

MPMA Information Sheet

Operating Instructions for MPMA Technical Division

**Motion +
Power
Manufacturers
Alliance*****Operating Instructions for MPMA Technical Division***

MPMA 999-E25

CAUTION NOTICE: MPMA technical publications are subject to constant improvement, revision or withdrawal as dictated by experience. Any person who refers to any MPMA Technical Publication should be sure that the publication is the latest available on the subject matter.

[Tables or other self-supporting sections may be referenced. Citations should read: See MPMA 999-E25, *Operating Instructions for MPMA Technical Division*, published by the Motion + Power Manufacturers Alliance, 1001 N. Fairfax Street, Suite 500, Alexandria, Virginia 22314, <http://www.motionpower.org>.]

Accredited by ANSI TBD

ABSTRACT

The MPMA Technical Division developed this Information Sheet to define procedures for standards development and to assist Project Working Groups in the efficient administration of their respective projects. These procedures are accredited by the American National Standards Institute (ANSI).

Published by

Motion + Power Manufacturers Alliance
1001 N. Fairfax Street, Suite 500, Alexandria, Virginia 22314

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Printed in the United States of America

Contents

| | | |
|--------|--|---|
| 1 | Scope | 1 |
| 2 | Normative references..... | 1 |
| 2.1 | MPMA Policy and Practice Guide | 1 |
| 2.2 | Style manual | 1 |
| 2.3 | Antitrust meeting policy..... | 1 |
| 2.4 | MPMA Technical Division Code of Conduct..... | 1 |
| 2.4.1 | General principles | 2 |
| 2.4.2 | Participant obligations | 2 |
| 2.4.3 | Unacceptable behavior..... | 3 |
| 2.4.4 | Consequences of inappropriate behavior | 3 |
| 2.4.5 | Reporting unacceptable behavior..... | 3 |
| 3 | Terms and definitions..... | 3 |
| 3.1 | ANSI..... | 3 |
| 3.2 | ISO | 4 |
| 3.3 | MPMA | 4 |
| 3.4 | AGMA | 4 |
| 3.5 | ABMA..... | 4 |
| 3.6 | TDEC | 4 |
| 3.7 | Commercial terms and conditions | 4 |
| 3.8 | Patent policy | 4 |
| 3.9 | Metric policy | 4 |
| 3.10 | Publications, types | 5 |
| 3.10.1 | Information sheets | 5 |
| 3.10.2 | Standards | 5 |
| 3.11 | Committees..... | 5 |
| 3.12 | Working groups..... | 6 |
| 3.13 | TDEC liaison | 6 |
| 3.14 | Chairperson | 6 |
| 3.15 | Chairperson term | 7 |
| 3.16 | Active member status | 7 |
| 3.17 | Projects and project working groups..... | 7 |
| 3.17.1 | Projects, type..... | 7 |
| 3.17.2 | Project working group..... | 8 |
| 3.18 | Project leader | 8 |
| 3.19 | Project leader term..... | 8 |
| 3.19.1 | Document editor | 9 |
| 3.20 | Meeting types..... | 9 |
| 3.21 | Determining quorum | 9 |

| | | |
|-------|--|----|
| 3.22 | Meeting location..... | 9 |
| 3.23 | Meeting agenda | 9 |
| 3.24 | Meeting minutes..... | 9 |
| 3.25 | Records..... | 10 |
| 3.26 | Motions and votes | 10 |
| 4 | Project stages | 11 |
| 4.1 | General | 11 |
| 4.1.1 | Proposal stage..... | 11 |
| 4.1.2 | Working draft stage | 12 |
| 4.1.3 | Review and comment stage | 12 |
| 4.1.4 | General ballot stage (standards only) | 12 |
| 4.1.5 | Publication stage | 14 |
| 4.1.6 | Discontinuance of a project..... | 14 |
| 5 | Maintenance of existing publications | 14 |
| 5.1 | Reaffirmation..... | 14 |
| 5.1.1 | Reaffirmation project | 15 |
| 5.2 | Withdrawal of an existing document | 15 |
| 5.3 | ISO adoption project | 15 |
| 5.4 | Request for interpretation | 16 |
| 5.5 | Post publication errors and revisions..... | 16 |
| 6 | Comment review and resolution | 17 |
| 6.1 | General | 17 |
| 6.2 | Comments on new or revision ABMA and AGMA documents | 18 |
| 6.3 | Processing of comments on reaffirmation of ABMA and AGMA documents | 18 |
| 6.4 | Comments on withdrawals..... | 19 |
| 6.5 | Comments on ISO adoptions..... | 19 |
| 6.6 | Appeals..... | 19 |
| 6.6.1 | Types of Appeals..... | 19 |
| 6.6.2 | Processes of Making Appeals..... | 19 |
| 7 | ISO processes | 21 |
| 7.1 | ISO TC 4, ISO TC 14, and ISO TC 60, U.S. participation | 21 |
| 7.1.1 | ISO TC 4, ISO TC 14, and ISO TC 60, U.S. TAG..... | 21 |
| 7.1.2 | U.S. TAG responsibilities | 21 |
| 7.1.3 | U.S. TAG U.S. delegate | 21 |
| 7.1.4 | Review, comment, and vote on active projects within TC 60..... | 22 |
| 7.1.5 | Adoption of ISO documents | 22 |
| 8 | Technical accuracy of standards and information sheets..... | 22 |
| 9 | Speaking on behalf of MPMA | 22 |

Tables

| | |
|---|----|
| Table 1 – Allowable comment actions for new or revision documents | 18 |
| Table 2 – Options if substantial comment from reaffirmation | 19 |

Figures

| | |
|----------------------------------|----|
| Figure 1 – Document Stages | 11 |
|----------------------------------|----|

Annexes

| | |
|---|----|
| Annex A (informative) Motion + Power Manufacturers Alliance Antitrust Meeting Policy..... | 23 |
| Bibliography | 25 |

Foreword

[The foreword, footnotes and annexes, if any, in this document are provided for informational purposes only and are not to be construed as a part of MPMA 999-E25, *Operating Instructions for MPMA Technical Division*.]

The first edition of this document was dated October 2014. A revision was created dated February 2015. The February 2015 revision updated the document to conform to the *AGMA Policy and Practice Guide*, which was approved by the Board of Directors in July of 2014. Changes found in the February 2015 revision include: Definition and description and differences between face-to-face and virtual meetings. Guidelines for selecting meeting locations for face-to-face meetings, including a list of approved locations. Clarification has been added to the definitions of Active and Observer members.

A revision was created dated May 2017. Changes found in the May 2017 revision include: Clarification has been added to the roles and responsibilities of all committee members. Emphasis on the importance of responding to committee comments and General Ballots has been added. Addition of the AGMA Antitrust Meeting Policy. Introduction of a term limit for chairpersons.

The AGMA 999-A20 edition is the first edition to be designated an Information Sheet. In addition to all the formatting changes required in updating to an Information Sheet, changes in this revision include: Global replacement of word chairman with chairperson. Reorganized clauses. Addition of Committee Project Proposal Form as an annex. Addition of information on motions and votes.

AGMA 999-B21 replaces AGMA 999-A20. Main changes in this revision include. Changed document title from *Operating Instructions for AGMA Committee Chairpersons and Vice Chairpersons* to *Operating Instructions for AGMA Technical Division*. Added information on committee governance. Committee project types listed. Document development clause expanded and figures for document stages added. Comment review and resolution made into its own clause and expanded, notably Table 1 added to show allowable comment actions. Annex A, standards checklist replaced with document proofing checklist. Annex B updated to current personnel.

AGMA 999-C23 replaces AGMA 999-B21. It is a general update to mark the creation of working groups in place of technical committees. The first draft of AGMA 999-C23 was made in November 2022. It was approved by the Technical Division Executive Committee (TDEC) in June 2023.

AGMA 999-D24 replaced AGMA 999-C23. The major change was to restore the committee structure while maintaining Project Working Groups for document creation and editing. A code of conduct was added to satisfy ANSI and ISO requirements as well as define AGMA's policy. The entire document was reviewed by the TDEC. Annexes showing meeting agenda and minutes templates and the project proposal form were removed because these documents are available online to members.

The first draft of AGMA 999-D24 was made in February 2025. It was approved by the Technical Division Executive Committee on July 29, 2024 and by the Board of Directors on August 15, 2024.

MPMA 999-E25 replaces AGMA 999-D24. Major changes include renaming the document to reflect the new legal entity that resulted from the merger of American Gear Manufacturers Association and American Bearing Manufacturers Association. Procedural elements from the AGMA and ABMA Policy and Practice guides were incorporated into this document so that it could become the single document that is reviewed and accredited by ANSI. This included additions and major changes to clauses 3.11 (Committees), 4.1 (Project stages – general), 5.4 (Request for interpretation), 5.5 (Post publication errors), 6.1 (Comment review – general), and 6.6 (Appeals). The project flow chart in Figure 1 was updated.

The first draft of MPMA 999-E25 was made in June 2025. It was approved by the Technical Division Executive Committee on August 19, 2025 and by the Board of Directors on August 26, 2025.

Suggestions for improvement of this Information Sheet will be welcome. They may be submitted to tech@motionpower.org.

MPMA Technical Division Executive Committee

Chairperson: Jason Daubert FLSmidth Cement USA Inc.

Technical Division Executive Committee members

Chris Bartus Dodge Industrial
Jodi Bello GE Aerospace
Lance Brown CGI, Inc.
Michael D’Arduini The Gleason Works
Bill Hannon The Timken Co.
Michael He Scot Forge
Frank Uherek Regal Rexnord Corporation
Walt Weber Flender Corporation
Dale Weires Boeing

Motion + Power Manufacturers Alliance –

Operating Instructions for MPMA Technical Division

1 Scope

The MPMA Technical Division developed this Information Sheet to define procedures for standards development and to assist Committees and Project Working Groups in the efficient administration of their respective projects. These procedures are accredited by the American National Standards Institute (ANSI). Any changes to this document shall be transmitted to ANSI for reaccreditation.

2 Normative references

2.1 MPMA Policy and Practice Guide

Guidelines on calling meetings, structure, responsibility for standards, and preparation of technical papers of the MPMA Technical Division and all the Technical Committees are covered in the *MPMA Policy and Practice Guide*. The *MPMA Policy and Practice Guide* defines the structure and responsibilities of the Technical Division and is the controlling document, and information there supersedes information in this document.

2.2 Style manual

MPMA 900, *Style Manual for the Preparation of Standards and Information Sheets*, is the style manual to be used for the preparation of AGMA and ABMA technical publications. It contains information concerning what elements should be included in each publication, as well as format, proofreading, symbols, and nomenclature. Also included are a checklist for editors, a sample cover page, a copyright page with abstract, a foreword page, and a table of contents. It is strongly recommended that individuals interested in acting as editors on a project should familiarize themselves with this document.

2.3 Antitrust meeting policy

Trade associations, due to their very nature, are particularly sensitive to antitrust violations. This is because, in bringing competitors together into an association, one element of a possible antitrust violation may already be present, a combination of competitors. To minimize the possibility of antitrust issues at alliance gatherings, MPMA has published a set of guidelines that should be followed at all meetings, as well as all alliance sponsored conventions, trade shows, training seminars, conferences, committee, and working group sessions. See Annex A.

2.4 MPMA Technical Division Code of Conduct

MPMA is committed to providing a safe and welcoming experience for all members, authorized observers, public commenters and other participants ("Participants"), regardless of race, ethnicity, disability, religion, political affiliation, gender, gender identity or expression, sexual orientation, or any other distinguishing characteristic protected by applicable law. We do not tolerate discrimination, intolerance, harassment, aggression, or ill will of any kind at any event, either in-person or online. MPMA reserves the right, in its sole discretion, to modify this Code of Conduct, as necessary.

2.4.1 General principles

1. To promote and support the work of the MPMA Technical Division, ANSI-Accredited U.S. TAG to ISO TC 4, ISO TC 14, and ISO TC 60 as well as the purposes and objectives of the voluntary consensus standards system.
2. To maintain a process that is open, honest, and fair to all Participants.
3. To promote the development of consensus through the broad participation of a variety of interests and through a fair airing and discussion of all points of view.
4. To adhere, both in letter and in spirit, to all duly established rules, regulations, and policies governing the work of MPMA.

2.4.2 Participant obligations

1. Comply with legal obligations. Respect all applicable laws and regulations and avoid collusive or anticompetitive behavior.
2. Participants shall act honestly, in good faith, and with the highest professional standards.
3. Participants shall refrain from any threatening, discriminatory, harassing, or illegal conduct as defined by applicable laws, rules, or regulations.
4. Although it is recognized that legitimate differences of opinion can exist on individual issues, Participants should act in a dignified and courteous manner, to avoid injuring others, their property, reputation, or employment by false, malicious or improper action and to avoid acting in a disrespectful or unprofessional manner towards other Participants or staff.
5. Participants who have a conflict of interest with respect to a specific issue or issues planned or discussed shall disclose those interests.
6. In order that the points of view and information Participants advance can be accurately evaluated by others, Participants should always endeavor to make known their business, commercial, organizational, or other affiliations that might affect their interests or points of view, avoiding real or perceived conflicts of interest whenever possible.
7. In all discussion, debate, and deliberation, Participants should confine their comments to the merits of the issues under review. Although Participants may forcefully advocate their views or positions, they should refrain from debate and discussion that is disrespectful or unprofessional in tone or that is unduly personalized or damaging to the overall process of achieving consensus.
8. Participants shall protect the integrity of discussions and debates and will not disclose information which is confidential in its very nature. Participants shall ensure that any confidential documents or data shared or in their possession are properly safeguarded. Participants shall not violate the intellectual property rights of another Participant or any third parties.
9. No Participant should ever attempt to withhold or prohibit information or points of view from being disseminated, particularly on the grounds that the Participant disagrees with the information or points of view. Disagreements should be addressed and resolved through fair presentation and discussion of all information and points of view not through withholding information or preventing points of view from being expressed.
10. Participants should treat all people with respect and fairness and shall not, directly or through intermediaries, offer or appear to offer or promise any personal or improper financial or other advantage or preferential treatment to any person or group, nor shall they accept any such advantage in return for any preferential treatment.
11. Participants shall refrain from disseminating false or misleading information.
12. Participants should comply with MPMA, ANSI and ISO policies if applicable.

13. Participants should safeguard MPMA's reputation and integrity by ensuring that any public statements relating to MPMA or the work of the committee or working group, which are not official statements of MPMA or the ANSI Accredited U.S. TAG, are properly portrayed as the opinion of the individual making them.

2.4.3 Unacceptable behavior

An environment free of harassment and/or sexual harassment is not only the law; it is fundamental to the culture of MPMA. Unacceptable behavior includes, but is not limited to: intimidating, harassing, abusive, discriminatory, derogatory, or demeaning conduct; inappropriate physical contact (e.g., unwelcome sexual advances, groping, sexual assault); excessive consumption of alcohol; physical, written, verbal, or other abuse, as determined by the event organizer and its representatives, in their sole discretion; failing to obey any rules or regulations of the venue and MPMA; and violating applicable federal, state, or local law, rule or regulation.

2.4.4 Consequences of inappropriate behavior

Any reported incident will be immediately investigated promptly and thoroughly. Each investigation will proceed as the circumstances warrant, and an investigation may involve an interview with the Participant making the complaint, interview with the subject of the complaint, and interviews with persons identified as witnesses or otherwise having knowledge of the incident or conduct. To the extent practicable, the investigation will be treated as confidential. MPMA reserves the right to immediately respond to imminent or actual threats of danger, violence, or disturbance that undermines the safety of MPMA, MPMA staff, or Participants, including but not limited to immediate suspension or expulsion from an MPMA event without refund.

When the investigation is completed, MPMA, in its discretion, will inform affected parties of the outcome of the investigation. Any appropriate measures may be taken pending a full investigation and final resolution of a complaint. Consequences may include warnings, removal from the meeting or event with or without warning or refund, and exclusion from any future MPMA meeting or Technical Committee proceedings.

2.4.5 Reporting unacceptable behavior

In the event of an emergency, please contact local authorities immediately.

If you believe you were harassed, notice that someone else is being treated poorly, or have additional concerns, please contact MPMA staff or see the onsite contact to discuss the situation. Complaints should at minimum, include the identity of the subject of the complaint, a brief description of the inappropriate behavior or applicable Code of Conduct violation, the date the incident occurred, and any other evidence the Participant filing the complaint believes may assist MPMA in investigating the matter.

We expect all Participants to follow this Code of Conduct at all event venues, any external venue affiliated with the event, and all related social events. MPMA may elect to revise this policy without notice.

3 Terms and definitions

3.1 ANSI

The American National Standards Institute, ANSI, is a private non-profit organization that oversees the development of voluntary consensus standards for products, services, processes, systems, and personnel in the United States. It audits the processes of U.S. standards developing organizations, approves American National Standards, grants standards developing organizations exclusive permission to write American National Standards in specific topic areas, and facilitates U.S. involvement in the International Standards Organization, ISO. To maintain ANSI accreditation MPMA's policies and practices shall be in line with the requirements published by ANSI in *ANSI Essential Requirements* [1]. Any changes to this document shall be transmitted to ANSI for reaccreditation.

3.2 ISO

The International Organization for Standardization, ISO, is an independent, non-governmental international organization composed of representatives from the national standards developing organizations, SDOs, of member countries. Standards development is carried out by Subject Matter Experts, SMEs, from member SDOs grouped in over 800 different technical committees and sub committees. American National Standards Institute, ANSI, is the national SDO representing the U.S. in ISO. ISO Technical Committee 60, TC 60, has the scope to develop standards for the global gearing industry. ISO Technical Committee 4, TC 4, has the scope to develop standards for rolling bearings and their accessories. ISO Technical Committee 14, TC 14 has the scope for standardization in the field of shafts for machines, their keys and keyways, splines and serrations and their accessories such as couplings, flanges, etc. ANSI has delegated the representation of the U.S. bearing and gearing industry on ISO TC 4, ISO TC 14, and ISO TC 60 to MPMA. MPMA's policies and practices shall be in line with the requirements published by ISO in *ISO/IEC Directives Part 1* [2].

3.3 MPMA

The Motion + Power Manufacturers Alliance, MPMA, is a voluntary association of companies, consultants, and academicians (hereafter referred to as members) with direct interest in the design, manufacture, and application of bearings, bearing accessories, gears, couplings, and related power transmission components and equipment.

3.4 AGMA

The American Gear Manufacturers Association, AGMA, is a division of MPMA and is a brand name carried on all U.S. gearing standards and information sheets, published by MPMA.

3.5 ABMA

The American Bearing Manufacturers Association, ABMA, is a division of MPMA and is a brand name carried on all U.S. bearing standards and information sheets, published by MPMA.

3.6 TDEC

The MPMA Board of Directors has delegated management of AGMA and ABMA Standards development to the Technical Division Executive Committee, TDEC. The TDEC is composed of MPMA members who have previously served on one or more technical committees. The TDEC reviews and approves project proposals and later manages their development by the project working groups through the technical committees. The TDEC also helps maintain the current catalog of AGMA and ABMA documents, Standards, and Information Sheets, and facilitates representation of the U.S. gearing industry within ISO TC 4, ISO TC 14, and ISO TC 60.

3.7 Commercial terms and conditions

Provisions involving business relations between buyer and seller such as guarantees, warranties, and other commercial terms and conditions shall not be included in an ABMA or AGMA standard. MPMA will comply with the policy concerning Commercial Terms and Conditions in *ANSI Essential Requirements* [1].

3.8 Patent policy

There should be no need to include the use of an essential patent claim in a proposed standard. If it is considered that technical reasons justify the use of an essential patent claim, then *ANSI Essential Requirements* [1] shall be followed before proceeding to ballot.

3.9 Metric policy

All new and revised ABMA and AGMA standards shall be in SI units (metric). Revision of documents for objects that are traditionally dimensioned in U.S. Customary units may be presented in those units if there is not another source document available for reference. The Working Group (WG) may elect to prepare an additional, parallel standard, in U.S. Customary units. See MPMA 900 for more information.

3.10 Publications, types

AGMA and ABMA publications are classified as either Standards or Information Sheets. Information Sheets contain material and recommendations that are still being tested and have yet to be fully examined by the industry, whereas standards contain proven material and requirements examined and verified by industry experts.

3.10.1 Information sheets

Unless explicitly approved by the TDEC, all new projects will be developed and designated as an AGMA or ABMA Information Sheet. Information Sheets have the designation AGMA ###-AYY or ABMA ###-AYY. Where the three “#” digits are unique to the Information Sheet, the “A to Z” character identifies the revision level, “A” being the first revision, and the “Y” characters designate the last two digits of the publication year. Upon completion of the last stage in the development, the review and resolution of comment stage, the project working group votes to submit the new Information Sheet to the TDEC for review and proposal to the Board of Directors for final approval for publication.

3.10.2 Standards

Standards are matured Information Sheets that have been reviewed, examined, and accepted by the industry. To be designated as an AGMA or ABMA American National Standard, the document will need to comply with applicable *ANSI Essential Requirements* [1] which includes an additional review and commenting period (public review and MPMA “general ballot”). Once all comments from this stage are reviewed and addressed per clause 4.1.4, the project working group votes to submit the new Standard to the TDEC for review and proposal to the Board of Directors for final approval for publication. The submission will be recorded as a resolution in the project group’s meeting minutes.

AGMA Standards are published with the designation ANSI/AGMA #####-AYY. Note that Standards start with an “ANSI” designation and have four digits instead of the three that Information Sheets have. In the designation, the four digits “####,” 1000 to 9999, followed by a letter, “A to Z,” identifying the revision level, “A” being the first revision. The “YY” characters designate the last two digits of the publication year. New documents are to be created in SI units, see Clause 3.9, and are numbered in the “#1##” format (e.g., 2101).

ABMA Standards are published with the designation of ANSI/ABMA ##-YYYY. In the designation the ## digits represent the main document number where the inclusion of a “##.1 or ##.2” to the document number indicates a metric version (##.1) and a U.S. customary units version (##.2). The “YYYY” characters represent the year of publication.

3.11 Committees

A member of a Technical Committee is a person who is interested in the work of the Committee and will be an active member. Committee members shall be an MPMA member in good standing. Each year, all Committee members shall be reviewed by MPMA staff and the Committee chairperson to maintain their membership on Technical Committees. Members who are not in good standing may be dropped from the Committee membership. A Committee Chairperson may apply to the TDEC for a waiver to allow participation by a non-member contributor. The application shall state the contribution and expertise that would be added to the Committee, which may not otherwise be available from a member. All issued waivers shall be reviewed for potential membership yearly. The Committee chairperson and TDEC should consider all qualified members before granting an exception or renewal. The TDEC shall annually submit the recommended list of waivers for final approval by the Board of Directors.

Members should attend meetings and/or accept and perform work assignments as assigned by the Technical Committee chairperson. Members have a vote on Committee activities with only one vote permitted per company, proprietorship, partnership or corporation/functional interest area. The goal is diversification, equitable voting and a lack of dominance; see 4.1.4.2. Individuals interested in becoming a member of one of the technical committees should submit a membership request to the Technical Division or through their employer’s MPMA Technical Representative. The committee is responsible for:

- ISO TAG responses;
- managing project working groups;

- document reaffirmations, see Clause 5;
- responding to requests for interpretation.

Each committee has the following member types:

- TDEC liaison;
- chairperson;
- vice-chairperson;
- committee members:
 - active members;
 - non-MPMA members under waiver.

3.12 Working groups

A project WG will be formed under the supervision of the subject Technical Committee. The WG will designate one of its active members as the “project leader” and can assign one member the “editor” and begin work on developing the “Working Draft” of the proposed document.

3.13 TDEC liaison

Each technical committee is assigned a TDEC liaison. The TDEC liaison acts as a link between the committee and the TDEC. They help the chairperson recruit committee members, evaluate new projects, and prepare proposals for the TDEC. They also submit progress reports to the TDEC, including any committee issues requiring assistance from the TDEC.

3.14 Chairperson

A chairperson and vice chairperson will be elected by the committee members from the roster of active members of the committee. The results of the election will be submitted to the TDEC for final approval. The Chairperson has the following responsibilities:

- act in a purely neutral capacity, divesting themselves from taking a position on matters before the committee;
- vote **only to break a tie** when the committee deadlocks on a motion, voting in his/her role as the chairperson and not as a representative of their company – otherwise the chairperson has no voting rights;
- counts as an active member in determining if a quorum is present;
- ensure that the policy and strategic decisions of the TDEC are implemented in the committee;
- ensure at meetings that all points of view are given adequate time and consideration;
- ensure that all decisions are clearly formulated and made available in written form by the secretary for confirmation during the meeting;
- communicate with TDEC liaison any issues they wish to call to the attention of the TDEC;
- develop responses to Requests for Interpretation directed at the committee’s standards and information sheets;
- recruit new committee members;
- develop priorities and time schedules for committee work;
- evaluate new projects;
- collaborate with MPMA staff liaison on periodical review of the committee roster and re-assignment of members’ status per their attendance and participation records as stated in 3.16;
- ensure that all committee members have a copy of this information sheet – all new members will receive a copy from MPMA upon membership to the committee;

- coordinate activities with other committees developing technical information common to both committees;
- coordinate ISO TAG responsibilities within their committee.

3.15 Chairperson term

A Chairperson's term ends after 48 months (4 years) after the first appointment. A Chairperson may be reappointed with consent by the committee members obtained through anonymous voting, typically through emails to MPMA staff, or if there are no other volunteers. The appointment, or reappointment, of a Chairperson is approved by the TDEC.

3.16 Active member status

Since companies, and not individuals, are members of MPMA, all employees of a company that is an active member are considered active members. If multiple employees from the same company are in attendance at the same meeting, the group only counts as one member when determining a vote or quorum. Only active members will be considered in determining a quorum and have a vote on committee activities.

An active member is determined by the following criteria:

- attends 75% of scheduled meetings per calendar year;
 - active members who miss 50% of scheduled meetings in a calendar year will be contacted and potentially removed from the roster.
- responds to all Review and Comment and General Ballots conducted by the committee. Abstention is considered an acceptable response, whereas a failure to reply is not acceptable;
- progressively demonstrates a willingness to accept and perform committee tasks;

An active member has the following responsibilities:

- participates actively in the work of the committee through attendance at, and contributions to, meetings;
- votes on all formally submitted questions;
- responds to all Review and Comment and General Ballots;
- serves as meeting secretary when called upon by the chairperson or vice chairperson.

3.17 Projects and project working groups

Following TDEC approval of a new project, project working groups will be formed to work on the approved project.

3.17.1 Projects, type

In general, an MPMA working group could be working on one of two main project types: a) developing a new document, and b) revising an existing document.

3.17.1.1 Projects, initiation

Initiation (start) of a new project depends on the type of project, i.e., developing a new document or revising an existing document.

- a) development of a new document may be initiated by the industry at large or by MPMA members, with the primary goal of addressing or meeting an industry need or adding complementary editions to an existing ABMA or AGMA document;
- b) revision of an existing document may be initiated to correct discovered errors, add clarifications to address questions received from industry users, or to implement a general update to match current industry practices.

3.17.2 Project working group

A new project is initiated as described in 3.17.1.1. Upon initial approval by the TDEC, the project will be announced to the industry. Interested subject matter experts will be invited to meet and discuss the project. The first order of business will be to develop preliminary scope, timeline and completion of a formal project proposal form. The form will be reviewed by the TDEC for final approval of the project. Official formation of the project working group commences once the project has received final approval from the TDEC.

3.17.2.1 Project working groups, members

Members of the project working group consist of subject matter experts who expressed interest to participate and make contributions as needed. During the course of the project new members may request to be added to the working group. Members may be removed from the working group due to lack of attendance or contribution.

The final publication version of the document will acknowledge the participation and contributions of the members by listing their respective company. To be listed on the document will require active participation during the project development, as determined by the project leader and MPMA staff liaison. Active participation during the development of the project is defined in 3.16. The project working group shall be dissolved at the completion of the project.

NOTE: Non-AGMA member

Should it become necessary to invite a subject matter expert, or SME, from a non-MPMA member company to participate on an active project, a request may be submitted to the TDEC to waive the membership requirement See 3.11.

3.18 Project leader

A project leader will be elected at the start of a new project by the working group members. The results of the election will be submitted to the TDEC for final approval. The project leader will work closely with MPMA staff to move the project through to its various stages including:

- preparation of meeting agendas;
- call meetings to order and move the meeting through the agenda items;
- act in a purely neutral capacity, divesting themselves from taking a position on matters before the working group;
- ensure at meetings that all points of view are given adequate time and consideration;
- ensure that all decisions are clearly formulated and made available in writing by the secretary for confirmation during the meeting;
- communicate with MPMA staff and the TDEC liaison any issues they wish to call to the attention of the TDEC;
- develop priorities and time schedules for the project;
- only when deadlocked on a motion, the project leader may vote to break the tie otherwise they have no voting rights;
- counts for quorum.

3.19 Project leader term

A Project leader's term ends at the conclusion of the project, or 48 months (4 years) after the first appointment, whichever comes first. A Project leader may be reappointed with per consent by the committee members obtained through anonymous voting, typically through emails to MPMA staff, or if there are no other volunteers. The appointment, or reappointment, of a Project Leader is approved by the TDEC.

3.19.1 Document editor

To ensure transparency during project development, the TDEC recommends that the working group appoint an editor at the start of a project who will work closely with the staff, ensuring that all approved changes and additions are implemented accurately. The editor together with the staff will maintain an accurate record of all changes, additions, and corrections through the development of the working draft by using the Track Changes feature in Microsoft Word and file copies of each major update or meeting edit. The editor should be present at a significant amount of any virtual meetings and perform the in-meeting edits to the document.

3.20 Meeting types

Meetings are either face-to-face or virtual. A face-to-face meeting can be held at MPMA offices, a member's facility, or at one of the approved locations as defined in 3.22. A virtual meeting is held through an internet meeting provider.

3.21 Determining quorum

A simple majority of the committee or project working group, or five, whichever is fewer, constitutes a quorum. For purposes of establishing a quorum, only one representative of each company, proprietorship, partnership, corporation, or other functional interest areas are counted. The goal is diversification, equitable voting, and a lack of dominance.

Meetings without a quorum should be canceled and rescheduled. Under unusual circumstances, a meeting may be held without a quorum, but any action taken during the meeting shall be ratified at the next meeting. If a project group consistently falls below five (5) member companies in attendance, the project will be reviewed by the TDEC for cancellation or solicitation for new members.

3.22 Meeting location

The following metropolitan locations have been approved by the TDEC for face-to-face meetings:

- Alexandria, VA (MPMA Virginia office);
- Chicago, IL (close to O'Hare airport);
- Orlando, FL;
- Denver, CO;
- Atlanta, GA;
- Hartford, CT;

Meetings may be held at locations other than those listed above if invited / hosted by a member at their respective facilities. Requests to hold a meeting at a location not on the approved list, or not at a member's facility, will be reviewed on a case-by-case basis by MPMA staff. MPMA will pay for catering when meetings are held at a member facility.

3.23 Meeting agenda

The committee chairperson or project leader will prepare, and forward to the MPMA staff liaison, the draft of the meeting agenda using the template from the MPMA portal. To provide adequate notice to potential participants, the meeting agenda should be distributed at least thirty (30) days prior to the scheduled meeting date for face-to-face meetings, and at least seven (7) days prior for virtual meetings.

3.24 Meeting minutes

All members of the committee or working group are required to help with the recording of the meeting minutes when called upon by the committee chairperson or project leader. To maintain one's active status in the committee or working group, members shall ensure they are ready to assist when called upon. The recording shall be done using the latest edition of the MPMA Minutes template available on the MPMA portal. The meeting minutes shall follow the meeting agenda; clearly recording the final actions, or decisions on each agenda item including reasons for the action or decision. When needed the minutes may also include a brief discussion summary for each agenda item. Care should be taken to avoid

verbosity. When motions are made and voting takes place, the minutes shall clearly record: 1) the content of the motion; 2) who made the motion; 3) who seconded the motion; 4) the outcome, including – if not unanimous – the number voted in favor, the number opposed, and the number abstained.

The meeting secretary submits the minutes to MPMA staff who will add the attendance, check to ensure nothing was missed, and send the minutes to the committee chairperson or project leader for final review and approval for distribution. In general, the meeting minutes shall be distributed no more than (7) days after the meeting. The minutes from the final meeting, the meeting in which the TDEC was requested for approval to publish, may be approved via email.

3.25 Records

It is the responsibility of the Technical Division to establish and maintain all development records for all active and withdrawn standards. It is the responsibility of the Committee Chairperson or Project Leader to furnish all pertinent documents used in the development of the standards to the Technical Division.

The file for the document shall contain at a minimum:

- Agendas of all meetings;
- Minutes of all meetings;
- Supporting documents including figures, tables, derivation of formulas and the sources of empirical values;
- Example calculations;
- Ballot drafts and comments and their resolutions including any correspondence relating to ballot positions;
- Appeal records, if applicable.

Records shall be retained for:

- one complete standards cycle, or until the standard is revised for standards maintained under the periodic maintenance option.
- a minimum of five (5) years or until approval of the subsequent revision or reaffirmation of the complete standard for standards maintained under the continuous maintenance option.
- until the standard is reaffirmed, revised, or subsequently reviewed in connection with the stabilized maintenance of the standard as an American National Standard (ANS).

3.26 Motions and votes

At times when consensus on a substantive discussion cannot be reached, the committee chairperson or project leader shall opt to move the discussion forward by requesting one of the members to make a motion, seconded by another member and calling for a vote. Motions not seconded shall be considered rejected. The voting shall be “voice” vote choosing “yea,” “nay,” or “abstain.” Unless the results are unanimous, the meeting minutes will reflect the final number of yeas, nays, and abstentions. For a motion to pass, it shall need a simple majority of votes not counting the abstentions.

The committee chairperson or project leader shall only vote when there is a tie.

NOTE: During comment review and resolutions, members who are attending the meeting ONLY because they submitted comments are not eligible to make a motion.

4 Project stages

4.1 General

Regardless of its type, new or revision, a Working Group Project will have a 4-year (48 months) maximum term. See Figure 1 for a process map of the following stages that document projects go through:

- Proposal stage;
- Working draft stage;
- Review and comment stage;
- General ballot stage;
- Publication stage.

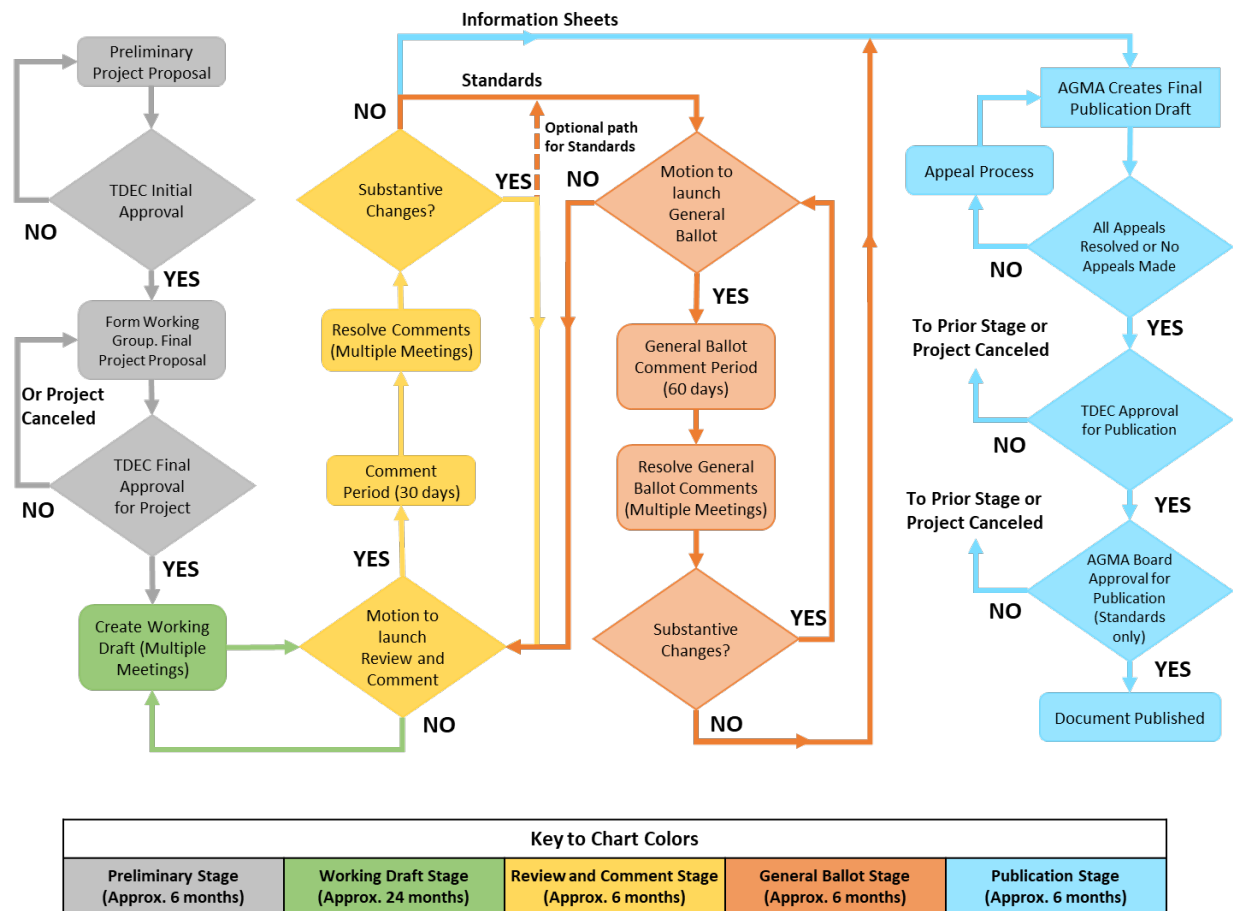


Figure 1 – Document Stages

4.1.1 Proposal stage

The subject matter committee will produce a preliminary project proposal. The “committee project proposal form” includes the proposed document title, the type of project (creation, revision), a description of the proposed material, the reasons for the project, and identify any member companies that are committed to participating in the project, or any that should be contacted for interest. This proposal form will be considered by the TDEC. See Clause 3.17. TDEC-approved proposals for new American National Standards and proposals to revise existing American National Standards shall be transmitted to ANSI for listing in ANSI “Standards Action” list by submission of the appropriate forms (PINS). Comments resulting from the filing of these forms will be handled in accordance with the provisions of the *ANSI Essential*

Requirements [1]. Public announcement of the project will be made, typically by adding the project announcement to the website or including in newsletters. Refer to *ANSI Essential Requirements* [1].

After initial project approval, a working group (WG) will be formed by an invitation to participate survey. After the WG formation, the WG will complete the Working Group Project Proposal Form based on the Committee Project Proposal Form. This form will be reviewed by the TDEC for approval to continue the project.

4.1.2 Working draft stage

A new project always starts with MPMA staff preparing the Working Draft, WD, copy of the document which the working group will use to develop the final deliverable. After each meeting where the working draft is edited by the document editor, a PDF copy of the latest version is shared with working group members on the MPMA portal. Substantial edits are allowed during the working draft stage. The draft shall contain, on each page, a watermark indicating that it is a working draft of the standard and is not to be used for citation and/or quotation. The WG is responsible for making up examples that will test each formula in the standard. A calculation is to be made of each example. Any significant change in the scope of the proposed standard requires prior TDEC approval. The draft shall be prepared in accordance with the latest issue of MPMA 900. After a draft of the proposed standard has been approved at a meeting of the WG by at least 75 percent of the votes cast by those present and eligible to vote, it will be submitted to the Technical Division via meeting minutes with a request to distribute for Review and Comment, RC. The stage ends when the working group motions to send the document out for the Review and Comment, RC, stage. MPMA staff will prepare the WD draft as the RC draft and launch the review.

4.1.3 Review and comment stage

The RC draft is reviewed for a period not less than thirty (30) days by working group members, the upper-level subject matter committee, and, for information sheets, any other interested parties who responded to the public announcement. See Clause 6 for details on comment resolution. For Information Sheets, once all comments are resolved and no substantive changes were made, the working group shall request approval from the TDEC for review and proposal to the Board of Directors for final approval to publish the document.

4.1.4 General ballot stage (standards only)

Per *ANSI Essential Requirements* [1], documents to be designated as standards shall be submitted for "public review and commenting" and consensus body review and voting, known in MPMA as General Ballot, GB.

4.1.4.1 Public Review

Public review differs from General ballot in that public review allows feedback of comments only and no voting position. Public review commentors are not considered part of the consensus body. 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 ANSI "Standards Action" in order to provide an opportunity for public comment. The comment period shall be one of the following:

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

Typically, the public review is performed concurrently with the General Ballot. Public review announcement is made through the BSR-8 form and by announcement on the MPMA website including the public review period.

Any substantive change made to the American National Standard as the result of the General Ballot requires listing of the change in ANSI "Standards Action" via an email to psa@ansi.org.

4.1.4.2 General Ballot

The committee or working group will request approval from the TDEC to submit the draft for General Ballot. After approval by the TDEC to launch the General Ballot and filing of appropriate paperwork with ANSI (BSR-8), the draft will be prepared, by MPMA staff, as the GB draft. The minimum ballot period will be 30 to 60 days depending on the complexity of the standard being balloted. The TDEC may set longer periods at its discretion. The invitation to participate is sent to technical contacts from both members and non-members, and any member of the general public that contacts MPMA to participate. Only those responding in the affirmative will be included in the consensus body for the balloting of the standard. In accordance with *ANSI Essential Requirements* [1] the balloting and re-balloting of substantive changes will be announced in the ANSI "Standard Action" (BSR-8 form) for all draft American national standards to provide opportunity for public comment, see Clause 4.1.4.1. All directly and materially affected interests shall have the opportunity for fair and equitable participation without dominance by any single interest category, individual, or organization.

MPMA seeks to maintain a balance within the consensus body such that no single interest category constitutes a majority of the membership of the consensus body. Should the results of the invitation to participate not be balanced, outreach will be performed to members of the under-represented interest categories prior to the launch of the GB. The recipients of a ballot for a draft American National Standard are to be classified as;

- a. Manufacturers – Those companies that design, assemble, or produce bearings, gearing, gearboxes, or flexible couplings for use by themselves or others;
- b. Users – Those companies that use bearings, gearing or flexible couplings in their products but do not design or produce bearings, gearing, or flexible couplings;
- c. General interest parties – Others that are interested in standardization, such as academicians, independent consultants, and equipment suppliers to the industry (tool, lubricant, material suppliers, etc.).

A consensus body member's interest category is determined by the response to the invitation to participate survey and should be relevant to the subject matter of the document being balloted. Only one vote per top-level company is considered. If there are multiple conflicting votes from a single top-level company, MPMA staff will contact the voters to resolve the voting to one position. Top-level companies are defined by the MPMA membership status.

Respondents to general ballots shall pick one of the following four choices:

- a) Approve the proposed standard as is.
- b) Approve the proposed standard with comments.
- c) Do not approve the proposed standard. Disapprovals not accompanied with comments shall be recorded as negative without comments, without further notice to the voter, but will not be factored into the numerical requirements for consensus.
- d) Abstain.

A reminder to complete the ballot should be sent one week ahead of the closure date to at least any consensus body member who hasn't responded.

See Clause 6 for details on comment review and resolution.

NOTE 1: To maintain the project schedule, it is imperative that anyone who submits comments during GB attends subsequent comment resolution meetings and be ready to provide clarification on their comments and views as needed. Commenters who fail to attend meetings when their comments were discussed and resolved shall be sent the written disposition and the working group's resolutions of their comments, including reasons therefore, via meeting minutes and comment resolution table. All resolutions shall be considered FINAL at the conclusion of the meeting following the meeting in which the comment resolutions were recorded.

NOTE 2: During GB, substantive comments to correct a technical error will be discussed and solved by the working group followed by another general ballot and public review. Comments regarding content that has previously been resolved by the committee will be rejected. New substantive comments, as decided by the working group, shall be archived for the next edition.

Once all comments are resolved, the committee or working group shall request approval from the TDEC via meeting minutes to take the next action (publication, withdrawal, adoption, or reaffirmation).

The action is approved if:

- a majority of the consensus body (those receiving ballots) cast a vote (counting abstentions);
- at least 75% of ballots cast approve the standard, (not counting abstentions);
- No substantive changes were made to the draft after voting, and all comments submitted were editorial;
- no appeals were made or all appeals have been adjudicated;
- the proper paperwork has been filed with ANSI;
- the TDEC and MPMA board approve the action.

Appeals shall be conducted in accordance with Clause 6.6.

4.1.5 Publication stage

The publication stage begins after the working group motions to request approval from the TDEC to publish the document. The TDEC may:

- a) Recommend the standard for acceptance to the Board of Directors;
- b) Reject and return the standard to the WG with constructive written comment for WG resolution;
- c) Postpone action pending resolution of appeals, if any.

After Board approval, MPMA staff will submit final forms and other required paperwork to ANSI and distribute the publication. Prior to publication, the final publication draft shall be reviewed by at least two working group members who will review that the draft includes all changes approved / requested by the working group and is free of errors and typos. The working group is disbanded once the document is published.

4.1.6 Discontinuance of a project

The TDEC may decide to abandon the processing of a proposed new or revised standard or portion thereof at its own discretion and without a vote of the relevant consensus body. ANSI shall be notified immediately after such a decision which will then be announced in ANSI "Standards Action".

5 Maintenance of existing publications

5.1 Reaffirmation

All AGMA Information Sheets and Standards have a five (5)-year life span, after which they are required to be either reaffirmed, revised, or withdrawn. ABMA documents have either a five (5)-year life span, or ten (10)-year life span if the document is under "stabilized maintenance". A standard that is maintained under the stabilized maintenance option shall satisfy the following eligibility criteria:

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

Should no request for change be received within the 10-year period, the standard will need to be reaffirmed. If a recommendation is made at any time by a directly and materially interested party that a standard maintained under the stabilized maintenance option requires revision or should be withdrawn, then that recommendation shall be considered in the same manner as a new proposal but within a maximum of 60 days from receipt.

5.1.1 Reaffirmation project

Per *ANSI Essential Requirements* [1], ABMA and AGMA standards shall be reaffirmed every 5 years (or 10 for stabilized maintenance) to confirm the document is still technically accurate and relevant to the industry. MPMA staff will inform the committee chairperson of documents due for reaffirmation within their committee. The committee responsible for the document have these options when reaffirmations are due:

- a) Motion to recommend to the TDEC to start the reaffirmation process (standards only).
- b) Motion to recommend to the TDEC to directly start revising the document. A preliminary project proposal shall be submitted along with the recommendation stating the reasons for the revision.
- c) Motion to recommend to the TDEC to start the withdrawal process for the document along with the reasons for withdrawal.
- d) Motion to open a ballot to gather comments and voting for reaffirmation (information sheets only).
- e) Motion to recommend to the TDEC to reaffirm the document as is (information sheets only).

If the document is a standard, it shall go through a General Ballot commenting period of not less than 30-60 days after the committee motions to start the reaffirmation process, and the TDEC approves the launch of the General Ballot. See Clause 4.1.4. See Clause 6 for details on the commenting process, and review of comments process.

Appeals shall be conducted in accordance with Clause 6.6.

5.2 Withdrawal of an existing document

The process to withdraw a document begins with a motion from the committee to start the withdrawal. If the document is an information sheet or an identically adopted ISO standard, it will be withdrawn after approval from the TDEC and the Board of Directors. All other documents shall go through a General Ballot commenting period of not less than 60 days after the committee motions to withdraw and the TDEC approves the launch of the General Ballot. See Clause 4.1.4. See Clause 6 for details on the commenting process, and review of comments process.

After Board affirmation of the withdrawal, the Technical Division will make a general announcement by public announcement to inform the membership and general public of the withdrawal. Appeals shall be conducted in accordance with Clause 6.6.

5.3 ISO adoption project

ISO international standards may be adopted as American National Standards. ISO technical specifications (TS), publicly available specifications (PAS), and technical reports (TR) may be adopted as ABMA or AGMA information sheets. The technical committee will determine if the ISO document is to be proposed as a new document, a replacement for an existing ABMA or AGMA document, or in addition to (parallel to) an existing ABMA or AGMA document. ISO documents are identically adopted by ABMA and AGMA, only minor stylistic changes may be made to the document. A foreword will be added to the document addressing the history, origin and, if appropriate, the differences between the AGMA and ISO standards

If the document will be adopted as an ABMA or AGMA information sheet, the committee may elect to collect comments on the document or directly motion to adopt it. Information sheets are adopted after approval from the TDEC. If the document will be adopted as a standard, it shall go through a General Ballot commenting period of not less than 60 days after the committee motions to start the adoption process, and the TDEC approves the launch of the General Ballot. See Clause 4.1.4. See Clause 6 for details on the commenting process, and review of comments process.

Any new ISO adoption documents will be designated as ANSI/AGMA ISO or ANSI/ABMA ISO preceded by the ISO numerical designation, and the four-digit year of the ISO document (e.g., ANSI/AGMA ISO 14104-2017). ISO TR or TS adoptions are not designated with the ANSI terminology (e.g., AGMA ISO 10828-2024). If it is intended as a replacement to an ABMA or AGMA standard, the original standard will be withdrawn per Clause 5.2.

If the ballot results in comments that generate substantive changes to the standard that the Technical Committee deems necessary to incorporate, the resulting revised standard shall be re-balloted as an ABMA or AGMA standard and shall contain an explanation of the changes from the ISO standard in the foreword.

Appeals shall be conducted in accordance with Clause 6.6.

Identical adoptions of an ISO standard may use the procedures outlined in this document, or the expedited procedures listed in *ANSI Procedures for the National Adoption of ISO and IEC Standards as American National Standards* [3]. These expedited procedures allow for public review and consensus body balloting concurrently and the minimum ballot period can be voted on by the consensus body to be less than Clause 4.1.4, but not less than two weeks.

5.4 Request for interpretation

To comply with the *ANSI Essential Requirements* [1], MPMA has a formal request for Interpretation (RFI) process. Questions received by MPMA go through different levels of escalation depending on their nature.

Comments that uncover a technical error are addressed with a revision to the document.

The request shall be made in writing to the Technical Division. The request shall include the following:

- a) The title, number and date of standard to be interpreted;
- b) A clear and concise statement of the question; and
- c) The circumstances of the application which prompted the question, to assure appropriate response.

When a question is received in its proper format per above, the Technical Division will attempt to answer the question and send a copy of the response to the appropriate Committee Chairperson. If the Technical Division cannot answer the question, they will forward it to the appropriate Committee Chairperson.

If the Committee Chairperson cannot answer the question, they will select a group of at least three impartial, knowledgeable people, which may include themselves, to develop a proposed response to the question. The group should work to reach consensus within 30 days.

The response is sent to the Technical Division for distribution to the requester and the appropriate technical Committee. The question and response will be published on the website and retained for consideration in the next revision of the standard. It is intended that this entire process will be completed in 60 days.

If the group cannot reach consensus or if the requestor does not accept the response, the matter will be forwarded to the TDEC for consideration at its next meeting and to develop a response.

5.5 Post publication errors and revisions

If an error is discovered in the standard after the standard is printed, the following actions will be taken depending upon the nature of the error.

- a) **Typographical Error.** The Technical Division will prepare an errata, change the publication master, and post the errata on the website.
- b) **Technical Error.** If the technical error was approved through the process, then an errata cannot be used and instead must go through full consensus process, see Clause 4. The Committee responsible for the standard will be notified. If found to be a publishing error, an errata to the standard will be prepared under the direction of the Committee Chairperson. The Technical Division will change the publication master and post the errata on the website.

- c) Technological Improvement. When a technological improvement is discovered, the Committee responsible for the standard will be notified by the Technical Division. A potential revision to the standard will be evaluated under the direction of the Committee. If the Committee decides that a revision is needed, the procedure for processing the revision will follow Clause 4. Improvements that do not trigger a revision are stored for the next revision of the document.

6 Comment review and resolution

6.1 General

Those taking part in Review and Comment, Public Review, or General Ballot will receive a copy of the subject document to review along with a blank comment table to record and submit their comments. The ballot will also include the due date to submit comments and, if voting is needed, a place where the vote may be recorded. Comments shall clearly state the issue and suggested action. At the close of the commenting period, MPMA staff and the project leader will review all comments received and propose an action for each. Tabulated comments along with the proposed actions will be distributed to the working group, public commentors, and consensus body respondents. Meetings will be scheduled to review and resolve comments labeled “to be discussed” by the project leader.

Regardless of the type of commenting period it is important to determine if the comment is editorial or substantive. A substantive change is one which directly and materially affects the use of the document.; Examples of substantive comments include: changes to the scope, introducing new content, extensive rewriting and reorganizing, changes (other than corrections) to mathematical equations, graphs, or tabulated values. Examples of editorial comments include grammar mistakes, changes to align with MPMA style and adding additional information for clarity. For new and revision of existing documents, substantive changes require an additional round of commenting.

NOTE: During GB, substantive comments to correct a technical error will be discussed and solved by the working group followed by another general ballot and public review. Comments regarding content that has previously been resolved by the committee will be rejected. New substantive comments, as decided by the working group, shall be archived for the next edition.

The consensus for the action to address each comment may be determined through an informal verbal agreement among the working group members present, or via a formal motion to take a specific action based on the comment. See 3.26 for information on motions. It is strongly recommended to cease discussion of a comment after a working group action is determined. Comments may be tabled until the next meeting if the commenter or their company is not represented during the review and discussion of the said comments.

NOTE: It is a courtesy, not a requirement, for the working group to wait for the commenter to attend a comment resolution meeting. Commenter absence should not hold up resolution of the comment if the working group is inclined to accept the comment. The working group should not let the absence of the commenter indefinitely delay the resolution process. Commenters who fail to attend meetings when their comments were discussed and resolved shall be sent the written disposition and the working group's resolutions, including reasons therefore, of their comments via meeting minutes and comment resolution table. All resolutions shall be considered FINAL at the conclusion of the meeting following the meeting in which the comment resolutions were recorded.

Acceptance of individual comments, rejection of comments, and changes to the draft standard shall be approved by at least 75 percent of the votes cast by those present and eligible to vote. The requirements per clause 4.1.4 must be met.

If any substantive changes have been made, all the changes shall be re-balloted per clause 4.1.4. Any unresolved objections, along with attempts at resolution, shall be reported to the consensus body to afford all voting members the opportunity to reaffirm, or change their vote (recirculation ballot).

The Technical Division shall notify each commenter from the consensus body and public review of the comment resolutions. The email shall include a complete set of minutes of the comment resolution meeting(s), comment table showing resolutions that include reasons for rejection, and notice of the Commenter's right to appeal in accordance with Clause 6.6.

6.2 Comments on new or revision ABMA and AGMA documents

The comment resolution process is similar regardless of the commenting period (Review and Comment stage or General Ballot stage). Before the working group holds a meeting to resolve the comments the project leader is requested to review the comments and recommend actions. See Table 1 for list of actions when resolving comments on new or revision documents. Comments labeled accepted by the project leader need no further discussion by the working group.

Table 1 – Allowable comment actions for new or revision documents

| Allowable Comment Action | Explanation |
|-------------------------------------|--|
| Accepted | The suggested action will be implemented. |
| Accepted with Modification | The working group agreed that there was an issue but decided on an action different from the one suggested by the commenter. |
| Rejected | As a result of working group discussion, the proposed change is not implemented. A reason is noted in the comment table. |
| Rejected – Deferred to Next Edition | Due to its scope, the amount of change required, or the inclusion of new technical concepts not present in the current edition, the comment will be deferred for consideration until the next edition. |
| Withdrawn | The commenter removes the comment from consideration. |

After the working group has concluded its review and resolution of all comments, one of two motions for the disposition of the draft is required: If the working group determines that its actions have NOT resulted in a SUBSTANTIVE change to the proposed document, and if there are no unresolved objections (See clause 6.1), the following motion is made, voted on, and recorded in the meeting minutes:

- *After review and resolution of all comments received and noting that no substantive changes were made to the draft and there are no unresolved objections, the working group requests approval from the TDEC to submit the draft for General Ballot [if this is the next stage] [or] Publication [if this is the next stage].*

If the working group determines that its action has resulted in SUBSTANTIVE changes to the proposed standard during General Ballot, the following motion is made, voted on, and recorded in the meeting minutes:

- *After review and resolution of all comments received and noting that substantive changes were made to the draft, the working group requests approval from the TDEC to launch a new General Ballot and Public Review (for standards).*
- *After review and resolution of all comments received and noting that substantive changes were made to the draft, the working group requests approval from the TDEC to launch a new Review and Comment (for information sheets).*

6.3 Processing of comments on reaffirmation of ABMA and AGMA documents

Detailed discussions of the reaffirmation comments are not necessary. For each comment, the committee only needs to determine whether it is editorial or substantive. Before the committee holds a meeting to resolve the comments the committee chairperson is requested to review the comments and recommend actions. Comments that the committee chairperson determines to be editorial may be resolved together by the committee without further discussion. If all comments are editorial, and there are no unresolved objections (see Clause 6.1), they will be archived for review at the next revision or reaffirmation. The following motion is then made, voted on, and recorded in the meeting minutes:

- *After review and resolution of all comments received and noting that all comments are editorial, the committee requests that the TDEC approve the reaffirmation.*

If the committee determines a comment to be substantive the options to proceed are listed in Table 2.

Table 2 – Options if substantial comment from reaffirmation

| Option | Explanation |
|---|---|
| Committee votes to reaffirm with an errata | After TDEC approval, MPMA will prepare the errata and attach it to the end of the published document. |
| Committee votes to start a revision project | The entire document may be revised. See Clause 4 for project stages. |
| Committee votes to start a limited scope revision project | Specific items or areas within the document are specified when requesting the revision project. Only those items or areas specified are valid to be changed or commented on. See Clause 4 for project stages. |
| Committee votes to withdraw the document | The document will go through the withdrawal process described in 5.2. |

6.4 Comments on withdrawals

The purpose of collecting comments on the withdrawal of a document is to determine if there are factors the committee did not consider when approving the start of the withdrawal process. After reviewing the withdrawal comments the committee motions to either request the withdrawal to be finalized, or request stopping the withdrawal process.

6.5 Comments on ISO adoptions

ISO documents are adopted as identical adoptions, meaning no substantive changes are allowed in the version MPMA publishes. Comments are reviewed to determine if any comments are substantial enough to warrant not adopting the document. After reviewing the comments, the working group motions to either request the adoption to be finalized, or request stopping the adoption process. The working group may also decide to send the comments to ISO with a request that ISO revise the document.

6.6 Appeals

The appeal processes herein permit MPMA standards to be created fairly.

6.6.1 Types of Appeals.

- A MPMA procedural appeal may be made by any party disagreeing with the manner in which standards are created.
- A MPMA technical appeal may be made by any party disagreeing with the content of standards being created.

Appeals of actions shall be made in accordance with the time frames provided in Clause 6.6.2. Appeals of inaction may be made at any time.

6.6.2 Processes of Making Appeals.

6.6.2.1 Procedural Appeals.

- a) The initial appeal regarding complaint of procedural defect in the course of standards development shall be given in writing, within 30 days of occurrence, to the Technical Division, the TDEC chairperson, the TDEC liaison, and the Chairperson of the Technical Committee.
- b) The Technical Committee shall then consider the procedural complaint at its next regularly scheduled meeting and shall attempt to resolve the conflict. All members of the Technical Committee hearing the procedural complaint shall be unbiased and not directly and materially affected by the outcome of the appeal, and the appellant shall be offered the opportunity to identify any Technical Committee members who have a conflict of interest in the appeal.

- c) If the complainant is not satisfied with the action of the Technical Committee, further appeal may be made in writing to the Technical Division and the TDEC chairperson, with copies to the TDEC liaison and Chairperson of the Technical Committee. This written appeal shall be made within 30 days of the Technical Committee action. The Technical Division shall forward the appeal to the TDEC for adjudication. The TDEC at its next regularly scheduled meeting shall adjudicate the procedural complaint, without oral hearing. All members of TDEC who hear the subject appeal shall be unbiased and shall not be directly and materially affected by the outcome of the appeal. In addition, the appellant shall be offered the opportunity to identify any TDEC members who have a conflict of interest in the appeal. The TDEC decision is final and shall be given in writing by the TDEC to both the appellant and the Technical Committee.

6.6.2.2 Technical Appeals.

- a) Appeals regarding technical complaints in the course of standards development may be made only after the resolution of comments. Notice of intent to appeal shall be made by appellant in writing within 30 days of resolution of comments. This notice shall be given to the Technical Division, the TDEC Chairperson, the TDEC liaison, and the Chairperson of the Technical Committee.
- b) A full written appeal shall be submitted within 60 days of resolution of comments. The appeal shall be given to the Technical Division and the TDEC and a copy sent to the Chairperson of the Technical Committee. This written appeal shall contain the following three sections: specific language of the proposed standard objected to, specific reasons for the objections, and specific proposed language to change the standard to eliminate the objections.
- c) As soon as the full written appeal is received by the Technical Division, it shall be sent to the Chairperson of the TDEC and the Chairperson of the Technical Committee. The Technical Committee shall then act on the appeal and send its response in writing to both the appellant and the Technical Division. All members of the Technical Committee hearing the appeal shall be unbiased and shall not be directly and materially affected by the outcome of the appeal. In addition, the appellant shall be offered the opportunity to identify any Technical Committee members who have a conflict of interest in the appeal. This response shall be sent within 30 days of the time the appeal is received by the Technical Division.
- d) The Technical Committee's response shall be considered as the adjudication of the appeal in accordance with *ANSI Essential Requirements* [1].

6.6.2.3 Technical Division Executive Committee review intervention.

- a) When extraordinary circumstances require TDEC intervention on a technical appeal decision of a Technical Committee, an Appeals Panel consisting of five people competent to hear the appeal shall be appointed by the TDEC Chairperson. All members of the appeals panel shall be unbiased and shall not be directly and materially affected by the outcome of the appeal. In addition, the appellant shall be offered the opportunity to identify any potential panel members who have a conflict of interest in the appeal. Appointments shall be made within 60 days of receipt of request for TDEC review of appeal.
- b) The appellant and the respondent (which in most cases will be the responsible Technical Committee) shall each strike one member of the Appeals Panel; the remaining three members will decide the issue.
- c) For appeals requiring TDEC intervention, the appellant shall submit an administrative fee of \$500.00. This fee may be waived or reduced upon sufficient evidence of hardship.
- d) The three panelists shall review the written appeal and responses as well as the entire record relevant to the proposed standard, including minutes, proposed standard ballots, and ballot resolutions. The Appeals Panel may decide the appeal on written submissions and the record alone, or it may also ask the parties involved to appear to help clarify written submissions. After considering the record, the pleading, and the hearings, if any, the Appeals Panel shall adjudicate the appeal and send in writing its decision (including reasons therefore and recommendations) to the TDEC. The Appeals Panel shall complete its responsibilities within 60 days of panel formation.

- e) The TDEC shall accept the Appeals Panel recommendations and then refer the matter to the MPMA Board of Directors for approval. The Appeals Panel decision shall be given by the TDEC to both the appellant and the responsible Technical Committee.
- f) For an American National Standard, after completion of the appeal to MPMA and action by ANSI, the complainant may further appeal to ANSI. The written appeal shall be made within 15 days of notice of the ANSI action. The appeal is to be sent to the ANSI Board of Standards Review, with a copy of the appeal sent to the MPMA Technical Division. See ANSI procedures for their Board of Standards Review, Executive Standards Council, and Appeals Board.

7 ISO processes

7.1 ISO TC 4, ISO TC 14, and ISO TC 60, U.S. participation

MPMA represents the interests of the U.S. bearing and gearing industry in ISO TC 4, ISO TC 14 and ISO TC 60 through a Technical Advisory Group, TAG. As defined by *ANSI International Procedures* [3], the primary responsibility of U.S. TAGs is to develop and transmit, via ANSI, U.S. consensus positions and comments on activities and ballots of ISO TCs (and, as appropriate, ISO subcommittees, SCs, and ISO policy committees, PCs). These include active participation in ongoing projects within relevant TCs by reviewing project related documents and submitting comments, as needed, as well as voting when those documents are submitted for final review and approval, or reaffirmation, or withdrawal. In addition, U.S. TAGs help in the search for, and nomination of, the U.S. delegates who will represent the U.S. at ISO committee meetings. U.S. TAGs also initiate the process for the U.S. adoption of an ISO document.

7.1.1 ISO TC 4, ISO TC 14, and ISO TC 60, U.S. TAG

The U.S. Technical Advisory Group, TAG, is a group of experts, from the MPMA committees and other experts, with expressed interests in active participation in the development of international bearing, gearing, and related standards. The TAG includes current technical representatives of MPMA member entities forming various MPMA working groups, committees, and other technical representatives. Two separate TAG rosters are maintained for ISO TC 4 and ISO TC 14 / ISO TC 60 due to the subject matter of the committees. Members of the U.S. TAG to ISO TC 4, ISO TC 14, and ISO TC 60 are expected to participate actively by fulfilling attendance, voting, correspondence, and other obligations.

7.1.2 U.S. TAG responsibilities

As part of their primary responsibility, the U.S. TAG, will review, and comment on, materials distributed by ISO TC 4, ISO TC 14, and ISO TC 60 during development of new ISO documents, systematic reviews, or withdrawal of existing documents. Any comments submitted will be forwarded, via ANSI, to the relevant working group under ISO TC 4, ISO TC 14, and ISO TC 60 for review and resolution. Periodically, as the scheduling allows, the U.S. TAG will conduct a preliminary review of the comments submitted before the comments are forwarded to ANSI to be sent to ISO. And finally, when voting is conducted on an ISO ballot, the U.S. TAG will determine the final U.S. position based on the majority of the votes cast.

In-person representation of the U.S. TAG, on behalf of the U.S. bearing and gearing industry, at live ISO TC 4, ISO TC 14, and ISO TC 60 meetings will be carried out by a U.S. Delegate, see 7.1.3 for details.

7.1.3 U.S. TAG U.S. delegate

To ensure active, hands-on, participation on active projects within ISO TC 4, ISO TC 14, and ISO TC 60, the MPMA Technical Division, with consultation with the U.S. TAG, recommends a current member of the U.S. TAG to the TDEC for approval as the U.S. delegate. Once approved by the TDEC, the nomination will be forwarded to ANSI for approval and submission to ISO to be registered as the U.S. delegate to working groups or committees of ISO TC 4, ISO TC 14, or ISO TC 60 on a particular active project.

A prospective U.S. delegate is:

- a SME individual representing a current MPMA member entity domiciled in the U.S. (including U.S. branch offices of foreign companies authorized to do business in one or more states as defined by the relevant state's corporation law within the U.S.);

- a U.S. citizen or permanent resident;
- is known as a SME in the related field;
- has functional understanding of MPMA Technical Division rules and guidelines;
- has a history of active participation in MPMA Technical Division activities;
- has the approval from their management to travel and attend ISO TC 4, ISO TC 14, or ISO TC 60 meetings as needed.

NOTE: MPMA pays the traveling cost (airfare, hotel, and food) of the U.S. delegates when attending ISO TC 4, ISO TC 14, or ISO TC 60 meetings. The delegate will make their own arrangements and upon returning will submit their travel expenses along with all applicable receipts to the Technical Division for reimbursement from MPMA. Only one delegate per working group or committee will be supported by MPMA. Other experts wishing to attend ISO meetings shall do so at their own expense.

7.1.4 Review, comment, and vote on active projects within TC 60

Review and commenting on ISO documents is similar to what was described for MPMA projects in previous clauses. When these activities differentiate from MPMA's own, explanatory information will be provided on a case-by-case basis.

7.1.5 Adoption of ISO documents

ISO international documents may be adopted as ABMA or AGMA documents in accordance with Clause 5.3.

8 Technical accuracy of standards and information sheets

The working group is responsible for the technical accuracy of the Standards and Information Sheets it publishes. This includes the formulas, figures, tables, and all text within the document. The MPMA technical staff and the working group share the responsibility for the accuracy of draft documents prior to publication. The publication draft is reviewed by at least two working group members for formatting, typos, and to ensure that all changes were correctly implemented. No further rewording or clarification changes can be made at this point.

The working group is responsible for making up examples that will test each formula in the standard. A calculation is made for each formula. This documentation is sent to the MPMA staff before the standard can be sent out for Publication.

The foreword or text of ABMA and AGMA standards for products which utilize application factors (service factors) shall contain a definition of application factors (service factors) and recommend proper use of application factors (service factors). Numerical application factor (service factor) values are to be included as annexes to the standard with language which defines their use and application.

9 Speaking on behalf of MPMA

At times, project leaders, or members of MPMA working groups are approached with questions about MPMA's position on various matters. However, the only official spokespeople of MPMA are the Chairperson of the organization, the Officers, and the President. If you are asked for an opinion regarding ABMA or AGMA Standards, interpretation, or policy, be sure to preface any comment with a statement that you speak as an individual, not as a representative of MPMA. Please advise MPMA staff by telephone or e-mail so that an official response to the question can be provided.

Annex A (informative)

Motion + Power Manufacturers Alliance Antitrust Meeting Policy

The purpose of this Antitrust Policy is to alert members and staff to the kinds of activities most likely to raise antitrust concerns and to the precautions that shall be taken to avoid antitrust problems.

The Antitrust Laws

The antitrust laws are intended to ensure free and open competition. These laws - the Sherman Act, Clayton Act, and Federal Trade Commission Act at the federal level and similar laws in many states — prohibit contracts, combinations, conspiracies, and other agreements in restraint of trade, as well as monopolization and attempted monopolization.

An "agreement" among trade association members in antitrust terms is a very broad concept: it may be oral or written, formal or informal, express or implied.

Meeting Guidelines

To minimize the possibility of antitrust problems at alliance gatherings, the following guidelines should be followed at all meetings of the Board of Directors and committees, as well as all alliance sponsored conventions, trade shows, training seminars, conferences, committees, and working group sessions.

Joint Conduct That Is Automatically Unlawful

Certain kinds of joint conduct are presumed to be unreasonable and therefore unlawful. These so-called "per se" unlawful practices are joint activities that the courts have long found clearly restrain competition and lacking redeeming procompetitive benefits. Examples include:

Setting Prices.

Agreements with the purpose or effect of setting or maintaining either prices or factors relating to prices, such as credit, discounts, profit levels, or volume of production.

Allocating Markets.

Agreements with the purpose or effect of allocating markets, such as an agreement not to provide service to a particular geographic area, industry, or group of customers in return for a reciprocal pledge from a competitor.

Tying.

Agreements with the purpose or effect of requiring a customer to buy an unwanted product or service in order to obtain the product or service desired ("tying" agreements). In addition, agreements with the purpose or effect of refusing to deal with competitors, customers, suppliers, or other third parties (often called "group boycotts") also have often been declared per se unlawful and should be avoided.

Trade Associations and Antitrust Agreements

Trade associations by their very nature shall be particularly sensitive to avoiding antitrust violations. This is because, in bringing competitors together into an association, one element of a possible antitrust violation may already be present, a combination of competitors. Thus, all that may be needed to prove a violation is the action to restrain trade.

Trade association members and staff should refrain from any discussion that could provide the basis or an inference that the members agreed to take any action that might restrain trade.

Remember that an "agreement" among trade association members need not be in writing. A "gentleman's agreement" to "hold the line" on prices may be more than sufficient for a court to permit a jury to infer an unlawful conspiracy to fix prices. The "agreement" can also be inferred by the parallel actions of trade association members that happen to follow the discussion of the topic at an alliance gathering.

The basic principle to be followed in avoiding antitrust violations in connection with alliance activity is to see that no illegal agreements, express or implied, are reached or carried out through the alliance.

DO NOT

DO NOT discuss your prices or competitors' prices with a competitor (except when buying from or selling to that competitor) or anything which might affect prices such as costs, discounts, terms of sale, or profit margins.

DO NOT agree with competitors to uniform terms of sale, warranties, or contract provisions.

DO NOT agree with competitors to divide customers or territories.

DO NOT act jointly with one or more competitors to put another competitor at a disadvantage.

DO NOT try to prevent your supplier from selling to your competitor.

DO NOT discuss your future pricing, marketing, or policy plans with competitors.

DO NOT discuss your customers with your competitors.

DO NOT make any statements regarding prices or matters affecting prices at alliance meetings.

DO NOT make statements about your future plans regarding pricing, expansion, or other policies with competitive overtones. Do not participate in discussions where other members do.

DO NOT propose or agree to any standardization that will injure your competitor.

DO NOT attend or stay at any informal meeting where there is no agenda, no minutes are taken, and no alliance staff member is present.

DO NOT do anything before or after alliance meetings, or at social events, which would be improper at a formal alliance meeting.

DO

DO alert alliance staff and legal counsel to anything improper.

DO consult your own legal counsel or the alliance's legal counsel before raising any matter which you feel might be sensitive.

DO send copies to an alliance staff member of any communications or documents sent, received, or developed by you when acting for the alliance .

DO alert every employee in your company who deals with the alliance to these guidelines.

DO be conservative. If you feel an activity might be improper, do not do it.

Potentially Severe Penalties

It is essential for alliance members and staff to comply with all aspects of federal and state antitrust laws. Violation of these laws can result in severe penalties and significant litigation expenses for organizations and individuals. For Example:

- The government can seek to have imposed fines per violation of up to \$10,000,000 for a corporation and \$350,000 for individuals.
- Individuals who are involved in activity that violates the antitrust laws can also be sentenced to jail for up to three years, and possibly more if mail or wire fraud are involved.
- The government can also seek other relief for violations, including cease and desist orders and dissolution of an alliance.
- Private companies and individuals who are injured by an antitrust violation can sue the alliance, its member companies, and individuals for three times their damages, plus reasonable attorneys' fees and injunctive relief.

Even if a government or private suit is successfully defended, the cost and disruption of the litigation can be overwhelming. Taking antitrust precautions, therefore, is not only advisable, but imperative.

Bibliography

- [1] *ANSI Essential Requirements*, January 2025 ed., American National Standards Institute (ANSI), New York, New York, 2025.
- [2] *ISO/IEC Directives Part 1, Procedures for the technical work*, 17th ed., International Organization for Standardization (ISO), Geneva, Switzerland, 2025.
- [3] *ANSI Procedures for U.S. Participation in the International Standards Activities of ISO*, January 2025 ed., American National Standards Institute (ANSI), New York, New York, 2025.