

# ASC Z136 Conventions

(February 2022)

**These conventions serve as a guideline to some of the internal procedures that ASC Z136 observes as part of its standards development operation. For more in-depth information on the Z136 committee process, please see the current version of *Accredited Standards Committee Z136 for the Safe Use of Lasers Procedures for the Development of Z136 American National Standards*, which is available at: [z136.lia.org/procedures](http://z136.lia.org/procedures)**

## 1. Annual meetings

In the off-years, when the Z136 Annual Meeting of the Committee does not take place in conjunction with another major meeting, e.g., ILSC, IEC TC-76, the subcommittee chairs shall poll their subcommittees and make an effort to hold meetings of their subcommittees in conjunction with the Z136 Annual Meeting. The subcommittee meetings should take place before the Committee meets.

## 2. Distribution of documents for ballot

The following documents are provided for the ballot and should be posted at the appropriate password protected portion of the Z136 website during balloting:

### ▪ Initial Ballot:

- a. The draft standard in MS Word, Adobe, or a similar format.
- b. A Comment Form (example in A.1) in MS Word format for Consensus Body Balloting Group (CBBG) members to submit their comments. For convenience of the ballot group members and the ballot resolution group, the drafts should be in single column format and the lines numbered at the left margin. It should be made clear to the balloting group that only comments submitted on the Comment Form will be considered (i.e., edited versions of the draft will not be accepted).
- c. If the ballot is for a revision of an existing published standard, the following documents should be provided
  - i. A summary of substantive changes in the revision with respect to the existing published standard.

*Note: a substantive change is one that directly and materially affects the use of the standard. Examples include: “shall” to “should” or “should” to “shall”; and addition, deletion, or revision of a “should” or “shall” requirement.*

- ii. A Redline version of the draft standard, indicating changes with respect to the existing published standard.

- iii. The Comment Matrix summary with resolutions from the prior SCDV and CDV balloting processes for the existing published standard.
    - iv. An EWG Comment Matrix summary for any unresolved comments between the EWG and the SSC from the prior revision process for the existing published standard.
  - d. If the ballot is for a SCDV,
    - i. The documents listed in a.-c. above are also provided to coordinating TSC members, except a modified Comment Form (example in A.2) is used for them to submit comments.
  - e. If the ballot is for a CDV,
    - i. The Comment Matrix summary with resolutions from the SCDV just completed.
    - ii. An EWG Comment Matrix summary for any unresolved comments between the EWG and the SSC from the SCDV just completed.
- **Recirculation Ballot:**
  - a. A clean copy (no changes shown) of the revised draft with all changes resulting from ballot resolution incorporated (MS Word, Adobe PDF or similar format).
  - b. A marked copy of the revised draft with all changes readily identifiable, e.g., in color using the MS Tracking Editor, or in black and white using strikethroughs for deleted text and underlined bold for new text.
  - c. The Comment Matrix summary with resolutions from the prior SCDV or CDV balloting process. If the recirculation ballot is for a SCDV, then the Comment Matrix is also provided to coordinating TSC members and include resolutions for comments submitted by them.
  - d. A Comment Form in MS Word format for the CBBG members to submit their comments.
  - e. If the recirculation ballot is for a SCDV, then the documents listed in a.-d. above are also provided to coordinating TSC members, except a modified Comment Form (example in A.2) is used for them to submit comments.

### 3. Addressing and resolving ballot comments

Following a SCDV or CDV ballot,

- i. The Secretariat sends the ballot results and a summary Comment Matrix (from Comment Forms submitted) to the SSC officers.
- ii. The SSC officers review all comments submitted and accept proposed changes that are deemed appropriate. They document their resolutions to submitted comments in the Comment Matrix.

- iii. The SSC officers make an effort to resolve all expressed objections accompanied by comments, including those from coordinating TSC members. They communicate with reviewers as needed to attempt a resolution that is acceptable to the reviewer and the SSC officers. If the attempt to resolve an objection is not successful, the SSC officers should enlist assistance from other CBBG members or other SSC/TSC members or experts to reach an acceptable resolution. If an objection cannot be resolved, the SSC officers then document the reasons for and against the proposed change in their resolution comments in the Comment Matrix.

*Note: objections are comments from CBBG members who submitted a Negative-Vote ballot, which they identify as needing to be resolved before they would change their vote. Comments proposing a substantive change that are submitted from a coordinating TSC member are also considered objections.*

#### **4. Recirculation ballots**

The purpose of an SCDV or CDV recirculation ballot is to show all changes to a balloting draft and to distribute the Comment Matrix with resolutions from the prior ballot. This affords members of the Balloting Group an opportunity to reaffirm or change their vote or provide comments. These changes may result from resolution of negative ballots, from incorporation of comments provided with affirmative ballots or from comments submitted by a coordinating TSC member.

Comments submitted in response to a recirculation ballot on an SCDV or CDV should address only changes to the prior (initial or recirculation) balloted draft; i.e., comments or changed votes should only be submitted based on the portions of the standard that were changed between ballots, or on unresolved objections. Comments should not be submitted or votes changed based on an approved clause unless that clause is affected by changes resulting from ballot resolution. New issues should be deferred to the next revision.

If during a recirculation ballot, errors in that draft are pointed out that require substantive changes to correct, then the following procedure should be followed even if the results of balloting were 100% affirmative:

- a. For an SCDV, the errors should be recorded in writing and circulated with the first CDV ballot
- b. For a CDV, the error should be corrected and a subsequent recirculation ballot conducted.

Members of a balloting group only need to respond to a recirculation ballot if they wish to comment or change their earlier votes; if a member does not return a ballot, his or her vote will be considered to be reaffirmed. The number of recirculation ballots for a CDV does not have a specific limit; the goal is to have the most mature and error-free document following balloting.

## **5. Number of simultaneous ballots**

When possible, no more than one SCDV or CDV ballot on a new standard or revision should be conducted during the same time period, i.e., simultaneous balloting on a number of standards is discouraged. However, ballots on administrative issues, e.g., membership, procedures, can take place simultaneously and during an SCDV or CDV ballot.

## **6. Summary of changes in a revised standard**

A short summary of the major changes between a prior standard and the revised standard should be incorporated into the published version of a revision, either as an informative annex or, if the summary is not extensive, in the front matter of the standard. If the summary is to be included as an informative annex, it should be included during SCDV and CDV balloting. If the summary is to appear in the front matter of the revision, a more detailed summary of the major technical changes should be provided to the balloting group in the form of a separate list.

## **7. Posting subcommittee working group drafts of standards**

Working group drafts of each standard should be posted on the password-protected portion of the subcommittee's web page for access by the working group (subcommittee). Revisions of drafts by the Editorial Working Group (EWG) should be maintained on the password-protected portion of the EWG web page along with each of the reviewer's comments, edited (marked-up) drafts, etc. The working group members should be notified immediately after posting that the draft is available for downloading.

## **7. Interpretations and Explanations**

Written inquiries shall be forwarded by the Secretariat to the ADCOM Chair and Committee Secretary for processing. The ADCOM shall review the inquiry and determine which Standards and Technical Subcommittees have a scope that pertains to this. The inquiry shall then be distributed to the Chairs of the pertinent Standards and Technical Subcommittees. Based upon correspondence with the selected Subcommittee Chairs, the ASC Z136 Chair will recommend to the ADCOM a Lead Subcommittee Chair. The ADCOM will confer and confirm which Subcommittee will be responsible for preparing the response and determine whether the inquiry requires an explanation or an interpretation.

### **7.1 Explanations**

The selected Subcommittee Chair shall consider input from Chairs of the other pertinent Subcommittees and other Subcommittee members as appropriate, and then prepare the explanation response. This response shall be submitted to the Secretariat with copies to the ADCOM Chair and Committee Secretary. The ADCOM shall review the response and distribute it to the Chairs of the pertinent Subcommittees.

Following ADCOM review, the Secretariat shall provide the explanation response, in writing, to the requestor. The explanation response should be concluded within one month of notification of the inquiry by the Secretariat.

## **7.2 Interpretations**

The selected Subcommittee Chair shall consider input from Chairs of the other pertinent Subcommittees and prepare an interpretation response that has concurrence by two-thirds affirmative vote from their associated Subcommittee. This response, along with balloting results, shall be submitted to the Secretariat with copies to the ADCOM Chair and Committee Secretary. The ADCOM shall review the response and distribute it to the Chairs of the pertinent Subcommittees. The interpretation response should be concluded within three months of notification of the inquiry by the Secretariat. In order to expedite the process, the subcommittee chair should designate an interpretations working group to prepare the response. Once a response is prepared (two weeks), a vote on the proposed response shall be taken by the working group in accordance with ASC Z136 procedures (two weeks\*). Following resolution of comments by the working group, a final draft for subcommittee ballot shall be prepared (two weeks). The final draft response shall be balloted by the full subcommittee on an abbreviated timeline (two weeks\*). Following ballot resolution by the working group, comments received with negative ballots and their resolution shall be distributed as a 10-day default recirculation ballot if comments have resulted in a substantive change to the interpretation. \*The balloting timeline may be less than two weeks should an urgent response to the requestor necessitate a shorter response time. As a courtesy, the preliminary response may be sent to the requestor. If the requestor submits comments on the preliminary response within 15 days of the date that the proposed interpretation is sent to the requestor, the interpretations working group shall consider the comments and respond to the requestor. Following ADCOM review, the Secretariat shall provide the formal interpretation response, in writing, to the requestor and document the process. Interpretations of Z136 standards shall be posted on the Z136 website until the next amendment or revision of the standard is published. If the Subcommittee is unable to reach consensus on an interpretation, the Secretariat can respond to the requestor that an interpretation will not be forthcoming on this matter. All interpretations and any interpretation requests that cannot be achieved shall be added to the content agenda of the next revision of the standard.

## **8. Horizontal vs. Vertical Standard**

Standards can be characterized as either horizontal or vertical. Ideally, a horizontal standard would contain primarily general principles, concepts, definitions, terminology and similar general information applicable over the subject area of the standard. Vertical standards would then contain only information specific to particular applications or products in that subject area. While vertical standards are based on the horizontal standard, they expand upon the information in that standard for specific application areas. Each vertical standard should not include information extraneous to its intended application.

In the Z136 series, the Z136.1 standard serves as a horizontal standard, and supplies the following information for all other standard in the series: (1) exposure limit definitions and tables, (2) hazard classification scheme, (3) broadly-applicable control measures which are general to laser safety, (4) glossary of terminology applicable in all Z136 standards, (5) general guidance on education and medical surveillance, and (6) examples which are applicable to items (1) - (3). The other standards in the Z136 series are vertical standards, with applications such as a research and development laboratory (Z136.8) or a medical facility (Z136.3). Two vertical standards address specific measurement issues (Z136.4) and protective equipment (Z136.7). In order to maintain a hierarchy in exposure limit definitions and other information, any duplication of information (such as MPE table excerpts) from the Z136.1 should be placed in a non-normative appendix within a vertical standard.

In order to address new applications and products, many horizontal standards also contain application-specific information. Such application-specific areas should be addressed by vertical standards. These application-specific vertical standards will refer to the Z136.1 horizontal standard for exposure limits, definitions and other items enumerated above. This will maintain standardization as the Z136.1 exposure limits, definitions and/or standard classification schemes evolve. Development of appropriate vertical standards allows the removal of application-specific information from the Z136.1 horizontal standard resulting in a standard more in line with the concept of a horizontal standard, i.e., containing only fundamental principles, concepts, definitions, terminology and other general information.

## **9. Documentation of Subcommittee Meetings**

The offices of each subcommittee (technical or standard) should keep minutes of every meeting of the subcommittee. The minutes should include;

- (a) the date and location of the meeting,
- (b) the members and observers in attendance and the affiliation of each,
- (c) a summary of the meeting's activities (see below),
- (d) a copy of the meeting agenda
- (e) copies of presentations from the meeting (if possible).

An emphasis should be given to documenting meeting activities which result in a decision regarding the content of a Z136 standard and supporting rationale. Arguments pro and con regarding standards content should be captured in the minutes. Any issues balloted upon by the committee during the meeting should be documented along with outcomes.

The minutes should be published on the Z136 website for record keeping purposes and for future reference by the subcommittee. Members of the subcommittee should be notified when the minutes of a meeting are posted.

SSCs should maintain a content agenda for the next revision of their standard and make any necessary updates to this following a subcommittee meeting. The content agenda should be published on the Z136 website.

TSCs should maintain a content agenda for their work supporting future revisions of Z136 standards and make any necessary updates to this following a subcommittee meeting. The content agenda should be published on the Z136 website.

## **10. ASC Z136 Interest Categories**

Following approval of membership to ASC Z136, each member is required to specify his/her own general interest category as appropriate, i.e., based upon affiliation, which is considered the individual's interest category when voting on a committee ballot unless otherwise stated at the time of ballot.

For Standards Ballots, upon joining a consensus body balloting group, the member will declare his/her interest category based on his/her relationship to the subject matter of the standard being balloted. The established interest categories for ASC Z136 are defined as follows:

- (a) **Academia:** Persons, entities, or educational institutions that provide academic review of the standard being developed for a product, service, or reference material.
- (b) **Consultant:** A person or entity that relies on the standard to define conformance of the product or service and to create a common understanding of the product or service.
- (c) **Consumer/Consumer Organization:** A person or entity that may benefit directly or indirectly, and may be affected by the standard under development without being either a direct user or producer of the product or service being defined in the standard.
- (d) **Department of Defense (DoD):** A representative of any level of the Department of Defense with direct interest in the development of the standard for purposes of ensuring conformance of the product or service.
- (e) **Directly Affected Public:** A representative of a group of individuals that may benefit directly or indirectly, and may be affected by the standard under development without being either a direct user or producer of the product or service being defined in the standard.
- (f) **Distributor/Retailer:** A person or entity directly involved with the sale or distribution of a compliant laser product or service.
- (g) **Government (non-DoD):** A representative of any level of government of any nation with direct interest in the development of the standard for purposes of compliance.
- (h) **Government Contractor:** A person or entity directly involved with creating a compliant product, component, or service for sale or distribution to government agencies including the Department of Defense.
- (i) **Health Care:** A person or entity involved in health care that relies on the standard to define conformance of the product, service or procedure.

- (j) Industrial/Commerce: A person or entity directly involved with creating a compliant laser product, component, or service for sale or distribution or using a compliant laser product for creating non-laser products for sale or distribution.
- (k) Manufacturer: A person or entity directly involved with creating a compliant laser product, component, or service for sale or distribution.
- (l) Professional Society: An entity whose interest includes the content of the standard under development that may benefit directly or indirectly, and may be affected without being either a direct user or producer of the product or service being defined in the standard
- (m) Regulatory Agency: An entity directly involved with ensuring a compliant product, or compliance with the use of a laser product or service.
- (n) Testing Laboratory/Facility: A representative of any testing laboratory or facility with direct interest in the standard for purposes of assessing conformity.
- (o) Trade Organization: An entity or a group of individuals that represent segments of the laser industry and who may benefit directly or indirectly from the product or service being defined in the standard.

## **11. TSC-7 Membership on EWG**

The Chair and Vice Chair of the TSC-7 (Analysis and Applications Subcommittee) will voluntarily serve as members of the EWG (Editorial Working Group). The purpose of this membership will be to facilitate the harmonization of non-normative examples sections with any revised content within the standard document. This harmonization will occur during the EWG review of final SCDV and CDV documents. The EWG will budget 2-6 weeks for a review and update of examples by the TSC-7, with a duration depending upon the number of substantive changes which may affect examples.

## **12. ASC Organizational Member Representation**

An ASC organizational member represented by both primary and alternate representatives that loses its primary representative may choose to promote its alternate representative to primary. In this case, it will not be necessary to ballot the committee for member approval, as the representative is an already-approved member of the ASC.

## **13. Sublevels within the Table of Contents in Z136 documents**

The Table of Contents listing in the front matter of each Z136 document should go to the third level, if the document content so dictates. For example:

1. General
  - 1.1 Scope
  - 1.2 Applications
  - 1.3 Laser Safety Programs



- 1.3.1 General
- 1.3.2 Laser Safety Program Provisions
- 1.3.3 Personnel Responsibilities

Sections 1.1 and 1.2 did not have content (subsections) to the third level of which to list, ergo no listing in the Table of Contents.

**Appendix**

**A.1 Example Summary Comment Form for a CBBG member for a CDV**



**SUMMARY COMMENT FORM**

**Ballot from:** \_\_\_\_\_ **Date:** \_\_\_\_\_

Title of Voting Document: Z136.x Safe Use of Lasers ...

Number and Date of Draft: CDV1 – Month Year

Title of Voting Group: CBBG Z136.x

**This Summary Comment Form Used For:**       Affirmative-Vote Comment       Negative-Vote Comment

Submitted by [First Initial. Last Name]	Text Location [Line Numbers]	Comment –Rationale or Error Indicate if it is an objection for a Negative-Vote Ballot [x]	Proposed Change [detailed explanation of <i>how to</i> <i>resolve</i> the comment]	Resolution of Comment by Subcommittee

NOTES: 1. Negative Votes. Reasons for a negative vote shall be given. Please provide specific wording or actions that would resolve objections. Indicate in the column to the left of the comment (mark with “x”) if this is an objection to be addressed before you would be willing to change your vote.  
 2. Insert additional rows as necessary.

**A.2 Example Summary Comment Form for a coordinating TSC/SSC member for an SCDV**



**SUMMARY COMMENT FORM**

Comment from: \_\_\_\_\_ Date: \_\_\_\_\_  
 Title of Document: Z136.x Safe Use of Lasers ...  
 Number and Date of Draft: SCDV1 – Month Year  
 Commenting as a member of the following subcommittee: \_\_\_\_\_

**THIS IS NOT A BALLOT**

Comments received from members of coordinating TSCs and SSCs do not constitute a vote.  
**Please submit all comments by Month Day, Year 5:00 pm EDT.**

Submitted by [First Initial. Last Name]	Text Location [Line Numbers]	Comment –Rationale or Error Indicate if it is an objection where a change to a substantive requirement is proposed [x]	Proposed Change [detailed explanation of <i>how to resolve</i> the comment]	Resolution of Comment by Subcommittee

NOTE: Insert additional rows as necessary.