represent more than one canvassee.

3.2 In order to determine if potential canvassees are interested in participating, NIST/ITL shall conduct a pre-canvass interest survey, in which NIST/ITL informs the potential canvassees in writing about the use of the canvass method for developing evidence of consensus, and, if the potential canvassees are interested in participating, obtains an appropriate interest category classification. NIST/ITL's letter shall contain the title, designation, scope, description of the standard along with the history of its development, purpose and intended application of the standard, and an explanation of the ANSI function. The time for response shall be at least 30 calendar days from the date of the NIST/ITL's letter and shall be so noted in the letter.

All those who have agreed to participate shall be included on the canvass list, together with their agreed-upon interest categories in accordance with clause 9.3. In addition, the affiliation and interest category of each member of the consensus body shall be made available to interested parties upon request.

Once an interest survey has been completed for a standard, it need not be repeated for subsequent balloting of the document. In addition, NIST/ITL may conduct a single interest survey for a group or category of standards. A canvassee who has indicated a desire to be on the NIST/ITL's canvass list for a particular category or categories of standards shall receive the draft document(s), letter ballot(s), and all appropriate information pertaining to clauses 4.2 and 5.

The review period shall be 30 calendar days from the date of publication. Any resulting proposals for addition to the canvass list shall be referred directly to NIST/ITL.

Additional canvassees may be added by NIST/ITL before the close of the canvass ballot period. However, new canvassees will not be entitled to request any additional extensions beyond what is described in clause 4.2.

4 Conduct of canvass

4.1 Initiation of canvass

NIST/ITL may begin to conduct the canvass at any time after establishment of the consensus body.

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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 and interest category should be available. Contact information is not required.
4.2 Canvass requirements

NIST/ITL shall transmit, at minimum, the following information to all canvassees and other interested parties so requesting unless NIST/ITL has previously supplied this information:

a) the purpose and intended application of the standard;

b) a brief history and explanation of how the standard was developed;

c) an explanation of ANSI’s function and NIST/ITL’s procedures;

d) a copy of the canvass list, consisting of the name, affiliation, and category of interest of each canvasee;

e) a copy of the complete proposed American National Standard or the relevant portion under consideration when the canvasee has previously received the complete standard;

f) official letter ballot(s) to all canvassees.

NIST/ITL shall provide to the canvasee an electronic copy of the document being considered, to allow for a speedy determination of position by the canvasee. Should the document contain material that is not to be considered for approval as an American National Standard, such as an introduction or annex, a clear statement shall be included indicating those portions of the standard that are to be considered for approval by ANSI.

The ballot form used by NIST/ITL shall provide opportunity for the canvasee to vote one of the following positions:

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 (with comment).

The ballot form shall include advice that, in order to receive consideration, negative votes must be accompanied by supporting written reasons and, where possible, proposals for a solution to the problem raised. The ballot form shall provide the option for a canvasee who is inactive to indicate that the canvasee no longer wishes to be a voting member.

Negative votes without any accompanying reason or abstentions without any accompanying comment shall be considered invalid responses and shall not be considered when determining the numerical requirements for consensus. Such votes shall be recorded as "abstain without comment" or "negative without comment" and shall be reported to the BSR.
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The canvass ballot duration is 30 calendar days. The canvass ballot may be sooner if all canvasses have responded. Upon request from any canvasee giving a legitimate reason, a single 15 calendar day extension to the ballot period may be granted. At least one follow-up shall be sent to canvasses not responding. NIST/ITL shall send follow-up correspondence to those consensus body members who have not yet returned their ballots by the end of the twentieth calendar day of the ballot period.

Those not on the canvass list who have a direct and material interest in the standard have an opportunity to participate in the review of the standard during the public review process, announced in Standards Action.

4.3 Public review

Proposals for new American National Standards and proposals to revise, reaffirm, or withdraw existing American National Standards shall also be transmitted to ANSI for listing in Standards Action for comment. NIST/ITL shall determine whether such listing shall be concurrent with the canvass and whether announcement of the proposed action in other suitable media is appropriate.

4.4 Consideration of comments

Views and objections resulting from the canvass and public review shall be dealt with in accordance with clause 5.

4.5 Criteria for approval

Approval of a new standard, revision or reaffirmation of an existing standard, or an addendum to part or all of an existing standard shall require approval by at least a majority of the canvass list, excluding abstentions and invalid responses, and at least two-thirds of those voting, excluding abstentions and invalid responses.

5 Disposition of views and objections

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

5.1 PINS announcement comments

If NIST/ITL receives written comments within 30 calendar 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 calendar days from the comment deadline. Such a deliberation shall be organized by NIST/ITL and the commenter and shall be concluded before NIST/ITL may submit a draft standard for public review. If the deliberation does not take place within the 90-calendar day period and NIST/ITL can demonstrate that it has made a good faith effort to schedule and otherwise organize it, then NIST/ITL may be excused by ANSI 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 NIST/ITL and the 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.

5.2 Public review and consensus body comments

In connection with an objection articulated during a public comment period, or submitted in connection with a vote, an effort to resolve all expressed objections shall be made, and each objector shall be advised in writing of the disposition of the objection and the reasons therefore. If resolution is not achieved, the objector shall be informed in writing of the right to appeal and that an appeals process exists (see clause 7). In addition, each objection resulting from public review or submitted by a member of the consensus body, and which is not resolved (see definition in Annex A) must be reported to the BSR.

NIST/ITL may consider any comments received subsequent to the closing of the public review and comment period, or shall consider them at the next review.

Each unresolved objection with the attempt at resolution and any substantive change (see definition in Annex A) made in a proposed American National Standard shall be reported to the consensus body, along with a 30 calendar day recirculation ballot in order to afford all voting members an opportunity to respond, reaffirm or change their vote. There is no obligation by voting members to return the recirculation ballot unless the voting members wish to change their original vote. If the recirculation ballot is not returned, the original vote stands.

Substantive changes made in a proposed American National Standard shall be listed in Standards Action.

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.

6 Submittal of standard

Upon completion of the procedures for canvass, for disposition of views and objections, and for appeals, the proposed standard may be submitted to ANSI for approval. The information to be supplied to ANSI shall include:

a) title and designation of the proposed American National Standard;

b) 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);

c) a declaration that applicable procedures were followed;

d) a declaration that the proposed standard is within the scope of the previously registered standards activity;

e) a declaration that conflicts with another American National Standard have been addressed in accordance with these procedures;
f) 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;

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; and

i) identification of all unresolved negative views and objections, with names of the objector(s), and a report of attempts toward resolution.

7 Appeals

Persons who have directly and materially affected interests and who have been or may be adversely affected by a procedural action or inaction of NIST/ITL shall have the right to appeal.

NIST/ITL shall provide or arrange for an impartial appeals body composed of at least three individuals knowledgeable as to the policy or other concerns related to the appeal. Such individuals must not have demonstrably real or apparent conflicts of interest with the subject of the appeal or the person filing the appeal.

7.1 Complaint

The appellant shall file a written complaint with NIST/ITL within 30 calendar days after the date of notification of action or at any time with respect to inaction. The complaint shall state the nature of the objection(s) including any adverse effects, the clause(s) of these procedures or the standard that is at issue, actions or inactions that are at issue, and the specific remedial action(s) that would satisfy the appellant’s concerns. Previous efforts to resolve the objection(s) and the outcome of each shall be noted.

7.2 Response

Within 30 calendar days after receipt of the complaint, NIST/ITL shall respond in writing to the appellant, specifically addressing each allegation of fact in the complaint to the extent of the respondent’s knowledge.

7.3 Hearing

If the appellant and the respondent are unable to resolve the written complaint informally in a manner consistent with these procedures, the NIST/ITL shall schedule a hearing with an appeals panel on a date agreeable to all participants, giving at least 10 working days notice. A hearing will be conducted via teleconference. Alternatives to a teleconference may be considered.

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7.4 Appeals panel

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. At least two members shall be acceptable to the appellant and at least two shall be acceptable to the respondent.

7.5 Conduct of the hearing

The appellant has the burden of demonstrating adverse effects, improper actions or inactions, and the efficacy of the requested remedial action. The respondent has the burden of demonstrating that the consensus body and NIST/ITL took all actions in compliance with these procedures and that the requested remedial action would be ineffective or detrimental. Each party may adduce other pertinent arguments, and members of the appeals panel may address questions to individuals. Robert’s Rules of Order (Scott, Foresman and Company, 2000) shall apply to questions of parliamentary procedure for the hearing not covered herein.

7.6 Decision

The appeals panel shall render its decision in writing within 30 calendar days, stating findings of fact and conclusions, with reasons therefore, based on a preponderance of the evidence presented to the appeals panel. Consideration shall be given to the following positions, among others, in formulating the decision:

a) Finding for the appellant, remanding the action to the consensus body or NIST/ITL with a specific statement of the issues and facts in regard to which fair and equitable action was not taken;

b) Finding for the respondent, with a specific statement of the facts that demonstrate fair and equitable treatment of the appellant and the appellant’s objections;

c) Finding that new, substantive evidence has been introduced, and remanding the entire action to the consensus body or NIST/ITL for appropriate reconsideration.

A summary of the nature of the appeal, and the decision and rationale thereof, shall be reported by NIST/ITL to the canvass list.

8 Requests for interpretation of standards

8.1 Requesting a technical interpretation

Request for a technical interpretation of a standard shall be submitted in writing to NIST/ITL.³

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A request for technical interpretation shall contain the following information:

a) Name of organization submitting request;

b) Name of individual within the submitting organization who may be contacted concerning the request;

c) Date by which interpretation is desired;

d) Appropriate references to the standard's clauses that have a bearing on the problem cited in the request;

e) A concise explanation of the problem requiring a technical interpretation;

f) Any supporting documentation that will assist in understanding or describing the problem;

g) Any recommendations the requesting organization would like to make concerning a possible technical interpretation, along with appropriate justification or comments.

8.2 Processing a request for technical interpretation

Upon receipt, NIST/ITL will develop a draft proposed technical interpretation to the request in consultation with persons recognized as expert in the particular subject matter of the interpretation request.

Upon completion of the proposed technical interpretation, NIST/ITL shall:

a) Arrange for publication of the proposed technical interpretation (or a source from which to obtain it) in Standards Action and forward it to the members of the canvass list which approved the standard.

b) Notify the requester of the proposed technical interpretation.

Comments received as a result of the publication and review of the proposed technical interpretation shall be reviewed by NIST/ITL, as well as the initial expert consultants, and NIST/ITL will develop a final interpretation.

8.3 Dissemination of final technical interpretations

NIST/ITL shall be responsible for the dissemination of the final technical interpretation.

The final technical interpretation shall consist of the following information:

a) Definition of the problem being resolved;

b) Discussion of the issues relevant to the problem;

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c) Discussion of the solution to the problem (interpretation);

d) Effective date of the technical interpretation.

The final interpretation shall be disseminated as follows: publication in *Standards Action*; in writing to the members of the canvass list, which approved the standard; in writing to the requester; others as deemed appropriate.

NIST/ITL shall maintain a central registry of technical interpretations for reference.

Revisions to the standard resulting from requests for interpretations shall be processed in accordance with these procedures.

9 Participation and membership

9.1 Lack of dominance

Any single interest category, individual or organization shall not dominate the standards development process. 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.

9.2 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. No interest category shall be greater than fifty percent of the consensus body. In the event that an interest category exceeds fifty percent of the consensus body, NIST/ITL shall make at least two independent outreach efforts to other interest categories in an effort to maintain the required balance of interests.

9.3 Interest categories

When applying to be a voting member on a canvass list, applicants shall declare their interest category in accordance with the following list of interest categories:

**User:** Users are organizations requiring the standards based product or service to accomplish required functions or responsibilities. This category includes organizations that capture fingerprints or other biometrics; that perform examinations or comparisons of fingerprints or other biometrics; that are responsible for the storage and processing of the information; and that plan procurement of systems to capture, store, and process the information.

**Producer:** Producers are manufacturers or vendors who directly manufacture or sell equipment, expendable media, and systems, or function as service bureaus to users. This category includes, but is not limited to, the Automated Biometric Identification System (ABIS) vendors, camera manufacturers, and booking station vendors.

**Consultant:** Consultants are organizations that provide advice or system analysis functions to other organizations regarding the planning, procurement, and acquisition of
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equipment, or systems. Generally, those classified as consultants have no relationship with their client organization other than as a hired contractor.

System Integrator: System integrators are organizations that provide and integrate one or more manufacturers’ equipment combined with software to function as a system. These value-added turnkey systems are designed for user organizations. Generally, these systems are capable of performing several different tasks that use and administer very large databases.

General Interest: General interests are organizations that have a direct or material interest in the development of the standards activity but cannot be classified in any of the other categories. For example, universities or other research-oriented groups may be classified in this category. Another example is organizations whose products or services are not directly involved in the standards activity but must potentially or directly interoperate with such an activity.

Other: If none of the above categories are deemed relevant, an applicant shall identify and define their category.

9.4 Termination of voting membership

Voting members on the canvass list constitute the consensus body and have an obligation to vote and return ballots on time. Failure to return two consecutive ballots shall result in termination of voting membership by NIST/ITL.

10 Coordination and harmonization

In accordance with the latest edition of the ANSI Essential Requirements: Due process requirements for American National Standards, good faith efforts shall be made by NIST/ITL to resolve potential conflicts between and among existing American National Standards and candidate American National Standards.

11 Compliance with ANSI patent policy

NIST/ITL will comply with the ANSI Patent Policy in the latest edition of the ANSI Essential Requirements: Due process requirements for American National Standards.

12 Commercial terms and conditions

NIST/ITL will comply with the ANSI Commercial Terms and Conditions Policy contained in the latest edition of the ANSI Essential Requirements: Due process requirements for American National Standards.

13 Metric usage policy

All American National Standards developed by NIST/ITL shall specify any units of measurement using the International System of Units (SI). In addition to SI units, US Customary Engineering Units (e.g., inch, pound) may be also used if deemed to be helpful based upon common existing practice.
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14 Copyright

Standards developed and approved by ANSI under these procedures shall contain the following notice:

This document is a contribution of the National Institute of Standards and Technology and is not subject to copyright. Any organization interested in reproducing [insert standard number and title] is free to do so. However there shall be no alteration to any of the material contained in the document.

15 Records retention policy

Records shall be retained for one complete standards cycle, or until the standard is revised.

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.

16 Maintenance of standards

NIST/ITL shall follow the ANSI requirements for periodic maintenance of a standard in the latest edition of the ANSI Essential Requirements: Due process requirements for American National Standards.

17 Withdrawal of a standard

Withdrawal of an existing standard, or an addendum to part or all of an existing standard shall require approval by at least a majority of the canvass list, excluding abstentions and invalid responses, and at least two-thirds of those voting, excluding abstentions and invalid responses.

If the criteria for withdrawal of an American National Standard are met, NIST/ITL shall notify ANSI immediately and the standard shall be withdrawn as an ANS and announced in Standards Action.

18 Discontinuance of a standards project

NIST/ITL 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 NIST/ITL within 60 calendar days of the date of the final action.

Appeals of such actions shall be made to the Executive Standards Council based on procedural noncompliance.
Annex A: Definitions (normative)

Consensus body: The group that approves the content of a standard and whose vote demonstrates evidence of consensus.

In Writing: Communication sent by either mail or electronic mail (email).

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:

- “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.