Annex Z
Operating Guide for ASME AED, A112, B1, B5, B18, B29, B36, B40, B46, B73, B89, B107, BP, EA, HST, MAM, MBE, MFC, MUS, PTC, RAP, STS, TM, VVUQ and Y14 Standards Committees reporting to the Board on Standardization & Testing

Approved by the [Cognizant Supervisory Board] on: [Date of Approval]

I. General (Reference Section 1)
This operating guide provides specific information related to the following Standards Committees:

- AED on Aerospace and Advanced Engineering Drawing Standards
- A112 on Plumbing Materials and Equipment
- B1 on Screw Threads
- B5 on Machine Tools - Components, Elements, Performance, and Equipment
- B18 on Standardization of Bolts, Nuts, Rivets, Screws, Washers, and Similar Fasteners
- B29 Standards Committee on Chains, Attachments, and Sprockets for Power Transmission and Conveying
- B36 on Nominal Wrought Pipe Sizes and Wall Thicknesses
- B40 for Pressure and Temperature Instruments and Accessories
- B46 on Classification and Designation of Surface Qualities
- B73 on Chemical Standard Pumps
- B89 on Dimensional Metrology
- B107 on Hand Tools and Accessories
- BP on Bioprinters
- EA on Industrial System Energy Assessment
- HST on Overhead Hoists
- MAM on Manufacturing and Advanced Manufacturing
- MBE on Model Based Enterprise
- MFC on Measurement of Fluid Flow in Closed Conduits
- MUS on Mobile Unmanned Systems
- PTC on Performance Test Codes
- RAP on Power Plant Reliability, Availability and Performance
- STS on Steel Stacks
- TM on Thermal Medicine
- VVUQ on Verification, Validation, and Uncertainty Quantification in Computational Modeling and Simulation
- Y14 Engineering Product Definition and Related Documentation Practices

that reporting to the Board on Standardization & Testing, hereafter referred to as the Committee, and provides guidance on its practices and procedural preferences.

II. Charter (Reference Section 1)
The Charter of the AED, A112, B1, B5, B18, B29, B36, B40, B46, B73, B89, B107, BP, EA, HST, MAM, MBE, MFC, MUS, PTC, RAP, STS, TM, VVUQ and Y14 Committees can be found in Appendix I.

III. Standards Committee Membership

Number of Consensus Body Members (Reference Para. 3.3)

The Committee:
☒ prefers to operate with no more than 35 members.
☐ does not have a preferred upper limit on the number of its members

☒ prefers to operate with no fewer than 5 members.
☐ does not have a preferred lower limit on the number of its members

Additional Preferences for Number of Consensus Body Members:

Membership Duties (Reference Para. 3.3.1.1.1)

Members, their alternates, or their representatives are expected to be in attendance and participate in not less than xx% of all scheduled meetings of the standards committee (see table below).

Additional Preferences for Attendance at Meetings:

See below table for the % by standards committee.

For Standards Committees that hold one meeting a year the attendance and participate % is for a three-year period.

For Standards Committees that hold two or more meetings a year the attendance and participate % is for a two-year period.

Members or their alternates are expected to participate on not less than yy% of all standards committee ballots.

<table>
<thead>
<tr>
<th></th>
<th>Members, their alternates, or their representatives are expected to be in attendance and participate in not less than xx% of all scheduled meetings of the standards committee</th>
<th>Members or their alternates are expected to participate on not less than yy% of all standards committee ballots.</th>
</tr>
</thead>
<tbody>
<tr>
<td>A112, AED, B1, B5, B29, B36, B40, B46, B73, B107, BP, EA, HST, MAM, MBE, MFC, MUS, PTC, RAP, TM, VVUQ, Y14</td>
<td>50</td>
<td>75</td>
</tr>
</tbody>
</table>
Interest Categories (Reference Para. 3.3.1.1.2)
Members of the Committee are typically identified by the following interest categories (See Appendix 2 for the definition of each interest category):
☒ AA Constructor
☒ AB Designer
☒ AC Designer/Constructor
☒ AD Distributor
☐ AE Employee/Union Interest
☒ AF General Interest
☐ AG Installer
☒ AH Insurance/Inspection
☒ AI Laboratory/Testing
☒ AK Manufacturer
☐ AM Material Manufacturer
☒ AO Owner
☐ AP Pipeline Operator/Owner
☐ AR Oil Refining/Production
☒ AT Regulatory
☒ AV Trainer/Educator
☒ AW User
☐ AX Utility
☒ AY Government
☒ CA Producer – Airframe/Power Plant
☐ CM Chemical Manufacturing
☐ DE Design/Engineering
☒ GS Gage Manufacturer
☐ MC Cast Boiler Manufacturer
☐ MH Water Heater Manufacturer
☐ MW Wrought Boiler Manufacturer
☐ OP Pressure Relief Device Manufacturer
☐ PP Petroleum Production
☐ PR Petroleum Refining
☐ RM Repair Manufacturing
☒ SP Standards Development Organization

Additional Guidance for Interest Categories:

Committees can use AA and AB but should not use AA, AB and AC. Committees should not use AA and AC, or AB and AC.
Change in Interest Category (Reference Para. 3.3.1.1.2(d))
When a member’s interest category changes that does not result in an imbalance, the Committee prefers to:
☐ Reaffirm the member to complete the present term, under the new interest category
☒ Reappoint the member for a new full term, under the new interest category
☐ No preference

Additional Preferences for Standards Committee Membership:

IV. Subordinate Group Membership
Establishment of Subordinate Groups (Reference Para. 3.2.2.1)
Subordinate groups that do not report directly to the standards committee are typically established by:
☐ The parent committee
☒ The consensus body (B89, MAM, TM, and VVUQ)
☒ Not applicable (A112, AED, B1, B5, B18, B29, B36, B40, B46, B73, B107, BP, EA HST, MBE, MFC, MUS, PTC, RAP, STS and Y14)

Subordinate Group Membership (Reference Section 3.4)
Membership actions for subordinate groups that report directly to the standards committee are typically approved by:
☒ The consensus body
☐ The Chair of the consensus body
☐ Not applicable

Membership actions for subordinate groups that do not report directly to the standards committee are typically approved by:
☐ The parent committee
☒ The Chair of the parent committee (B89, MAM, TM, and VVUQ)
☒ The consensus body (B89, MAM, TM, and VVUQ)
☐ The Chair of the consensus body
☒ Not applicable (A112, AED, B1, B5, B18, B29, B36, B40, B46, B73, B107, BP, EA HST, MBE, MFC, MUS, PTC, RAP, STS and Y14)

Chairs and Vice Chairs of Subordinate Groups that do not report directly to the Standards Committee (Reference Para. 3.4.3.2)
Chairs and Vice Chairs of subordinate groups that do not report directly to the standards committee are typically nominated by
☐ The Chair of the parent committee
☒ Election method specified in 3.3.4.2.1.1 (B89, MAM, TM, and VVUQ)
Chairs and Vice Chairs of subordinate groups that do not report directly to the standards committee are typically appointed by:
☒ The parent committee (B89, MAM, TM, and VVUQ)
☐ The consensus body
☒ Not applicable (A112, AED, B1, B5, B18, B29, B36, B40, B46, B73, B107, BP, EA HST, MBE, MFC, MUS, PTC, RAP, STS and Y14)

Additional Preferences for Subordinate Group Membership:
Subordinate Groups should use para. 3.3.1.2(b) as a guideline concerning limits on the number of members from a Single Organization.

For Honorary members, at periodic intervals (e.g., every five years) ASME staff should reach out to the Honorary Member to determine if they wish to remain as an Honorary member. If after a reasonable effort ASME staff cannot reach the honorary member, they shall inform the appropriate committee and the honorary member may be removed.

V Standards Committee Ballot Authorization (Reference Para. 4.4.2)
The Committee prefers standards committee ballot be authorized by:
☐ The subordinate group responsible for the standards proposal
☐ An officer of the subordinate group responsible for the standards proposal
☐ An officer of the standards committee
☐ Members of the standards committee
☒ No Preference

Additional Preferences for Authorization of Standards Committee Ballot:

VI Interpretations
Issuance of Interpretations (Reference Section 5)
Interpretations, generally, are
☒ not provided for any standards within the committee charter (AED, B1, B40, B73, MBE and Y14)
☒ provided for all standards within the committee charter (A112, B5, B18, B29, B36, B46, B89, B107, BP, EA, HST, MAM, MFC, MUS, PTC, RAP, STS, TM, VVUQ)
☐ provided for all standards within the committee charter, except the following:
Approval of Interpretations (Reference Para. 5.2)
When interpretations are issued, the Committee prefers to approve them via
☐ Consensus Body
☐ Cognizant Subordinate Group
☐ Special Committee
☒ No Preference

Additional Preferences for Interpretations:
For committees with subcommittees the following should be used to select the special inquiry committee members:
The Chair and Vice Chair of the subcommittee directly associated with development of the standard involved in the inquiry should be members of the special inquiry committee. The third and fourth members shall be selected from the subcommittee or consensus committee through consultation between the subcommittee Chair and Staff Secretary of the concerned committee. If the Chair or Vice Chair of the subcommittee cannot serve on the special inquiry committee (e.g., because of a potential conflict of interest, or there is no Vice Chair), the remaining officer of the subcommittee and the Secretary shall select an alternate for the particular inquiry.

Approval of a revision to an issued interpretation shall be by the same or higher committee, which approved the original interpretation. For example, a special inquiry committee or subcommittee cannot revise an interpretation approved by the consensus committee. The special inquiry committee or subcommittee may recommend a revision, but the consensus committee would have the final vote.

If a PTC special inquiry committee is used to consider an inquiry when they ballot the inquiry proposal the PTC Standards Committee should be copied on the ballot for review and comment.

If a PTC subcommittee is used to consider an inquiry when they ballot the inquiry proposal the PTC Standards Committee should be copied on the ballot for review and comment.

VII Cases
Issuance of Cases (Reference Section 6)
Cases, generally, are
☐ not provided for any standard within the committee charter
☑ provided for all standards within the committee charter
☑ provided for all standards within the committee charter, except the following:
  all joint CSA/ASME A112 standards and ASSE/CSA/ASME A112 standards
  
  
  
☐ provided for only the following standards:

Cases are typically reviewed on the following cycle:
Three months prior to five years after the date of approval (i.e., since last revision or reaffirmation unless an earlier expiration date is specified in the Case.

Additional Preferences for Cases:

VIII Technically Affected Parties
Parties Outside of ASME’s Committee Structure (Reference Para. 4.4.5)
Technically affected parties outside of ASME’s committee structure are typically provided an opportunity to review and comment on proposals during:
  ☑ the ANSI Public Review only (A112, AED, B1, B5, B18, B29, B36, B40, B46, B73, B89, B107, BP, EA, HST, MAM, MBE, MFC, MUS, RAP, STS, TM, VVUQ, and Y14)
  ☑ a third party/industry review in addition to the ANSI Public Review (PTC Standards)
  ☐ the ASME Public Review only
### Parties Within ASME’s Committee Structure (Reference Para. 4.4.2.1.2.2)

The committees noted below are typically affected by changes to this committee’s standards as indicated below:

<table>
<thead>
<tr>
<th>Standard</th>
<th>Section/Part (if applicable)</th>
<th>Committees(^1) typically technically affected by revisions</th>
<th>Typical Timing of Review &amp; Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>AED-1</td>
<td>Entire Standard</td>
<td>Y14 Standards Committee, Y14 Subcommittee 5</td>
<td>Included on Standards Committee First Consideration ballots and recirculation’s</td>
</tr>
<tr>
<td>B1.25</td>
<td>Entire Standard</td>
<td>B89 Standards Committee</td>
<td>Included on Standards Committee First Consideration ballots and recirculation’s</td>
</tr>
<tr>
<td>B18.2.9</td>
<td>Entire Standard</td>
<td>B89 Standards Committee</td>
<td>Included on Standards Committee First Consideration ballots and recirculation’s</td>
</tr>
<tr>
<td>B18.6.3</td>
<td>Entire Standard</td>
<td>B5 Standards Committee</td>
<td>Included on Standards Committee First Consideration ballot</td>
</tr>
</tbody>
</table>

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\(^1\) Committees may include conference committees or regulatory committees.
<table>
<thead>
<tr>
<th>Standard</th>
<th>Part Type</th>
<th>Committee</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>B29.24M</td>
<td>Entire Standard</td>
<td>HST Standards Committee or B30 Subcommittee 16</td>
<td>Included on Standards Committee First Consideration ballot</td>
</tr>
<tr>
<td>B36.10M</td>
<td>Entire Standard</td>
<td>B31 Standards Committee</td>
<td>Included on Standards Committee First Consideration ballot</td>
</tr>
<tr>
<td>B36.19M</td>
<td>Entire Standard</td>
<td>B31 Standards Committee</td>
<td>Included on Standards Committee First Consideration ballot</td>
</tr>
<tr>
<td>B40.100</td>
<td>Entire Standard</td>
<td>PTC 19.2 Subcommittee</td>
<td>Included on Standards Committee First Consideration ballot</td>
</tr>
<tr>
<td>B40.200</td>
<td>Entire Standard</td>
<td>PTC 19.3 Subcommittee</td>
<td>Included on Standards Committee First Consideration ballot</td>
</tr>
<tr>
<td>B46.1</td>
<td>Entire Standard</td>
<td>Y14 Subcommittee 36</td>
<td>Included on Standards Committee First Consideration ballot</td>
</tr>
<tr>
<td>B89.1.17</td>
<td>Entire Standard</td>
<td>B1 Standards Committee</td>
<td>Included on Standards Committee First Consideration ballot</td>
</tr>
<tr>
<td>B94.9</td>
<td>Entire Standard</td>
<td>B5 Standards Committee</td>
<td>Included on Standards Committee First Consideration ballots and recirculation’s</td>
</tr>
<tr>
<td>B107.17</td>
<td>Entire Standard</td>
<td>B18 Standards Committee</td>
<td>Included on Standards Committee First Consideration ballot</td>
</tr>
<tr>
<td>B133.8</td>
<td>Entire Standard</td>
<td>PTC 36 Subcommittee</td>
<td>Included on Standards Committee First Consideration ballot</td>
</tr>
<tr>
<td>MFC Stds</td>
<td>Entire Standard</td>
<td>PTC 19.5 Subcommittee</td>
<td>Included on Standards Committee First Consideration ballot</td>
</tr>
<tr>
<td>PTC 13</td>
<td>Entire Standard</td>
<td>PTC 10 Subcommittee, PTC 11 Subcommittee</td>
<td>Included on Standards Committee First Consideration ballot</td>
</tr>
<tr>
<td>PTC 19.3TW</td>
<td>Entire Standard</td>
<td>B31 Committee</td>
<td>Include on Standards Committee First Consideration ballot</td>
</tr>
<tr>
<td>PTC 19.5</td>
<td>Entire Standard</td>
<td>MFC Standards Committee and Subcommittees</td>
<td>Included on Standards Committee First Consideration ballot and recirculation’s</td>
</tr>
<tr>
<td>PDS-1.1</td>
<td>Entire Standard</td>
<td>Y14 Standards Committee, B46 Standards Committee, B89 Standards Committee</td>
<td>Included on Standards Committee First Consideration ballot</td>
</tr>
<tr>
<td>VVUQ Stds</td>
<td>Entire Standard</td>
<td>All VVUQ Subcommittees and Subgroups</td>
<td>Included on Standards Committee First Consideration ballots and recirculation’s</td>
</tr>
<tr>
<td>Y14.5</td>
<td>Entire Standard</td>
<td>AED Standards Committee, Y14 Subcommittee 5.1</td>
<td>Included on Standards Committee First Consideration ballot</td>
</tr>
<tr>
<td>Y14.6</td>
<td>Entire Standard</td>
<td>B1 Screw Threads</td>
<td>Included on Standards Committee First Consideration ballot Included on all ballots</td>
</tr>
<tr>
<td>Y14.36</td>
<td>Entire Standard</td>
<td>B46 Classification and Designation of Surface Qualities</td>
<td>Included on Standards Committee First Consideration ballot and recirculation’s</td>
</tr>
</tbody>
</table>
IX Additional Honors & Awards (Reference Section 8 & Appendix 4)
[Additional honors and awards information applicable to this standards committee.]

Patrick J. Higgins Medal. Annually, the Board on Standardization & Testing is allowed to present this ASME award to an individual from a committee under the Board’s jurisdiction.

(a) The purpose of the Patrick Higgins Medal is to honor unusually dedicated voluntary service to the development, and promotion of an ASME Standardization and Testing Standard, Code or Conformity Assessment Program.

(b) Any individual or committee may nominate candidates for the Medal. Nomination and eligibility information may be found at:
https://www.asme.org/about-asme/participate/honors-awards/achievement-awards/patrick-j-higgins-award
The Medal shall be administered by the Patrick J. Higgins Medal Committee, appointed by the Committee on Honors upon the recommendation of the Board on Standardization and Testing.

(c) No person shall receive more than one Patrick J. Higgins Medal. Individuals responsible for selecting a candidate for the Medal are not eligible to receive an award during this time.

(d) The award consists of a plaque with medallion, a certificate and $1000 honorarium.

(e) At the option of the awardee, a letter from the Board Chair to the individual’s management expressing appreciation for sponsoring the individual should be sent.

Performance Test Codes Medal. Annually, the PTC Standards Committee is allowed to present this ASME award to an individual from a committee under the Performance Test Code’s jurisdiction.

(a) The purpose of the Performance Test Codes Medal is to honor outstanding contributions to the development and promotion of ASME Performance Test Codes, including the Supplements on Instruments and Apparatus.

(b) Any individual or committee may nominate candidates for the Medal. Nomination and eligibility information may be found at:

The Medal shall be administered by the Performance Test Codes Medal Committee, appointed by the Committee on Honors upon the recommendation of the PTC Standards Committee.

(c) No person shall receive more than one Performance Test Codes Medal. Individuals responsible for selecting a candidate for the Medal are not eligible to receive an award during this time.

(d) The award consists of a plaque with medallion, a certificate and $1000 honorarium.

(e) At the option of the awardee, a letter from the Board Chair to the individual’s management expressing appreciation for sponsoring the individual should be sent.

X Additional Guidance
Committees concerning Safety Standards versus Product Standards
The Standards Committee on Bioprinters, Standards Committee on Mobile Unmanned Systems and the Standards Committee on Thermal Medicine are committees concerning safety standards. The other Standards Committees under the Board on Standardization & Testing are consensus committees dealing with product standards.

Maintenance Options for ASME’s American National Standards
When performing the required five-year review of a standard, the following should be considered:
   a) revise the standard because it is still relevant, but changes are needed
   b) request for an extension of time to take action
   c) reaffirm the standard because it is still relevant, and no changes are needed
   d) withdraw the standard because it is no longer relevant
   e) if the standards is over ten years old and no future changes are anticipated for the next ten years consider changing the standard to be under Stabilized Maintenance

Incorporation of Material from a Copyrighted Publication
If in developing an ASME standard, a standards committee or its subordinate group proposes to incorporate material from a copyrighted publication of another organization, they should request the ASME Staff to obtain written permission from the publisher to reprint the material. ASME Staff should be notified of this request no later than the time of submittal to the standards committee for consideration of the text containing the incorporated material.

International Working Groups
For requirements on International Working Groups see Appendix II.
APPENDIX I
CHARTERS

BOARD ON STANDARDIZATION AND TESTING
Charter: Management and supervision of the dimensional, design, application, drafting, performance test codes, and miscellaneous standards activities of the Society, as designated by the Council on Standards & Certification. The standards developed by groups managed by the Board are intended to be submitted to the American National Standards Institute to become American National Standards.

AED COMMITTEE ON AEROSPACE AND ADVANCED ENGINEERING DRAWING
Charter: Develop advanced practices unique to aerospace and other industries. Develop and maintain standards and supplements to the standards currently under the jurisdiction of the Y14 standards committee on engineering drawings and related documentation practices.

A112 COMMITTEE ON PLUMBING MATERIALS AND EQUIPMENT
Charter: The recommendation of suitable standards, or the development of standards where none exist, for performance requirements, composition, dimensions, and/or mechanical and physical properties of materials, fixtures, devices, and equipment used or installed in plumbing or mechanical systems.

B1 COMMITTEE ON SCREW THREADS
Charter: Standardization of screw threads, taps, and gages, including terminology, symbols, forms, designations, standard and special series, the dimensional limits for these series, thread gages and gaging, principles for determining dimensional limits of threads and thread gages, and acceptability requirements. Not included are certain specialized screw threads such as those for fire hose couplings.

B5 COMMITTEE ON MACHINE TOOLS - COMPONENTS, ELEMENTS, PERFORMANCE, AND EQUIPMENT
Charter: The standardization of machine tools, cutting tools and of the elements of machine tool construction and operation relating primarily to their use on manufacturing operations, including work and tool holding elements, driving mechanisms that constitute an inherent part of the machine tool, components and associated appurtenances; nomenclature, designations, sizes, capacities, and tests for accuracy of machine tools and of work and tool holding parts or elements; movements and adjustments of machine tool elements; and parts and elements for adjusting, guiding, and aligning work or tools, including slots and tapes, but excluding perishable tools, punches, dies and screw taps.

B18 COMMITTEE ON STANDARDIZATION OF BOLTS, NUTS, RIVETS, SCREWS, WASHERS, AND SIMILAR FASTENERS
Charter: Standardization of dimensional, physical, and performance requirements for the specification and manufacture of bolts, nuts, rivets, screws, washers, and similar fasteners.

B29 COMMITTEE ON CHAINS, ATTACHMENTS, AND SPROCKETS FOR POWER TRANSMISSION AND CONVEYING
Charter: Standardization of chains, attachments, and sprockets for power transmission and conveying.
B36 COMMITTEE ON NOMINAL WROUGHT PIPE SIZES AND WALL THICKNESSES
Charter: The standardization of seamless and welded nominal wrought pipe sizes and wall thicknesses.

B40 COMMITTEE ON STANDARDS FOR PRESSURE AND TEMPERATURE INSTRUMENTS AND ACCESSORIES
Charter: The preparation and promulgation of standards for pressure and temperature instruments and accessories.

B46 COMMITTEE ON CLASSIFICATION AND DESIGNATION OF SURFACE QUALITIES
Charter: Classification and designation of surfaces according to quality of surface.

B73 COMMITTEE ON CHEMICAL STANDARD PUMPS
Charter: The development of centrifugal pump standards for chemical, petrochemical and industrial processes.

B89 COMMITTEE ON DIMENSIONAL METROLOGY
Charter: The calibration performance evaluation, uncertainty evaluation, and specification of dimensional measuring instruments and gauges and the methods of their use for measuring various geometrical characteristics such as lengths, plane surfaces, angles, circles, cylinders, cones, spheres and tori, as well as profiles.

B107 COMMITTEE ON HAND TOOLS AND ACCESSORIES
Charter: Establish standards for hand tools and accessories: These standards provide performance and safety requirements. These requirements encompass the elements of design, use, performance, tolerances, and configurations of; including but not limited to, wrenches, pliers and snips, screwdrivers, striking and struck tools and torque instruments. The standards will include consideration of various classes and types of hand tools, and accessories. They will also include any tests that are needed to determine conformance with the performance and safety requirements.

BP COMMITTEE ON BIOPRINTERS
Develop, review and maintain guidelines and standards for bioprinters hardware requirements.

EA COMMITTEE ON INDUSTRIAL SYSTEM ENERGY ASSESSMENT
Charter: Development of standards for conducting energy improvement assessments of the following industrial systems: steam systems, compressed air systems, process heating systems, and pumping systems.

HST COMMITTEE ON HOISTS - OVERHEAD
Charter: Performance standards for overhead hoists; in particular, powered wire rope and chain hoists, and hand chain and lever operated hoists. The standards will include, where applicable, terminology, hoist and trolley service classifications, and mechanical and electrical data.
**MAM COMMITTEE ON MANUFACTURING AND ADVANCED MANUFACTURING**
Charter: The development and maintenance of standards and guidelines addressing manufacturing and advanced manufacturing.

**MBE COMMITTEE ON MODEL BASED ENTERPRISE**
Charter: Develop standards or related products that provide rules, guidance, and examples for the creation, use and reuse of model-based datasets, data models, and related topics within a Model-Based Enterprise (MBE).

**MFC COMMITTEE ON MEASUREMENT OF FLUID FLOW IN CLOSED CONDUITS**
Charter: Standardization of rules and methods for the measurement of fluid flow in closed conduits, including terminology and definitions; rules for construction, installation, and conditions under which measurements are to be made; rules for collection, evaluation, and interpretation of measurements data, including errors.

**MUS COMMITTEE ON MOBILE UNMANNED SYSTEMS**
Charter: Establish standards and guidelines that provide safe and reliable application of Mobile Unmanned Systems (MUS) for unmanned aerial systems (UAS), ground/crawlers and submersibles to inspect, monitor, and maintain industrial facilities and power plants as well as equipment, transmission lines, and pipelines.

**PTC COMMITTEE ON PERFORMANCE TEST CODES**
Charter: The Performance Test Code Standards Committee develops codes, supplements, and other types of documents, which provide rules and procedures for the planning, preparation, execution, and reporting of results for performance tests and evaluations.

**RAP COMMITTEE ON POWER PLANT RELIABILITY, AVAILABILITY AND PERFORMANCE**
Charter: Establish standards and guidelines that provide for the optimization of power plants to enhance reliability, availability, and performance, which includes design for operation and design for maintenance.

**STS COMMITTEE ON STEEL STACKS**
Charter: Standardization as it relates primarily to the design and construction of steel stacks, with or without lining and supports, and to the application of lining or cladding to such stacks, where required, and recommendation for their inspection and maintenance.

**TM COMMITTEE ON THERMAL MEDICINE**
Charter: Develop, review and maintain guidelines and, standards for requirements to improve quality of care in thermal medicine applications.

**VVUQ COMMITTEE ON VERIFICATION AND VALIDATION AND UNCERTAINTY QUANTIFICATION IN COMPUTATIONAL MODELING AND SIMULATION**
Charter: Coordinate, promote, and foster the development of standards that provide procedures for assessing and quantifying the accuracy and credibility of computational modeling and simulation.
Y14 COMMITTEE ON ENGINEERING PRODUCT DEFINITION AND RELATED DOCUMENTATION PRACTICES

Charter: The development and maintenance of national standards for defining and documenting a product throughout its life cycle and related certification activities. This shall be accomplished by: (1) Recognizing the continuing need for existing standards regardless of the source medium (e.g., paper, film, and digital) or method of preparation (e.g., manual or computer generated). (2) Providing standardization where a variety of practices exist within industry and government. (3) Providing standards for new concepts and technologies; and (4) Supporting and coordinating development and harmonizing of standards with responsible standardization bodies, including ANSI, ISO, and government agencies.
APPENDIX II
INTERNATIONAL WORKING GROUPS

II 1.0 PREFACE
This document is intended to provide guidance for standards committee leadership, including ASME Staff Secretaries, considering or planning the establishment of an International Working Group (IWG). IWG member-candidates, partner organizations and others are referred to ASME S&C staff for information on IWGs. General information regarding Subordinate Group membership may be found in Section 5, Appendix III and training documents.

II 2.0 INTRODUCTION
ASME’s globalization activities seek to enhance the applicability and utilization of its codes and standards around the globe. These activities often rely on cooperation and contributions by ASME’s partners and stakeholders based outside the U.S., many of whom have experience, technical expertise, and distinct perspectives that enhance the global relevance of ASME’s standards.

Participation by such valued stakeholders on ASME standards development committees is desired. However, there are a variety of circumstances that prevent stakeholders, regardless of their geographic location, from meeting the expectations associated with “traditional” S&C committee membership. To accommodate such individuals, ASME S&C has introduced several alternative means of S&C participation. An International Working Group (IWG) is one such innovation that permits participation by a group of stakeholders based in a common geographic location outside the U.S. and unable to fulfill the attendance expectations of committees that meet principally in the U.S.

II 3.0 FUNDAMENTAL IWG CONCEPTS
II 3.1 With regard to the Procedures for ASME Codes and Standards Development Committees, IWGs are identical to other subordinate groups (i.e. working groups, subgroups, etc.).
II 3.2 The role of IWGs is like other subordinate groups in that they should be expected to both develop and review proposed standards actions for subsequent consideration by their respective standards committees. Proposals developed by an IWG, such as revisions, interpretations, and Cases, will follow a path through the subordinate committee structure towards “consensus” consideration.
II 3.3 The reporting relationships and proposal development path between subordinate groups should be considered and possibly modified by the standards committee to facilitate an effective integration of the IWG into the consensus process.
II 3.4 ASME has established a number of ways in which interested people may participate in the development of ASME codes and standards. Each IWG member shall be designated as either a member, an alternate or a contributing member (see 3.4.1). A member of an IWG is required to vote when a ballot is presented to the IWG and invited to comment when the IWG is included in a review and comment distribution. For contributing members attendance at committee meetings is optional.

II 4.0 KEY DIFFERENCES FROM OTHER S&C SUBORDINATE GROUPS
II 4.1 IWGs typically conduct their meetings in a geographic location outside of the U.S. (i.e. a country) common to its members.
II 4.2 IWGs are typically populated by virtue of the common geographic location, rather than a common engineering discipline or specialization, such as design, quality assurance, etc. At least initially, the IWG membership may be expected to represent a cross-section of relevant expertise.
II 4.3 IWGs may choose to conduct their proceedings in a language other than English. This includes IWG meeting discussions, minutes and agendas.

II 5.0 GEOGRAPHIC BASIS FOR IWGs
The IWG concept suggests a common nationality as the basis for an IWG, however it is conceivable an IWG may support a common region (e.g., Scandinavia, Central America, etc.). A preference for a “regional IWG” may arise from a desire for an IWG with a greater number of members, a broader membership base, or other reasons. However, such an arrangement may compromise several of the intended benefits of an IWG, such as the common language and jurisdiction framework shared by its members. Also, a proposal that regional stakeholders work together may reveal national or cultural sensitivities. Therefore, the viability of a “regional IWG” should be determined through careful consultation with the expected participants.

II 6.0 BENEFITS OF IWGs
II 6.1 Benefits to Standards Committees
a) IWGs provide additional subordinate technical resources to standards committees
b) IWGs may help standards committees identify, understand and address stakeholder issues in countries or regions outside of the U.S. Examples of such issues may include:
   • Jurisdictional and regulatory differences
   • Manufacturer supply-chain and materials considerations
   • Innovative or unusual standards applications or products

II 6.2 Benefits to IWG Members
a) Participation may strengthen IWG members’ individual and collective understanding of ASME standards requirements and philosophy
b) IWGs can alleviate several barriers to participation that prevent otherwise qualified experts from participating in the ASME S&C standard development process, such as very long distances, travel constraints, and language barriers.
c) There is opportunity for IWG members to identify new directions for ASME standards.
d) There is opportunity for IWG members to communicate the interests and needs of the local industry, region or country in the development of ASME standards.
e) There is opportunity for IWG members to network and share technical knowledge with experts working in similar fields of expertise

II 6.3 Benefits to Global Stakeholders
a) IWGs may facilitate discussion of ASME standards issues and experiences among local stakeholders
b) As an ASME S&C body, an IWG may serve as a possible first line of support for local stakeholder’s inquiries, in coordination with its standards committee and ASME Staff.

II 6.4 Benefits to ASME Standards and Certification
a) IWGs may improve the usability and acceptance of the ASME standards around the world
b) Foster the development of potential S&C volunteer leaders

II 7.0 FORMATION OF INTERNATIONAL WORKING GROUPS
II 7.1 General
The formation of the IWG, including the appointment of its members shall be conducted in accordance with para. 3.4.2. The decision to form an IWG will likely be prompted either through an expression of interest by the standards committee or stakeholders based outside the U.S. As with other expressions of interest in S&C standards participation, ASME staff and committee leadership are expected to provide guidance to stakeholders on the variety of means available for participation and guide the selection toward the most appropriate means based on the circumstances. If the establishment of an IWG is supported by the standards committee and stakeholders, the process should be managed by ASME staff with close coordination with the standards committee or parent committee leadership.

II 7.2 Assistance from Local Partners
Although not required, the establishment of an IWG may be facilitated by partnership with a local organization or stakeholder(s). A partner organization familiar with the range of local stakeholders and potential participants may assist in soliciting candidates for the IWG’s charter membership, garnering support from employers of membership candidates, and providing logistical support for IWG meetings.

II 7.3 Identification and appointment of IWG members
   a) See para. 3.4.2(d) for the appointment of IWG members
   b) Establishment of an IWG should only proceed when there is confidence that there is a sufficient pool of local experts to sustain an appropriate membership size for a viable subordinate group, however an IWG may be established with the expectation that the desired membership size will be achieved subsequently.
   c) Identification of candidates for IWG membership may be conducted through solicitation of stakeholder organizations and direct appeals to individuals. The activity may be undertaken by current volunteer members, staff or a designated local partner organization.
   d) Regardless of the means employed to identify candidates, the assessment of their qualifications and other considerations, such as confirmation of support from their employers, should be consistent with the appointment process for other subordinate groups.

II 7.4 IWG Officers
The election or nomination of the IWG officers are in accordance with para. 3.4.3.

II 7.5 IWG Training
It is likely that, at the time of the establishment of an IWG, none of its charter members will be familiar with ASME standards development principles, procedures, processes and practices. A commitment to training and ongoing guidance in C&S development knowledge for IWG members is vital to the successful establishment of an IWG.

II 7.6 IWG Charter
Subordinate groups typically have a charter. A template for an IWG charter is as follows:
The <country/region> International Working Group (IWG) serves as a subordinate group operating within the Charter of the <standards committee> and scope of <ASME standard title/designation>. The <country/region> IWG provides for the participation in <ASME standard title/designation> development by technical expert members based in <country/region>. The <country/region> International Working Group will:
   • Initiate and process proposed standards actions for eventual consideration by <standards committee>.
   • Review and provide comments on proposed revisions to the ____ <ASME standard>.
• Conduct technical and administrative activities related to <ASME standard> development in accordance with approved ASME procedures, policies, and established guidelines,
• Coordinate IWG activities with its parent committee and ASME staff.

II 8.0 COMPLIMENTARY STANDARDS
The provision of complimentary standards to committee members, including IWG members, is the prerogative of ASME staff.

II 9.0 SUPPORT FROM ASME STAFF
II 9.1 ASME staff should provide guidance and assist IWGs to ensure that the IWG proceedings are conducted according to ASME procedures and expectations. Assistance should be provided for activities such as preparation of meeting agendas and minutes, planning of meetings, maintenance of records, and tracking progress of work items.

II 9.2 ASME staff should provide training on the operation of C&S Connect, the operations of the parent committee and the requirements of the Operating Procedures for ASME Codes and Standards Development Committees. Preferably, this should be done in-person during or prior to the inaugural meeting of the IWG.

II 10.0 MEETING FACILITIES AND LOGISTICAL SUPPORT FOR IWG MEETINGS
ASME Staff and IWG officers are responsible for facilitating meeting facilities and providing related logistical support for its S&C groups, including IWGs. IWG members may offer to host meetings and provide related logistical support with assistance from their employers. Alternatively, ASME may arrange for ongoing support through a local partner organization. In such arrangements, the local partner organization may be referred to as the “Secretariat” for the IWG.

II 11.0 COMMUNICATION AND COORDINATION WITH IWGs
II 11.1 The success of a subordinate group and the benefits it provides to the standards committee depend greatly on consistent and reliable communication and coordination of activities with their peer groups, parent committee and ASME staff. The following characteristics of IWGs are potential barriers to such interaction:
   a) IWG members are not expected to regularly attend meetings of their peer groups, parent committee or standards committee, nor are IWGs expected to conduct meetings in conjunction with those groups.
   b) Members of an IWG’s parent committee and standards committee are not expected to regularly attend IWG meetings.
   c) For an extended time following the establishment of an IWG, its members – including its officers – are likely to be unfamiliar with the practices of inter-committee communication and the strategic priorities of its standards committee.

II 11.2 Initially, many of these potential barriers may be addressed through a program of training to be arranged by ASME staff. Additionally, the IWG’s parent committee or standards committee may implement a number of practices to promote adequate communication and coordination with the IWG. Such practices may include:
   a) Assigning mentors to guide the IWG leadership.
b) Requiring periodic written reports on IWG meetings and key discussions. Such a report may be provided to the parent committee or standards committee in lieu of, or in addition to the meeting minutes furnished to ASME staff.

c) Requiring periodic progress reports on specific projects assigned to the IWG.

d) Communicating to IWGs and ASME staff the parent committee’s or standards committee’s expectations for productivity and work prioritization.

e) Encouraging cross-meeting attendance and regular informal email communication and fostering interpersonal relationships between members.

f) Providing useful feedback and encouragement to IWG members from the standards committee leadership.

II 11.3 Such practices to foster communication and coordination with IWGs should be implemented for the objective of ensuring the success of the IWG and the engagement of its members. Caution should be exercised against placing requirements on the IWG or its members that are unrealistic, needless, or inconsistent with those placed on other subordinate groups.

II 12.0 IWG INTEGRATION INTO COMMITTEE CONSENSUS PROCESS, BALLOTS, OR REVIEW AND COMMENT DISTRIBUTIONS

II 12.1 While ASME staff is expected to assume the lead role in the successful assembly, launch, training and operational support of IWGs, the standards committees also share the responsibility to provide for their ongoing success. To maintain the engagement of IWG members and derive the full benefit of the group as a technical resource, consideration should be given to enhancing the integration of the IWG into the standards development process through provisions implemented in the standards committee’s processes or procedures.

II 12.2 Approval of proposals by relevant subordinate group(s) is often considered a prerequisite to standards committee consideration. Similar to their counterparts on other subordinate groups, IWG members possess expertise and perspectives which may enhance proposed standards actions that did not originate within the IWG. Therefore, the standards committee should consider process mechanisms to permit IWG members to participate in ballots or review and comment distributions for such proposals. Para. 4.4.1 describes provisions for review and comment on draft proposals by technically affected parties, such as subordinate groups.