

General

The following table provides the detailed processes that UL, CSA and ANCE follow for internal review and resolution of comments, committee/constituent review and resolution of comments, and publication of a draft harmonized standard. The same basic process is followed for proposed revisions to a published harmonized standard. See Clause 6 of the Procedures for Harmonizing ANCE/CSA/UL Standards for details on processing revisions where a THC is involved and where a THC is not involved. Each development process task is compared, showing the associated UL, CSA, and ANCE tasks. The comparison identifies loops where SDO internal review and comment resolution tasks can be performed repeatedly and where delays in the projects might happen.

The THC that developed the standard should be involved in the review and resolution of technical comments received on draft-harmonized standards and proposed revisions to published harmonized standards. If the THC does not exist or has been disbanded after the publication of a harmonized standard, only the SDO's are involved in the review and approval of revisions to a standard or new edition. However, for controversial topics, it may be important and helpful to resurrect the THC, with the same or different leadership and membership, in order to coordinate the revisions. See Clauses 6.2 and 6.3 of the Procedures for Harmonizing ANCE/CSA/UL Standards.

When revisions are proposed for a standard, CSA's procedures may require that a new edition be published. The CSA publication department determines whether a new edition is required based on the number of revisions to a standard and the number of pages revised. Similarly, UL may prefer a new edition over the publication of revision pages, for SGML or other administrative reasons. UL and CSA staff should consult each other early in a proposal/revision project as to whether an amendment/revision pages or a new edition of the standard is required. Due to legal requirements in Mexico, ANCE technical revisions must be incorporated in a new edition of the relevant standard. ANCE may choose to publish a new edition for technical revisions, if ANCE determines the changes to be applicable to requirements for Mexico. Other revisions may be addressed by a published ANCE clarification, and/or be held until such time that a new ANCE edition is considered to be required.

A preliminary technical review of a harmonized new edition draft, or amendment/revisions, to a published harmonized standard should be conducted before they are submitted to the UL STP or CSA TC for formal review and voting and to the ANCE Committee (CONANCE) for formal approval. See Clause 5.7 of the Procedures For Harmonizing ANCE/CSA/UL Standards. For UL, for their preliminary technical review, the proposals are submitted to the UL STP and subscribers for comment only. No voting to the UL STP takes place at this time. For CSA, their preliminary technical review is done at the Technical Subcommittee (TSC) review level. No voting to the CSA TC takes place at this time. For ANCE, their preliminary technical review is done at the Technical Subcommittee review level. Only text modified or added since the previous review is reviewed at each subsequent SDO technical review.

Before initiating a CANENA project, preliminary support at each SDO may be required to begin each new standard, revision/amendment or new edition. This should be obtained before proceeding with THC development of requirements.

UL/CSA/ANCE Process Comparison Table

CSA PROCESSES	UL PROCESSES	ANCE PROCESSES
<p>After the draft is received from the THC, the publication coordinator will verify that the draft is formatted in accordance with the Procedures for Harmonizing ANCE/CSA/UL Standards.</p> <p>Reference: Clause 5.6 of the Procedures for Harmonizing ANCE/CSA/UL Standards.</p>		
<p>CSA-P1 The draft is forwarded to CSA's Technical Subcommittee (TSC) for review and comment.</p> <p>Note: The CSA Project Manager (PM) may choose to submit the draft standard to the TSC for preliminary technical and for editorial review before the Publication Coordinator releases the draft to the SDOs to begin their formal review process, to bring forward comments, to allow them to be addressed, prior to final release to the SDOs.</p> <p>Reference: Clause 5.7 of the Procedures for Harmonizing ANCE/CSA/UL Standards.</p>	<p>UL-P1 UL conducts a preliminary technical review, which is intended to determine the initial response of the STP and subscribers to the technical content of the draft and to provide feedback. See the note to step UL-P7.</p> <p>Reference: Clause 5.7 of the Procedures for Harmonizing ANCE/CSA/UL Standards.</p>	<p>ANCE-P1 The draft is forwarded to ANCE's Subcommittee (SC) for review and comment.</p> <p>Reference: Clause 5.7 of the Procedures for Harmonizing ANCE/CSA/UL Standards.</p>
<p>CSA-P2 Comments are forwarded to the THC, UL and ANCE for review.</p> <p>Reference: Clause 5.7.2 – 5.7.4 of the Procedures for Harmonizing ANCE/CSA/UL Standards.</p>	<p>UL-P2 Comments are forwarded to the THC, CSA and ANCE for review.</p> <p>Reference: Clause 5.7.2 – 5.7.4 of the Procedures for Harmonizing ANCE/CSA/UL Standards.</p>	<p>ANCE-P2 Comments are forwarded to the THC, UL and CSA for review.</p> <p>Reference: Clause 5.7.2 – 5.7.4 of the Procedures for Harmonizing ANCE/CSA/UL Standards.</p>
<p>CSA-P2 (a) CSA staff work with the THC, UL and ANCE to resolve technical comments and agree to any proposed changes to the draft.</p>	<p>UL-P2 (a) UL staff work with the THC, CSA and ANCE to resolve technical comments and agree to any proposed changes to the draft.</p>	<p>ANCE-P2 (a) ANCE staff work with the THC, CSA and UL to resolve technical comments and agree to any proposed changes to the draft.</p>
<p>CSA-P2 (b) LOOP The changes agreed to by the THC, UL, ANCE and CSA staffs are forwarded back to the TSC for review. Comments and responses are exchanged between the CSA TSC, the THC, ANCE and UL until all comments are resolved.</p>	<p>UL-P2 (b) LOOP UL staff work with the THC, ANCE and CSA to resolve comments and agree to any proposed changes to the draft.</p>	<p>ANCE-P2 (b) LOOP ANCE staff work with the THC, UL and CSA to resolve comments and agree to any proposed changes to the draft.</p>
<p>CSA-P2/UL-P2 Note: CSA may decide to conduct the TSC and the CSA editorial review in next step CSA-P3 simultaneously. UL staff can work with CSA staff to decide on the best way to approach this</p>		

review step for each project.

<p>CSA-P3 After all TSC comments have been resolved, the draft is submitted to the CSA Editorial Department for PAE (Pre-Approval Edit) review and Quality Review which reviews the draft for compliance with formatting and verifies that all standards development guidelines have been met. . The PAE and Quality Reviews may be run concurrently. Public review may begin at this stage or at step CSA-P4.</p> <p>Reference: Clause 5.9 of the Procedures for Harmonizing ANCE/CSA/UL Standards.</p>	<p>UL-P3 No concurrent activity at this stage.</p> <p>Reference: Clause 5.9 of the Procedures for Harmonizing ANCE/CSA/UL Standards.</p>	<p>ANCE-P3 After all comments have been resolved, the draft is translated into Spanish. After this stage, SC will review Spanish translation.</p> <p>Reference: Clause 5.9 of the Procedures for Harmonizing ANCE/CSA/UL Standards.</p>
<p>CSA-P3 LOOP Comments generated from editorial review are forwarded to UL and ANCE for review and resolution. Comments and responses are exchanged between CSA, ANCE and UL until all comments are resolved.</p>	<p>UL-P3 LOOP UL staff work with CSA and ANCE to resolve editorial comments and agree on any proposed changes to the draft.</p>	<p>ANCE-P3 LOOP ANCE staff work with CSA and UL to determine if the resolution of comments may affect the translation into Spanish. Simultaneously the ANCE SC reviews the Spanish draft – typically 2 months.</p>
<p>CSA-P3/UL-P3/ANCE-P3 Technical comments could be generated during SDO editorial review, which may need to be reviewed by the THC for resolution.</p> <p>[Reference: Clause 5.7 of the Procedures for Harmonizing ANCE/CSA/UL Standards.]</p>		
<p>CSA-P4 When all TSC and CSA editorial comments are resolved and the changes are made to the draft, the draft proposals are submitted for public review.</p> <p>Note: CSA’s directives specify that public review be conducted before submitting the draft to the TC for balloting. If time constraints dictate, CSA can decide to conduct public review concurrent with, but it must end before the end of the TC ballot.</p> <p>Reference: Clause 5.11.2 of the Procedures for Harmonizing ANCE/CSA/UL Standards.</p>	<p>UL-P4 It is recommended that the SGML conversion, if not already done, take place at this step.</p> <p>Note: UL’s public review takes place during the STP balloting stage.</p>	<p>ANCE-P4 When all SC editorial changes are made to the Spanish draft, the draft proposal is submitted to Editorial and Quality Review in order to check compliance with formatting and development guidelines.</p>
<p>CSA-P5 Any comments generated or proposed changes</p>	<p>UL-P5 No concurrent activity at this stage.</p>	<p>ANCE-P5 Any comments generated or proposed changes</p>

<p>from public review are reviewed by the TSC.</p> <p>Reference: Clauses 5.9 and 5.10 of the Procedures for Harmonizing ANCE/CSA/UL Standards.</p>	<p>Reference: Clauses 5.9 and 5.10 of the Procedures for Harmonizing ANCE/CSA/UL Standards.</p>	<p>from Editorial and Quality review that may affect the technical content are reviewed by the SC.</p> <p>Reference: Clauses 5.9 and 5.10 of the Procedures for Harmonizing ANCE/CSA/UL Standards.</p>
<p>CSA-P6 Any public review comments or proposed changes to the draft due to public review comments and that the TSC determines to be substantive are forwarded to the THC, ANCE and UL for review.</p> <p>Reference: Clause 5.9 and 5.10 of the Procedures for Harmonizing ANCE/CSA/UL Standards.</p>	<p>UL-P6 UL staff work with the THC, ANCE and CSA to resolve CSA public review or ANCE comments and agree on any proposed changes to the draft.</p> <p>Reference: Clause 5.9 and 5.10 of the Procedures for Harmonizing ANCE/CSA/UL Standards.</p>	<p>ANCE-P6 Any comment that may affect the technical content and that the SC determines to be substantive are forwarded to the THC, CSA and UL for review.</p> <p>Reference: Clause 5.9 and 5.10 of the Procedures for Harmonizing ANCE/CSA/UL Standards.</p>
<p>CSA-P6 (a) LOOP Comments and responses are exchanged among the THC, UL, ANCE and the TSC until all comments are resolved.</p>	<p>UL-P6 (a) LOOP UL staff work with the THC and CSA staff and ANCE staff to resolve CSA public review comments and ANCE comments and agree on any proposed changes to the draft.</p>	<p>ANCE-P6 (a) LOOP Comments and responses are exchanged among the THC, UL and CSA until all comments are resolved.</p>
<p>CSA-P6 (b) LOOP The TSC comments agreed to in CSAP6 (a) are submitted for editorial review.</p>	<p>UL-P6 (b) LOOP No concurrent activity at this stage.</p>	<p>ANCE-P6 (b) Draft is submitted to TC for comments or approval.</p>
<p>CSA-P6(c) LOOP CSA editorial comments generated from public review are forwarded to UL and ANCE for review and response.</p> <p>Near the end of this step, CSA may submit ballot draft for translation to French, if this is required for Canada. Translation activity can continue simultaneous with the upcoming CSA ballot period, as it is not a prerequisite to begin balloting, unless it relates to markings that may be required to be in French. Also, for an amendment to a national standard for Canada (one with a "CAN/CSA" prefix), full French text translation must be prepared and published by CSA, concurrently with the English version.</p>	<p>UL-P6(c) LOOP UL staff work with CSA and ANCE to resolve editorial public review comments and agree on any proposed changes to the draft.</p>	<p>ANCE-P6 (c) Draft is submitted to CONANCE for comments or approval.</p>

<p>CSA-P7 When all TSC and editorial comments and proposed changes are resolved, and the changes are made to the draft, the revised draft is submitted to the CSA Technical Committee (TC) for balloting.</p> <p>Reference: Clause 5.9 of the Procedures for Harmonizing ANCE/CSA/UL Standards.</p>	<p>UL-P7 Typically at this stage, UL issues the proposals that were agreed upon to its STP members for balloting, and to subscribers, and public review participants for review and comment.</p> <p>Note: Some UL Project Managers issue the proposals before the CSA editorial (PAE) review, the TSC review, or both; it is up to the Project Manager's discretion. Typically, it is recommended that UL wait to ballot the material until the PAE editorial review (which is CSA's comprehensive editorial review) has been conducted.</p> <p>Reference: Clause 5.9 of the Procedures for Harmonizing ANCE/CSA/UL Standards.</p>	<p>ANCE-P7 When CONANCE approval is reached; the draft proposal is submitted for public review.</p> <p>Reference: Clause 5.9 of the Procedures for Harmonizing ANCE/CSA/UL Standards.</p>
<p>CSA-P7/UL-P7 Note : When balloting and submitting material for public review, it is important that UL and CSA provide the same text and clause numbers usage to allow easy updating of the final draft.</p>		
<p>CSA-P8 CSA forwards resolutions to resolve negatives or address comments from the TC ballot to the THC, ANCE and UL. The CSA TSC may be asked to determine a TSC position before submitting the resolutions to the THC, ANCE and UL.</p> <p>Reference: Clause 5.10 of the Procedures for Harmonizing ANCE/CSA/UL Standards.</p>	<p>UL-P8 UL forwards comments from the STP, subscribers and public review participants to the THC, ANCE and CSA for resolution. Typically UL provides UL's position on the comments to expedite the process of comment resolution.</p> <p>Reference: Clause 5.10 of the Procedures for Harmonizing ANCE/CSA/UL Standards.</p>	<p>ANCE-P8 ANCE forwards comments from the public review that may affect the technical content to the THC, UL and CSA for resolution.</p> <p>Reference: Clause 5.10 of the Procedures for Harmonizing ANCE/CSA/UL Standards.</p>
<p>CSA-P8 (a) LOOP CSA staff work with the THC, ANCE and UL to agree on resolutions and proposed changes.</p>	<p>UL-P8 (a) LOOP UL staff work with the THC, ANCE and CSA to agree on resolutions and proposed changes.</p>	<p>ANCE-P8 (a) LOOP ANCE staff work with the THC, UL and CSA to agree on resolutions and proposed changes.</p> <p>It is really important to consider that in any case this stage in the ANCE process may be not longer than 6 months. If this stage is longer than 6 months, TC has to justify the time in excess.</p>
<p>CSA-P8 (a)/U-LP8 (a) CSA, ANCE and/or UL may have to work with the THC to revise responses to comments and proposed changes to the draft so that the THC and each SDO are satisfied with the responses and proposals. Editorial changes may be resolved among the SDOs.</p>		
<p>CSA-P9 TC comments are addressed and negatives</p>	<p>UL-P9 No concurrent activity at this stage. Comment resolution</p>	<p>ANCE-P9 Comments are addressed and negatives</p>

<p>dispositioned with the TC members who submitted them. The proposed changes are submitted for editorial review. Reference: Clause 5.9 of the Procedures for Harmonizing ANCE/CSA/UL Standards.</p>	<p>occurs at ULP10. Reference: Clause 5.9 of the Procedures for Harmonizing ANCE/CSA/UL Standards.</p>	<p>dispositioned with the commenters. Reference: Clause 5.9 of the Procedures for Harmonizing ANCE/CSA/UL Standards.</p>
<p>CSA-P9 (a) CSA forwards any comments or proposed changes generated by the editorial review to ANCE and UL for resolution.</p>	<p>UL-P9 (a) UL staff work with ANCE and CSA staff to resolve editorial comments and proposed changes.</p>	<p>ANCE-P9 (a) ANCE staff work with UL and CSA staff to resolve editorial comments and proposed changes.</p>
<p>CSA-P9 (a)/UL-P9 (a)/ANCE-P9 (a) CSA may decide to resolve technical and editorial comments simultaneously. UL staff and ANCE staff may work with CSA staff to decide on the best way to approach this review step for each project.</p>		
<p>CSA-P10 After suitable disposition of all TC comments and negatives with the submitters, the changes are integrated into the draft. If the changes are technical, from any SDO's process, the changes to the draft are submitted to the TC for ballot. Reference: Clause 5.10 of the Procedures for Harmonizing ANCE/CSA/UL Standards.</p>	<p>UL-P10 UL responds to comments, and issues new or modified proposals that were agreed upon with the THC, UL and CSA, to its STP members, subscribers, and public review participants. Reference: Clause 5.10 of the Procedures for Harmonizing ANCE/CSA/UL Standards.</p>	<p>ANCE-P10 After suitable disposition of all TC comments and negatives with the submitters, the changes are integrated into the draft. The draft is reviewed by the CONANCE's technical secretariat. If the draft had substantial changes, a new public comment review is required (ANCE -P7). Reference: Clause 5.10 of the Procedures for Harmonizing ANCE/CSA/UL Standards.</p>
<p>CSA-P11 LOOP After all of the comments generated from the TC, THC's, ANCE and UL's reviews are resolved and the changes integrated into the draft, the draft is submitted for final editorial review. Reference: Clause 5.11 of the Procedures for Harmonizing ANCE/CSA/UL Standards.</p>	<p>UL-P11 LOOP No concurrent activity at this stage. If CSA requires any editorial changes at this stage, CSA, ANCE and UL work together to resolve these comments. Reference: Clause 5.11 of the Procedures for Harmonizing ANCE/CSA/UL Standards.</p>	<p>ANCE-P11 LOOP If there are no substantial changes, the draft is submitted for final editorial review and publication preparation. Reference: Clause 5.11 of the Procedures for Harmonizing ANCE/CSA/UL Standards.</p>
<p>CSA-P11/UL-P11/ANCE-P11 Steps CSA-P/UL-P/ANCE-P 8–10 are to be repeated if more comments are generated from disposition of negatives and review of new or modified proposals.</p>		
<p>CSA-P12 After all comments are resolved, disposition of negatives is complete, and consensus is attained UL, CSA, and ANCE decide on a publication date and the publication coordinator provides a complete dated document that includes Title,</p>	<p>UL-P12 The UL Project Manager is responsible for verifying adherence to UL's STP process, which is followed during the previous development steps. UL, CSA, and ANCE decide on a publication date and the publication coordinator provides</p>	<p>ANCE-P12 After all comments are resolved and consensus is attained UL, CSA and ANCE decide on a publication date. Reference: Clause 5.11 of the Procedures for Harmonizing ANCE/CSA/UL Standards.</p>

<p>Copyright, Table of Contents and Preface pages to the other SDOs.</p> <p>The dated document is then submitted for Second Level Review, which is conducted to verify the draft was reviewed and approved in accordance with CSA standards development directives. After Second Level Review, the document is submitted for Production Edit.</p> <p>Reference: Clause 5.11 of the Procedures for Harmonizing ANCE/CSA/UL Standards.</p>	<p>a complete dated document that includes Title, Table of Contents and Preface pages to the other SDOs.</p> <p>Reference: Clause 5.11 of the Procedures for Harmonizing ANCE/CSA/UL Standards.</p>	
<p>CSA-P13 CSA publishes the standard with a joint publication date pre-arranged with UL and ANCE.</p> <p>CSA may submit the draft standard to obtain SCC approval before or after publication.</p> <p>Reference: Clause 5.11 of the Procedures for Harmonizing ANCE/CSA/UL Standards.</p>	<p>UL-P13 UL publishes the standard with a joint publication date pre-arranged with CSA and ANCE.</p> <p>During the STP review process, UL typically has obtained ANSI approval for the draft-harmonized standard. However, there are cases when UL submits the standard to ANSI approval after it is published.</p> <p>Reference: Clause 5.11 of the Procedures for Harmonizing ANCE/CSA/UL Standards.</p>	<p>ANCE-P13 ANCE submits the draft standard to Ministry of Economy in order to be recognized as a national standard. The title and scope of the standard is recorded in the official gazette.</p> <p>Publication time could be more than 2 months and is not under ANCE's control.</p> <p>ANCE publishes the standard at a later date, recording the same pre-arranged joint publication date as used by CSA and UL.</p> <p>Reference: Clause 5.11 of the Procedures for Harmonizing ANCE/CSA/UL Standards.</p>

**UL/CSA/ANCE Standards Development Processes
Quick Reference**

NOTE: The timeframes included in this reference are approximate. Actual target dates for each project task will need to be established for each harmonization project (preferably at the beginning of the project with the help of the THC).

Step	CSA	Timeframe	UL	Timeframe	ANCE	Timeframe
Pre-SDO	<i>THC formed, then first-time development of harmonized standard, or existing THC calls in and reviews proposals for harmonized amendment or new edition -7 months to 3 years (THC dependent time, could be shorter for accelerated amendments, e.g. for safety requirements or could be longer for complex projects)</i>					
P1	Technical Subcommittee (TSC) Review	4 – 8 weeks	STP and Subscriber Comments Only	4 – 8 weeks	Subcommittee (SC) Review	8 weeks
P2	<i>THC dependent time for review of technical comments –2 months or more</i>					
P3	Pre-Approval Edit (PAE) and Quality Review	6 – 18 weeks*			Translation into Spanish	18 weeks
P3	<i>THC dependent time for review of technical comments, if any –1 month or more</i>					
P4	Public Review	60 days*	Public Review	30/45/60 days**	Editorial and Quality review	30 days
P5 P6(a)	<i>THC dependent time for review of comments, if any –1 month or more</i>					
P6(b) P6(c) P7	Technical Committee (TC) Ballot	30 days (usually add a week for admin / handling at beginning and end)	STP Ballot	30/45/60 days** (Usually add a week for admin / handling at beginning and end)	TC approval CONANCE Approval Public Review	30 days 30 days 60 days

P8 P9	Comment resolution	Up to 12 weeks or more, depending on complexity of comments, and time needed by THC and SDOs to resolve.	Comment resolution	Up to 12 weeks or more, depending on complexity of comments, and time needed by THC and SDOs to resolve.	Comment resolution	Up to 12 weeks or more, depending on complexity of comments, and time needed by THC and SDOs to resolve, but no longer than 6 months
P10 P11	Re-ballot to TC (if needed)	30 days	Recirculation to STP (if needed)	30 days	Recirculation to public review	60 days at least
P12	Publication Preparation*** (Second Level Review (SLR) and Production Edit)	8 – 24 weeks	Publication Preparation	8 – 10 weeks	Publication Preparation	8 weeks
P13	CSA and UL publish on pre-determined joint publication date. ANCE publishes as soon as possible, bearing the same publication date.					

* CSA Pre-approval Edit (PAE), Quality Review and Public Review may occur concurrently. PAE time depends on document complexity. Some examples: an amendment of less than 10 pages or less than 5 figures, requires 6 weeks; an amendment / standard of less than 65 pages or less than 10 figures requires 10 weeks; and a standard of greater than 150 pages requires 18 weeks.

** Typical UL public review periods are 45 days for proposals and 60 days for first/new editions. A 30-day review is for a proposal small enough to be published in ANSI Standards Action. Public Review and STP Ballot are run concurrently.

*** For CSA Second Level Review (SLR) and Production Edit may occur concurrently. Production Edit time depends on document complexity. Some examples: an amendment of less than 10 pages or less than 5 figures, requires 8 weeks; an amendment / standard of less than 65 pages or less than 10 figures requires 10 weeks; and a standard of greater than 150 pages requires 24 weeks.