ASC Z136

Safe Use of Lasers

Accredited Standards Committee



ASC Z136 Conventions

(July 2015)

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 on the Safe Use of Lasers Procedures for the Development of Z136 American National Standards, which is available at http://www.z136.org/securedoc.php?&docid=874

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 should be posted at the appropriate password protected portion of the Z136 website during balloting:

- Initial Ballot: 1) The draft standard in MS Word, Adobe, or a similar format; 2) The Comment Matrix in MS Word format. 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 matrix will be considered, i.e., edited versions of the draft will not be accepted.
- Recirculation Ballot: 1) 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); 2) 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; 3) The Comment Matrix in MS Word format.

3. Recirculation ballots

The purpose of an SCDV or CDV recirculation ballot is to show all substantive changes to a balloting draft to afford 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 or incorporation of comments provided with affirmative ballots that result in substantive changes to the balloted draft (SCDV or CDV). Comments submitted in response to a recirculation ballot on an SCDV or CDV should address only substantive changes to the prior balloted draft (initial or recirculation ballot draft), i.e., comments (or changed votes) should only be submitted based on the changed portions of the standard, or on unresolved negatives. 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, the modified draft should be recirculated – even if the results of balloting were 100% affirmative. That is, no draft should be moved up to the next level without members of the balloting group seeing all substantive changes to the draft.

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 does not have a specific limit; the goal is to have the most mature and error-free document following balloting.

4. 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.

5. 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.

6. 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

As indicated in the ASC Z136 Procedures, "Written inquiries judged to be bona-fide interpretations are forwarded by the Secretariat to the Chair of the appropriate subcommittee for processing. The Subcommittee Chair shall obtain concurrence by two-thirds affirmative vote from their associated subcommittee for the response. This response, along with balloting results, is then submitted to the Secretariat (with copies to the ADCOM Chair and Committee Secretary). The Secretariat shall provide the formal interpretation to the requestor and document the process as required by these procedures."

The proposed interpretation response shall be concluded <u>within three months</u> of notification of the interpretations request 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.

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.

The final interpretation shall be transmitted to the AdCom and the Secretariat together with a list of the members of the designated interpretations working group. Following AdCom review, the Secretariat shall forward the interpretation to the requestor. 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. It should be noted that all interpretations and any interpretation requests that cannot be achieved should be considered during the next revision cycle 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.ORG web site 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.

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.