



OPERATING PROCEDURES MANUAL

for the

MTCONNECT INSTITUTE STANDARDS COMMITTEE

Procedures approved by the ANSI Executive Standards Council:

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ANSI Accredited Standards Developer (ASD) and Secretariat:

MTConnect Institute
7901 Jones Branch Drive, Suite 900
McLean, VA 22102
(703) 827-5274

www.MTConnect.org

TABLE OF CONTENTS

FOREWORD	III
INTRODUCTION	III
1 GENERAL	1
1.1 PURPOSE	1
1.2 SCOPE	1
2 THE MTCCONNECT INSTITUTE STANDARDS COMMITTEE (MTCI-SC)	1
2.1 ORGANIZATION	1
2.1.1 Standards Committee Members.....	1
2.1.2 Working Groups.....	1
2.1.3 Secretariat	24
2.2 RESPONSIBILITIES	24
2.2.1 Standards Committee.....	24
2.2.2 Working Groups.....	24
2.2.3 Secretariat	24
2.3 MEMBERSHIP	34
2.3.1 Application.....	34
2.3.2 Membership Roster.....	34
2.4 INTEREST CATEGORIES.....	34
3 MEETINGS	44
3.1 MTCI-SC MEETINGS	44
3.1.1 Open Meetings.....	44
3.1.2 Quorum	44
3.2 WORKING GROUP MEETINGS.....	44
3.3 ANTITRUST	44
4 VOTING	44
4.1 VOTING ON STANDARDS.....	44
4.1.1 Authorization of Letter Ballots	54
4.2 LETTER BALLOT VOTING PERIOD.....	54
4.3 VOTING (CHOICES).....	54
4.4 SINGLE VOTE.....	54
4.5 THE VOTE.....	54
5 PROCEDURES FOR DEVELOPING A STANDARD OR TECHNICAL REPORT	54
5.1 INITIATION OF A STANDARD DEVELOPMENT PROJECT	54
5.2 PROJECT INITIATION NOTIFICATION SYSTEM (PINS).....	64
5.3 SUBMITTAL OF DRAFT STANDARDS.....	64
5.3.1 Submittal of Draft Technical Reports.....	64
5.4 DISPOSITION OF VIEWS AND OBJECTIONS	74
5.4.1 Substantive Change to a Draft	74
5.5 REPORT OF FINAL VOTING RESULT	74
5.6 SUBMITTAL OF STANDARD	74
5.7 DISCONTINUANCE OF A STANDARDS PROJECT	74
5.8 RECOMMENDATION AND REGISTRATION OF A TECHNICAL REPORT	74
6 MTCCONNECT INSTITUTE SC POLICIES	74
6.1 APPEALS POLICY	74
6.1.1 Complaint	84
6.1.2 Response	84
6.1.3 Hearing.....	84
6.1.4 Appeals Panel.....	84
6.1.5 Conduct of the Hearing.....	84
6.1.6 Decision.....	84
6.1.7 Appeals to Recommend a Technical Report.....	84
6.2 INTERPRETATIONS POLICY	84
6.3 RECORD RETENTION POLICY	94
6.4 METRIC POLICY	94
6.5 PATENT POLICY	94
6.6 COMMERCIAL TERMS AND CONDITIONS POLICY.....	94
6.7 ANTITRUST POLICY	94

FOREWORD

This document comprises and compiles the operating procedures for the MTConnect Institute Standards Committee (MTCI-SC), and is designed to comply with the updated ***ANSI Essential Requirements: Due process requirements for American National Standards*** and the ***ANSI Procedures for the Registration of Technical Reports***. These operating procedures are periodically updated, procedurally processed and approved by the ANSI Executive Standards Council to reflect the changes made to the constantly evolving ANSI *Essential Requirements* (ER).

INTRODUCTION

The purpose of this document is twofold: 1) provide the MTConnect Institute Standards Committees (MTCI-SC) members with a concise overview of the role and function of the MTCI-SC and its Working Groups as they operate within the ANSI voluntary consensus standard system; and 2) provide them with a procedural resource on the process of introducing an American National Consensus Standard and the rules that must be followed to maintain their accreditation. As an aid to understanding how the MTConnect Institute operates as an accredited standards developer within the ANSI system, the following overview is provided.

The American National Standards Institute, Inc. (ANSI) is a private non-profit federation of the nation's leading trade, technical and professional organizations, corporations, government agencies, organized labor and consumer groups engaged in or concerned with developing and promulgating national standards. There are well over ten thousand consensus standards approved by ANSI that cover standards language from crayons to machine tools.

ANSI is not a government agency nor does it write/publish consensus standards. Rather, it coordinates and harmonizes the development and writing of consensus standards by those outside constituent organizations seeking ANSI accreditation to do so. Coordination of the voluntary development of consensus standards is accomplished by:

- assisting participants in the voluntary system to reach agreements on standards needs and/or priorities;
- arranging for competent organizations to undertake standards development work;
- providing fair and effective procedures for standards development;
- resolving conflicts and preventing duplication of effort.

ANSI remains the autonomous umbrella standards body that provides consensus procedures and the formal process by which groups like the MTConnect Institute as the ANSI-accredited Standards Developer may develop, write and process standards for ANSI approval as American National Standards. In attempting to coordinate and harmonize voluntary standards, the MTConnect Institute employs the principles of consensus, openness, balance, due process and a means for appeal, as detailed in the *ANSI Essential Requirements*.

Before an MTConnect Institute draft standard can be submitted to ANSI for approval, it must be reviewed within two consensus arenas. The draft is first subjected to an official review and letter ballot of the MTConnect Institute Standards Committee and then it must be made available for Public Review for a period of forty-five days; a thirty-day comment period is available under some circumstances. These two reviews can be solicited and conducted concurrently.

It is only after the MTConnect Institute draft has undergone review within these two arenas that the MTConnect Institute can establish a case before ANSI that all possible means of due process have been faithfully carried out in achieving the best possible consensus between the MTConnect Accredited Standards Committee and the public at large.

OPERATING PROCEDURES OF THE MTCCONNECT INSTITUTE STANDARDS COMMITTEE(s)

1 GENERAL

These procedures meet the requirements for due process, openness, balance and development of consensus for approval of American National Standards as described in the document: ANSI *Essential Requirements: Due process requirements for American National Standards* (latest version). 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. A means to appeal must exist for unresolved objections.

On questions of parliamentary procedure not covered in these procedures, *Robert's Rules of Order* (latest edition) may be used to expedite due process.

1.1 Purpose

The purpose of the MTConnect Institute Standards Committee (MTCI-SC) is to develop American National Standards and Technical Reports ("Materials") for approval or registration, respectively, by the American National Standards Institute Board of Standards Review.

MTConnect Institute American National Standards and Technical Reports deliver a protocol and semantic vocabulary designed for the exchange of data between shop floor equipment and software applications used for monitoring and data analysis.

1.2 Scope

The MTCI-SC scope encompasses the MTConnect standard including all its current parts as well as future expansions or extensions to the standard. Core functionality of the standard includes a data dictionary and data structure for manufacturing, especially as it pertains to production operations ("shop floor").

2 THE MTCCONNECT INSTITUTE STANDARDS COMMITTEE (MTCI-SC)

2.1 Organization

The MTConnect Institute Standards Committee (MTCI-SC) will consist of its members, Working Groups and Secretariat. ~~It will have a title, scope, and an interest category system for its members.~~ Members will be classified by interest category. The membership will be sufficiently diverse to ensure reasonable balance and

that no single interest category ~~will constitute~~ constitutes a majority of the membership of the consensus body. MTCI will periodically (at least annually) assess the balance of interest categories. Should an imbalance occur, the MTCI will engage in outreach activity through available media (trade publications, trade association membership, *ANSI Standards Action*, MTCI Newsletter, etc.) to recruit membership and negate that imbalance.

2.1.1 ~~Standards Committee Members~~ Officers

- a) There will be a Chairperson and a Vice-Chairperson ("Officers") appointed by the Secretariat;
- ~~b) Officers automatically become MTCI-SC Members if they are not already;~~
- ~~e)b)~~ The Vice-Chairperson will carry out the Chairperson's duties if the Chairperson is unable to do so;
- ~~d)c)~~ Officers unable to continue their term will be replaced by the Secretariat and serve the remainder of their predecessor's term;
- ~~e)d)~~ An Officer may be removed from office by either the Secretariat or by a two-thirds percent vote of the MTCI-SC;
- ~~f)e)~~ The length of term for each Officer shall be four years; appointed Officers may be reaffirmed indefinitely;
- ~~g)f)~~ The officer's term will begin the meeting that follows the appointment.

2.1.2 Working Groups

Each MTConnect Institute Working Group formed by the MTCI-SC is an autonomous body under the direction and control of the MTCI-SC. Such Working Groups should have a defined scope. Working Groups are otherwise free to establish meeting agendas and goals, timetables, and *ad hoc* task groups to expedite the work of the Working Group, as long as these are in overall conformance to the Working Group's scope of work.

2.1.2 Review Board

A Review Board consisting of volunteers from the Standards Committee membership will assess proposed Materials for accuracy and consistency with respect to information modelling, vocabulary, semantics, terms and definitions, protocol, information management, communication, and security.

2.1.3 Executive Committee

An Executive Committee consisting of volunteers from the Standards Committee membership will assess proposed Materials for accuracy, consistency, and completeness prior to circulation of the Materials to the

wider SC. The Executive Committee will have no more than 12 members.

2.1.4 Other Committees

Additional committees, task groups, review boards, etc. may be established to address other areas of concern, including: Technical leadership and/or oversight for developing Materials; maintaining architectural integrity and coherence of Materials; assuring soundness and applicability of Materials; assessing strategic priorities; information modeling and architecture; coordinating efforts across or between Working Groups; creating or maintaining reference implementation(s); harmonization with other standards bodies; garnering community interest and input; articulating needs of the standard development organization.

2.1.4 Secretariat

The Secretariat for the MTCI-SC activities is the MTConnect Institute. ~~The MTConnect Institute will designate a representative as a member to the overall MTCI-SC and to each MTCI-SC Working Group. This can be the same individual, or different staff members. The MTConnect Institute may also assign an administrative assistant accountable for the administrative responsibilities and duties thereto.~~

The term “Secretariat” as used throughout these procedures means any combination of MTConnect Institute staff members, consultants, or designee(s) who are designated with these responsibilities either in whole or in part.

2.2 Responsibilities

2.2.1 Standards Committee

2.2.1.1 SC Members

The MTCI-SC members will be responsible for:

- a) ~~Handling the development of~~ Developing proposed MTConnect Institute standards and technical reports within its scope; this includes the revision, reaffirmation or withdrawal of American National Standards;
- b) Approval of proposed MTConnect Institute standards Working Groups;
- c) Maintaining the MTConnect Institute standards and technical reports in accordance with §4.7 of the ANSI *Essential Requirements*;
- d) Adopting MTConnect Institute procedures and revisions thereof;
- e) Other matters requiring MTCI-SC action as provided in these procedures; and
- f) Strictly observing rules regarding antitrust ~~and IP~~ policy.

2.2.1.2 SC Officers

The Chairperson (or the Vice-Chairperson in his/her absence) is responsible for:

- a) Providing direction and leadership needed to make the work of the MTCI-SC and its Working Groups successful;
- ~~a)b)With the Secretariat, preparation / distribution of meeting agendas;~~ and,
- ~~b)c)Chairing all MTCI-SC meetings.~~

2.2.2 Working Groups

- a) Provide issues, concepts, draft language and documentation to develop a draft American National Standard or Technical Report;
- b) Develop the definitive / technical content of an assigned standard or technical report.

2.2.3 Secretariat

- a) Maintain ANSI-accreditation as an Accredited Standards Developer (ASD) in accordance with the relevant requirements contained in the ANSI *Essential Requirements*;
- b) Provide oversight for MTCI-SC compliance with these and ANSI procedures;
- c) Assure fair and equitable consideration of all viewpoints and review the MTCI-SC at least annually for imbalance or evidence of dominance;
- d) Maintain a current and accurate roster of the MTCI-SC, and a list of standards and technical reports for which the MTCI-SC is responsible;
- e) ~~Provide a technical representative and administrative assistant to perform oversight activities and the~~ Perform administrative responsibilities and duties, including but not limited to:
 - meeting notices and arrangements;
 - processing of membership requests;
 - with the Chair, preparation / distribution of meeting agendas;
 - meeting reports;
 - ballots;
 - ~~draft standards;~~
 - maintenance of adequate records.
- f) Initiate new project(s) to develop or revise an American National Standard by submitting to ANSI, a PINS form for registration of same;
- g) Conduct MTCI-SC formal review and voting of candidate draft standards, as well as coordinate with ANSI (BSR 8 form) for the public review and comment period (usually concurrent or close to concurrent with the MTCI-SC review);
- h) Submit candidate standards approved by the MTCI-SC along with supporting documentation (ANSI BSR 9 form), for ANSI BSR review and approval as American National Standards;
- i) Recommend candidate technical reports for ANSI to register as an MTConnect Institute Technical Report;

- j) Publish ANSI approved or registered MTConnect standards or technical reports, revisions and addenda (see §4.5 of the ANSI *Essential Requirements*, as well as the ANSI Procedures for the Registration of ANSI Technical Reports);
- k) Coordinate and respond to requests for interpretations of the standard(s) or technical report(s) developed by the MTConnect Institute, per 6.2 of these procedures;
- l) Appoint ~~either~~ the MTCI-SC Chairperson and/or Vice-Chairperson;
- m) Develop revisions to these MTConnect Institute Operating Procedures as needed or required, and coordinate their subsequent approval by the MTCI-SC, and by ANSI;
- n) Submit to periodic audit by ANSI of overall procedural conformance;
- o) Enforce antitrust regulations at MTCI-SC meetings or other related functions; and
- p) Perform any other feasible administrative or oversight functions as required by these procedures, by ANSI, or as deemed necessary to accomplish the overall objectives of the MTConnect Institute.

2.3 Membership

Members of the MTCI-SC will consist of organizations having a direct and material interest in the activities of the MTCI-SC.

2.3.1 Application

The application for membership is at www.mtconnect.org and maintained by the Secretariat. Applicants must provide name, organization name, and email address of a primary point of contact ("Delegate"). A request for membership in the MTCI-SC will be addressed to the MTConnect Institute and will identify a primary point of contact ("Delegate").

2.3.2 Membership Roster

The Secretariat will maintain a current and accurate MTCI-SC roster ~~and will distribute an updated roster to the members on request.~~ The rosters will include the following:

- a) Title of the MTCI-SC and its designation;
- b) Scope of the MTCI-SC;
- c) Secretariat - name of organization, name of the technical representative, and contact information;
- d) Officers - Chairperson and Vice-Chairperson;
- e) Members - name of organization or agency, its delegate and contact person (as applicable); and
- f) Interest Category of each member.

A public roster of company names is at www.mtconnect.org and maintained by the Secretariat. A member may request that their company name be suppressed from the public roster by submitting a written request to the Secretariat.

2.4 Interest Categories

All appropriate interests that might be directly and materially affected by the standards activity of the MTCI-SC will have the opportunity for fair and equitable participation without dominance by any single interest category. Each MTCI-SC member will indicate an interest category as appropriate and in accordance with the MTCI-SC's established categories as specified below: (see also §2.3 of the ANSI *Essential Requirements*).

- a) Equipment Supplier;
- b) End-User;
- c) Integrator;
- d) Other.

The MTCI-SC interest categories are defined as follows:

Equipment Supplier: one that manufactures; especially an employer of workers in manufacturing, or one who represents the manufacturing interests.

End-User: one that uses; an individual, corporation, partnership other legal entity or form of business that utilizes a machine, machine production system or related equipment.

Integrator: An entity that designs, provides, or assembles a machine, its associated machines or equipment, control interfaces, interconnections or the control system into a machinery system.

Other: An entity not adequately covered by any of the above interest categories. This can include but not be limited to: trade associations, professional societies, government agencies, academic institutions or distributor/retailers.

In cases where a single MTCI-SC member may represent multiple interest categories, the primary interest category should be selected. For example, a multinational parent company with divisions or subsidiaries in multiple interest categories can select its own primary interest category as the parent. If only one division is a member, or the divisions are each members, each should indicate their own primary interest category.

~~A trade association, professional society, etc. may indicate an interest category based on its membership or on its own interest. For example, a trade association dedicated to Equipment Suppliers can select "Equipment Supplier," but a professional association for engineering services can select "Other."~~

3 MEETINGS

3.1 MTCI-SC Meetings

MTCI-SC meetings will generally be held on a quarterly basis, but at a minimum, annually. Meetings will be organized for the purpose of conducting business including ~~via~~ voting (provided a quorum as described in §3.1.2 is present). The conduct of such business includes but is not limited to making assignments, receiving reports of work, considering the need for draft standards or technical reports, resolving differences among Working Groups, and considering views and objections from any source.

~~Voting at a MTCI-SC meeting that fulfills quorum requirements is authorized on all business before the MTCI-SC with the exception of approving draft candidate American National Standards or Technical Reports. This activity can only be done by letter ballot amongst the consensus body. Reaffirmation of standards or technical reports can be voted on at a MTCI-SC meeting but any consensus body members not present will be afforded the opportunity to register a vote via letter ballot.~~

~~The MTCConnect Chairperson or Vice-Chairperson will be present at all meetings.~~

3.1.1 Open Meetings

Meetings of the MTCI-SC will be open to all members and others having a direct and material interest, including members of the general public. At least four weeks' notice of regularly scheduled meetings will be given to ANSI by the Secretariat for publication in *ANSI Standards Action* and in other media designed to reach directly and materially affected interests, as deemed appropriate by the Secretariat. The notice will describe the purpose of the meeting and will identify a readily available source for further information. An agenda will be available and will be distributed in advance of the meeting to members and to others expressing interest. Non-members choosing to attend an MTCConnect meeting will be there as observers only. Meeting reports will be generated and distributed by the Secretariat.

3.1.2 Quorum

A quorum is the number ~~of Officers or~~ Members of a body that when duly assembled, is validly competent and can proceed to transact the business of that body. At least 15 % or 25 of the MTCI-SC members present at a meeting (whichever is lower) will constitute a quorum for conducting business at a meeting. If a quorum is not present, actions/decisions may be taken subject to confirmation via subsequent letter ballot.

3.2 Working Group Meetings

Each MTCConnect Working Group formed by the MTCI-SC can determine their own meeting schedule and whether to hold in-person or web meetings, or some combination. Some documentation or report of the Working Group meeting should be recorded and saved.

3.3 Antitrust

The MTCConnect Institute, as the MTCConnect Secretariat, is a registered corporation with its principal place of business in the United States. The MTCConnect Institute conducts its meetings under the auspices of the U.S. Department of Justice antitrust regulations (Sherman Antitrust Act). So too, any MTCConnect-related meeting is subject to these same regulations, and they will be strictly observed. In brief, the following discussions are prohibited either inside of, or in conjunction with Secretariat sponsored meetings:

- a) Discussion which could be interpreted as collusion or other attempt to agree or bring about an understanding regarding price, conditions of sale including warranties, and customers;
- b) Discussion regarding cost data of any manufacturer or seller;
- c) Discussion on pricing or pricing methods;
- d) Discussion on marketing plans or plans for introduction of innovative technology;
- e) Discussion which could be interpreted as an attempt to exclude from manufacture or sale by means of standardization requirements greater than needed to effect a legitimate end use; or
- f) Discussion which could be interpreted as an agreement or understanding to develop a standard, recommended practice, technical practice or interpretation, the purpose of which would be to affect the competitive position of any person or business entity.

Although everyone in the entire "MTCConnect community" is responsible for observing antitrust regulations, the Secretariat is ultimately accountable for their application.

4 VOTING

4.1 Voting on Standards

Voting on standards will be conducted by the Secretariat amongst the "consensus body" which is the MTCI-SC. Voting on all matters except approval of a new or revised standard may be done either by letter ballot or in person at quorate MTCI-SC meetings. Voting on the approval of new or revised standards shall only be conducted via official letter ballot on the final draft standard ~~and authorized~~ by the Secretariat.

4.1.1 Authorization of Letter Ballots

Letter Ballots may only be authorized by the Secretariat.

4.2 Letter Ballot Voting Period

The voting period for letter ballots on final draft standards will end 45 days from the date of issue or as soon as all ballots are returned, whichever comes earlier. An extension beyond the 45-day voting period may be granted at the MTCI-SC Chairperson's or Secretariat's option, if either believes the measure is warranted.

The voting period for letter ballots on all other MTConnect related administrative or procedural matters will end 45 days from the date of issue or as soon as all ballots are returned, whichever comes earlier.

A follow-up communication requesting immediate return of a letter ballot shall be sent, as appropriate, to MTCI-SC members (~~delegates and alternate members~~) whose votes have not been received within 14 days before the ballot closes. Additional and/or more frequent reminders may be sent at the discretion of the Secretariat.

4.3 Voting (Choices)

Each MTCI-SC member (~~delegate and alternate~~) will vote (choose) one of the following positions:

- a) Approval;
- b) Approval, with comment(s);
- c) Abstain (with or without comment);
- d) Disapproval, with reasons (the reasons for a negative vote will be given and if possible should include specific wording or actions that would resolve the objection). If 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. Such votes (i.e., negative vote without comment or negative vote accompanied by comments not related to the proposal) shall be factored into the numerical requirements for consensus. The Secretariat is not required to solicit any comments from the negative voter.

4.4 Single Vote

An MTCI-SC member will have only one vote. Generally, this means that no individual organization representative will have more than one vote. However, if two or more organizations appoint the same individual to represent each of them, that individual may cast a separate vote for each organization represented. MTCI-SC Members having multiple representatives may only have a single vote.

4.5 The Vote

To be considered a valid vote, the MTCI-SC must have a majority of the listed members actually vote (or return an official ballot, including abstentions).

In cases that do not meet the above criterion, the Secretariat must either recast the entire vote, or letter ballot the balance of non-voters until such time as a numerically valid majority has cast a vote.

On all voting issues, a two-thirds (rounded to the nearest whole number) approval of those returned ballots from a valid vote will result in the vote passing. The following is a list of voting issues:

- a) Creation of a new standard or technical report;
- b) Approval of a draft of a new standard or reaffirmation of an existing one;
- c) Reaffirmation of an existing technical report;
- d) Approval of a revision or addendum to part or all of a standard;
- e) Approval of a change of the MTCI-SC scope;
- f) Withdrawal of an *existing* standard or technical report;
- ~~g) Adoption of the MTCI-SC operating procedures, interest categories, or revisions thereof;~~
- h)g) Adoption of relevant and appropriate ISO or IEC standards as American National Standards;
- i)h) Formation of a Working Group, including its scope and duties, or changes in scope;
- j)i) Other matters, as deemed necessary by the Secretariat.

Items (a) through (gh) above all require use of a formal Letter Ballot. Reaffirmation of standards or technical reports can be voted on at a MTCI-SC meeting but any consensus body members not present will be afforded the opportunity to register a vote via letter ballot.

5 Procedures for Developing a Standard or Technical Report

5.1 Initiation of a Standard Development Project

After identification of the need for a MTConnect Institute standard or technical report, any member of the MTCI-SC or an interested member of the general public may petition the Secretariat in writing for its formation, outlining the scope of the anticipated standard or technical report and justifying the perceived need. The Secretariat will then coordinate a vote on the subject by the MTCI-SC.

5.2 Project Initiation Notification System (PINS)

A PINS form will be submitted at the initiation of a project. Comments received in connection with a PINS announcement shall be handled in accordance with these procedures.

Subsequent to the MTCI-SC approval process and within six months, a Project Initiation Notification System (PINS) form will be filed with ANSI to initiate, revise or reaffirm an American National Standard by the Secretariat for publication in *ANSI Standards Action*. The Secretariat will cause timely resolution of any negative public comments.

If the Secretariat receives written comments within 30 days from the publication date of a PINS announcement in *ANSI 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 *ANSI 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 Secretariat and the commenter and shall be concluded before the Secretariat may submit a draft standard for public review. If the deliberation does not take place within the 90-day period and the Secretariat can demonstrate that it has made a good faith effort to schedule and otherwise organize it, then the Secretariat will be excused from compliance with this requirement.

The outcome of a PINS deliberation shall be conveyed in writing (the "Deliberation Report") within 30 days after the conclusion of the deliberation by the developer to the commenter and to ANSI. Upon submission of the Deliberation Report, the developer may continue with the submission of the proposed standard for public review. If additional deliberations take place, they should not delay the submission of the proposed standard for public review, and an updated Deliberation Report shall be conveyed within 30 days after each deliberation. Any actions agreed upon from the deliberations shall be carried out in a reasonably timely manner, but normally should not exceed 90 days following the deliberation.

Subsequently, the developer shall include all of the Deliberation Report(s) with the BSR-9 submittal to the ANSI Board of Standards Review (BSR) for consideration should the developer ultimately submit the subject standard to ANSI for approval. Stakeholders who were involved in the PINS deliberation process may also file separate Deliberation Report(s) with ANSI and the developer within 30 days after conclusion of any deliberation for consideration by

the BSR, if the standard is submitted to ANSI for approval.

While the outcome is not binding, unless binding provisions are agreed to by the developer, participants are encouraged to develop a consensus on whether and how the standards development project should proceed.

5.3 Submittal of Draft Standards

Upon completing the development of a draft standard, the Working Group Chairperson will request the Secretariat submit the final draft to the MTCI-SC for a formal review via letter ballot. The Secretariat may conduct an editorial review, authorize submission of the final draft to the Secretariat for editorial review and submission to the MTCI-SC for a formal review via letter ballot.

~~Once the project development has concluded, t~~The Secretariat will submit the BSR-8 form to ANSI for listing/comments in *ANSI Standards Action* at or around the same time as it initiates the formal comment/voting period with the MTCI-SC.

The Secretariat will generally submit the final draft to the MTCI-SC and solicit public comment through *ANSI Standards Action* concurrently.

The public comment period will be one of the following:

- a) A minimum of thirty days if the full text of the revision(s) can be published in *ANSI Standards Action*;
- b) A minimum of forty-five days if the document is available in an electronic format 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 *ANSI Standards Action*; or
- c) A minimum of sixty days, if neither of the above two options are applicable.

5.3.1 Submittal of Draft Technical Reports

Upon completing the development of a draft technical report, the Secretariat will conduct an editorial review and consider recommendation to ANSI for registration as an MTConnect Technical Report. The Secretariat has discretionary authority to submit the draft for comment from the MTCI-SC and public comment. The resolution of any comments received will be less formal than that required to resolve comments on a draft standard. The editorial review of a draft technical report will consist only of minor grammatical edits or conformance to any MTCI-SC style elements. See also §5.8 and the ANSI Procedures for the Registration of ANSI Technical Reports.

5.4 Disposition of Views and Objections

When the balloting has been closed, the Secretariat will compile all comments received and conduct an appropriate comment resolution process.

Prompt consideration will be given to the expressed views and objections of all participants, including those commenting on the listing in *ANSI Standards Action*. An effort to resolve all expressed objections will be made, and each objector will be advised in writing of the disposition of the objection and the reasons therefore, and of their right to appeal such decisions.

5.4.1 Substantive Change to a Draft

Substantive changes made to a draft document, in addition to unresolved objections from public review and from the vote of the consensus body as well as attempts at resolution, will require an additional 30-day ballot for both MTCI-SC and public review, in order to afford all members the opportunity to respond, reaffirm or change their votes. If consensus is determined to advance the candidate American National Standard and a standing objection remains despite all reasonable attempts to resolve it, the consensus body will be notified of this fact and the objector will be provided with the MTConnect appeals policy in clause 7, which includes their right to appeal the decision to process a standard. Appeals must include the fee detailed in §6.1.1. Only the substantive changes, not the entire draft, are subject to this follow-up requirement. The Secretariat, usually in consultation and consensus with the Standards Committee and/or Working Group, is responsible for determining a substantive change. A conservative interpretation shall be applied to the determination of whether a change is substantive or editorial, erring on the side of substantive.

Editorial changes are not subject to the requirement of an additional 30-day ballot (as above). An example of an editorial change is a correction in typographical errors or grammar or clarification that does not change the intent of the language. Examples of substantive changes would be changes in numerical values or language (i.e., changing an advisory requirement by changing the word “should” to “shall,” or vice-versa, or adding or removing a normative reference (see also, §§ 2.4, 2.5 and Annex A of the *ANSI Essential Requirements*)).

5.5 Report of Final Voting Result

The final result of the voting will be recorded, tabulated and reported, as appropriate, by the Secretariat.

5.6 Submittal of Standard

Upon completion of balloting, resolution of comments, objections, appeals, and re-balloting as needed, the

Secretariat will submit to the ANSI Board of Standards Review, a BSR-9 form, along with any other required or requested documentation.

Upon receipt of approval as an American National Standard from the ANSI BSR, the Secretariat will begin the process of publishing the MTConnect standard. Publication of an approved standard will be completed within six months from date of ANSI approval.

5.7 Discontinuance of a Standards Project

The Secretariat 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 Secretariat within 60 days of the date of the final action. The Secretariat shall notify ANSI upon the decision made to discontinue a project.

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

5.8 Recommendation and Registration of a Technical Report

The ANSI Procedures for the Registration of ANSI Technical Reports place the decision to publish a technical report with the Accredited Standards Developer, in conformance with its own operating procedures. When the Secretariat receives a formal request from a technical report writing Working Group Chairperson that the draft document is “final” and ready for registration by ANSI, the Secretariat accepts the responsibility and will be accountable to exercise due diligence in ensuring that due process during the development of the technical report as well as consensus has been achieved within the Work Group or the MTConnect community as a whole. The Secretariat reserves the right to conduct additional review at its discretion (e.g., MTCI-SC ballot or additional public review), or to deny recommendation to ANSI for registration as a technical report. See also, the *ANSI Procedures for the Registration of Technical Reports*, and §6.1.8 on appeals.

6 MTConnect Institute SC **POLICIES**

6.1 Appeals Policy

Persons who have directly and materially affected interests and who have been, or who presume they will be adversely affected by a MTConnect Institute standard within the MTConnect Institute’s jurisdiction,

will have the right to appeal procedural actions (or inactions) of the MTConnect Institute or the Secretariat.

6.1.1 Complaint

The appellant must file a written complaint with the Secretariat within twenty-one days after the date of action. For the complaint to be considered, the appellant shall include a non-refundable \$250 filing fee, or alternatively may file a fee waiver or fee reduction request based on cause. If a decision on the fee waiver is rendered within forty-eight hours of the request, the 21-day period for filing the complaint above will remain in effect unless an extension for cause is requested. If a decision on the fee waiver/reduction is not rendered within the specified time, the twenty-one days will begin upon transmission of the decision. The complaint will state the nature of the objection(s) including any adverse effects, the clause(s) of these (or ANSI) procedures or the standard(s) that is at issue, actions or in-actions 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 will be noted.

6.1.2 Response

Within fourteen days after receipt of a complaint, the respondent (MTConnect Chairperson or Secretariat representative) will respond in writing to the appellant, specifically addressing each allegation of fact in the complaint to the extent of the respondent's knowledge.

6.1.3 Hearing

If the appellant and the respondent are unable to resolve the written complaint informally in a manner consistent with these procedures, the Secretariat will schedule a hearing with an appeals panel on a date agreeable to all participants.

6.1.4 Appeals Panel

The appeals panel will 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 MTConnect Institute. If the appellant and respondent cannot agree on the composition of an appeals panel within 10 working days, MT Connect Institute's Board of Trustees shall appoint the panel.

6.1.5 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 MTCI-SC and the Secretariat 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. For the hearing, *Robert's Rules of Order* (latest edition) will apply to questions of parliamentary procedure not otherwise covered herein.

6.1.6 Decision

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

- a) Finding for the appellant, remanding the action to the MTCI-SC or the Secretariat 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 MTCI-SC, or the Secretariat for appropriate reconsideration.

6.1.7 Appeals to Recommend a Technical Report

Materially affected interests who wish to appeal the Secretariat's recommendation of a technical report to ANSI for registration, or refusal to make such recommendation, may avail themselves of the preceding §6.1 appeals policy.

6.2 Interpretations Policy

The MTCI-SC does not formally provide interpretations of its standards or technical reports but regards such requests as comments to be considered for clarification in the revision process (cycle) of a standard or technical report.

Any such requests for interpretation will be filed by the Secretariat and submitted to the appropriate MTCI-SC Work Group for consideration of incorporation or clarification.

Inquiries requesting an interpretation of a MTCI-SC approved standard or technical reports must be in writing and will be responded to by the Secretariat with a copy of the MTCI-SC Interpretations Policy and an invitation to participate in that particular standard or technical report during its current or next revision cycle.

6.3 Record Retention Policy

Each Working Group will submit to the MTConnect Secretariat a copy of any meeting notices, agendas, minutes, and draft documents. The Secretariat will retain all records related to a standards development project, in addition to other records concerning new, revised or reaffirmed American National Standards (e.g., letter ballots, comments, disposition of comments, notices of appeal, membership records, etc.) ~~in either electronic or paper media~~ for one (1) complete standard's cycle or until the standard or technical report is revised. Upon completion of its next published revision, all previously retained records specific to the standard or technical report may be discarded or destroyed. The actual approved American National Standard or registered Technical Report will be retained for a period of at least thirty (10) years. All record retention will be electronic.

Records for withdrawn standards will be retained from date of withdrawal for a minimum of five (5) years.

6.4 Metric Policy

Where dimensions are listed and other units of measure will be given in metric (SI) units followed by Imperial units (e.g., inches, pounds, gallons) in parentheses (conversion of units should include enough significant digits to convey the appropriate measurement accuracy for the intended application). Exceptions to this policy due to space limitations, electronic/software limitations, or other potential problems will be allowed and will be at the sole discretion of the Secretariat.

6.5 Patent Policy

There is no objection in principle to drafting a proposed MTConnect safety standard in terms that include the use of a patented item, if it is generally agreed that technical reasons justify this approach.

Participants in the ASD/ANSI standards development process are encouraged to bring patents with claims believed to be essential to the attention of the ANSI-Accredited Standards Developer (ASD).

If the Secretariat receives a notice that a proposed, revised or approved MTConnect standard may require the use of such a patent claim that is not already covered by an existing assurance, the procedures in §§ 3.1.1 through 3.1.4 of the *ANSI Essential Requirements: Due process requirements for American National Standards*, will be followed.

6.6 Commercial Terms and Conditions Policy

MTConnect Institute standards shall comply with Section 3.2, Commercial Terms and Conditions of *ANSI*

Essential Requirements: Due process requirements for American National Standards.

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. Generally, it is not acceptable to include proper names or trademarks of specific companies or organizations in the text of a standard or in an annex (or the equivalent). The appearance that a standard endorses any particular product(s), service(s) or company(ies) 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 or proper name.

6.7 Antitrust Policy

The MTConnect Institute shall conduct its meetings, including standards development meetings, under the precepts, constructs and legal framework of antitrust legislation contained in the Sherman Antitrust Act. These relevant antitrust principles shall be reviewed with participants prior to every MTConnect ASC standards development meeting.

For further detail on the implementation of this antitrust policy, see §3.3.