Public Comments Deadline: July 11, 2022
ASB Std 013, Standard for Friction Ridge Examination Conclusions

#	Section	Type of Comment (E-Editorial, T-Technical)	Comments	Proposed Resolution	Final Resolution
6	all	T	We realize that changes were made in response to some comments on the last round, but the fundamental problem of calling a statement of strong support for the same-source hypothesis an "identification" remains. Several LTG members believe that the terminology in the standard remains confusing or inappropriate, but we realize this is a recirculation.		Reject. This proposal has been considered by the Consensus Body on previous drafts and rejected.
31	3.2 and 3.3	T	Conformity / non-conformity are terms of art that are not defined in this document		Reject. Dictionary definition is intended.
32	3.3	T	Is a disagreement one dissimilarity or more than one dissimilarity? This definition is not clear.		Reject. We believe the definition of "disagreement" makes clear that it can be either one or more than one.
33	3.8	T	The word "reproduction" ought to be changed. The common use of this word refers to something that is fabricated or copied.		Reject. Dictionary definition does not contain fabrication.
34	3.9	T	What scenario is this describing? This sounds like a print of "no value."		No resolution proposed. An impression may have high value and yet offer equal support for both propositions.
35	3.16	T	In the definition of questioned, it says unknown or known source. If it's known, then why is it questioned?		No resolution proposed. The inclusion of "known" is to account for scenarios in which two known impressions are compared.
11	3.19	T	I disagree with the definition of Source Exclusion (Section 3.19) and with the source conclusion category of Source Exclusion (Section 4.2) I hold with the view that an observer can, within a framework of articulated assumptions, hold an opinion that a proposition of common source is disproved by the data. I believe that to hold otherwise denies the basic tenants of the scientific method. As a practitioner, I would be unable to accept this standard for my conclusions as it does not allow for the rejection of the hypothesis of common source. I hold that we should not seek or expect symmetry on the conclusions scale. The opinion of source exclusion does not mirror that of source identification. Most importantly, the sources for uncertainty are quite different. In a conclusion of strong association (i.e. Source Identification) what separates a certainty from substantially strong support is the inability of our cumulative observations of corresponding detail to prove the proposition. (We don't prove that a hypothesis is true by failing to reject it and accumulating data supporting it.) In a conclusion of disassociation (rejecting the proposition of association), any residual uncertainty for absolute rejection of the proposition of common source lies in the validity of the assumptions, the quality of the data, and the rigor of the examination. These sources of uncertainty can be articulated and critically evaluated. After an examination we can reject the proposition of common source, if, based on the observed data, we (1) conclude that the questioned and exemplar impressions are true representations of the friction ridge skin that made them, and (2) find, through exhaustive comparative observations, that no portion of friction ridge skin represented by the exemplar could have made the questioned impression. (We do, in fact, disprove the hypothesis, within the framework of the articulated assumptions)	Replace entire test to fthe section to: The conclusion that the friction ridge pattern detail present in the questioned impression could not have originated from the skin whose ridge patterns are represented in the exemplar impressions.	Accept with Modification. Definition from updated Section 4.2 was used.
9	4.1	E	The NOTE under Figure 1 says: Figure not to scale. This note is unnecessary and potentially confusing given that no "scale" is provided	Delete the NOTE under Figure 1. If the authors of the document believe more explanation is needed, they could say in the text at the end of Section 4.1 that (a) Figure 1 represents possible source conclusions arrayed from most supportive of the different -source proposition (on the left) to most most supportive of the same source proposition (on the right), and (b) that the size of the boxes representing the possible conclusions is not intended to reflect relative frequency or number.	Reject: The phrase "not to scale" does not require a scale. See https://english.stackexchange.com/questions/159821/what-do-people-mean-or-think-they-mean-by-not-to-scale
17	4.1	T	This states "shall assess the similarities and dissimilarities in the observed data and consider their probability under each of the two following two propositions: the two impressions originated from the same source or from different sources.". Is 'their probability' referring to the examiners subjective probability, or is 'their probability' referring to the probability of same source or different source?	Clarify what 'their' is referring to, the examiner or the propositions.	Accept. Change "their probability" to "the probability of both"
18	4.1	T	This states "shall assess the similarities and dissimilarities in the observed data and consider their probability under each of the two following two propositions: the two impressions originated from the same source or from different sources." There is no means by which to determine the probability and therefore this requirement is forcing examiners to understate or overstate information, and not indicating it to the courts.	Clearly state that any measure is highly subjective and may not accurately represent the data.	Reject. Subjectivity is implied by the word "opinion."
36	4.1	T	"which is inherently subjective" is unnecessary language. This is not appropriate commentary in a Standard document. The Standard should focus on definitions of conclusions and remove any additional commentary. This type of commentary is relevant in admissibility litigation, not in this Standard document.	Remove "which is inherently subjective."	Accept. Subjectivity is implied by the word "opinion."

12	4.1	T	I disagree with the definition of Source Exclusion (Section 3.19) and with the source conclusion category of Source Exclusion (Section 4.2). I hold with the view that an observer can, within a framework of articulated assumptions, hold an opinion that a proposition of common source is disproved by the data. I believe that to hold otherwise denies the basic tenants of the scientific method. As a practitioner, I would be unable to accept this standard for my conclusions as it does not allow for the rejection of the hypothesis of common source. I hold that we should not seek or expect symmetry on the conclusions scale. The opinion of source exclusion does not mirror that of source identification. Most importantly, the sources for uncertainty are quite different. In a conclusion of strong association (i.e. Source Identification) what separates a certainty from substantially strong support is the inability of our cumulative observations of corresponding detail to prove the proposition. (We don't prove that a hypothesis is true by failing to reject it and accumulating data supporting it.) In a conclusion of disassociation (rejecting the proposition of association), any residual uncertainty for absolute rejection of the proposition of common source lies in the validity of the assumptions, the quality of the data, and the rigor of the examination. These sources of uncertainty can be articulated and critically evaluated. After an examination we can reject the proposition of common source, if, based on the observed data, we (1) conclude that the questioned and exemplar impressions are true representations of the friction ridge skin that made them, and (2) find, through exhaustive comparative observations, that no portion of friction ridge skin represented by the exemplar could have made the questioned impression. (We do, in fact, disprove the hypothesis, within the framework of the articulated assumptions).	Add the following to the end of the first paragraph: Additionally, the nature of the dissimilarities (and the reliability of the impressions to represent the details of the skin from which they were made) can be sufficient exclude the possibility that the friction ridge skin producing one impression could have produced the other impression.	Reject. Based on discussions during CB meetings, it has been determined that the modifications to section 4.2 are sufficient to cover this comments.
13	4.2	T	I disagree with the definition of Source Exclusion (Section 3.19) and with the source conclusion category of Source Exclusion (Section 4.2). I hold with the view that an observer can, within a framework of articulated assumptions, hold an opinion that a proposition of common source is disproved by the data. I believe that to hold otherwise denies the basic tenants of the scientific method. As a practitioner, I would be unable to accept this standard for my conclusions as it does not allow for the rejection of the hypothesis of common source. I hold that we should not seek or expect symmetry on the conclusions scale. The opinion of source exclusion does not mirror that of source identification. Most importantly, the sources for uncertainty are quite different. In a conclusion of strong association (i.e. Source Identification) what separates a certainty from substantially strong support is the inability of our cumulative observations of corresponding detail to prove the proposition. (We don't prove that a hypothesis is true by failing to reject it and accumulating data supporting it.) In a conclusion of disassociation (rejecting the proposition of association), any residual uncertainty for absolute rejection of the proposition of common source lies in the validity of the assumptions, the quality of the data, and the rigor of the examination. These sources of uncertainty can be articulated and critically evaluated. After an examination we can reject the proposition of common source, if, based on the observed data, we (1) conclude that the questioned and exemplar impressions are true representations of the friction ridge skin that made them, and (2) find, through exhaustive comparative observations, that no portion of friction ridge skin represented by the exemplar could have made the questioned impression. (We do, in fact, disprove the hypothesis, within the framework of the articulated assumptions).	Replace the body of the text in this entire section (but keeping the Note): Source exclusion is the conclusion that the friction ridge pattern detail present in the questioned impression could not have originated from the skin whose ridge patterns are represented in the exemplar impressions. This conclusion is based on observed data from which the examiner (1) concludes that the questioned and exemplar impressions are true representations of the friction ridge skin that made them, and (2) finds, through exhaustive comparative observations, that no portion of friction ridge skin represented by the exemplar could have made the questioned impression. This finding disproves the hypothesis of common origin.	Accept with Modification. Based on discussions during CB meetings, the section was revised to be in line with the comment, to read: "Source exclusion is the conclusion that two friction ridge impressions did not originate from the same source. After a comparison of all relevant areas., the observed data are incompatible with the proposition that the two impressions originated from the same source. (See Annex A, Section Source Exclusion)." For clarification, the note was removed.
45	4.2 and 4.6	E/T	4.2 rejected "extremely strong" and kept "substaintially stronger" while 4.6 switched from "substaintially stronger" to "extremely strong" even though the final resolution said it was rejecting "extremely strong".	Document should be consistent in wording - use either "extremely strong" or "substaintially stronger" in both 4.2 and 4.6. If the CB has in fact rejected the phrase "extremely strong" as their final resolution comment suggests, then 4.6 needs to revert back to "substaintially stronger".	Accept.
19	4.2-4.6	T	There is no criteria for conclusions. Weak, strong, extremely strong are highly subjective and therefore not a criteria. If FSP's come up with their own criteria then this standard does not standardize anything, it only gives the appearance of standardization.	Develop a criteria before stating that only certain conclusions can be arrived at. And State a criteria for measurements like weak, moderate, strong, stronger, extremely strong.	Reject. Criteria will be addressed in BPR 165, BPR 166, and STD 015 and the criteria will be determined by the FSP.
1	4.3	T	The standard mandates the use of a statement regarding the degree of support yet does not give objective guidance or a definitive scale on how to apply an inherently subjective qualification of the degree of support for the conclusion. Further, the required degree of support statement does not add value for the end customer who receives the report, nor does it add value to the process of adjudication.	Remove this requirement, or at the very least make it optional.	Reject. The Consensus Body regrets that the scale is subjective but does not feel the discipline is ready to offer guidance on subdivisions of this conclusion with sufficient precision and clarity.
20	4.3 and 4.5	T	The word strong was taken out of the graphic for inconclusive but the word "stronger" remains in the description under 4.3. If you can't determine what is strong, then you can't determine what is stronger.	Either remove 'strong' in both the graphic and the wording, or keep the word in both places.	Reject. Ordinary English meaning of the word "stronger" is intended.
37	4.3 and 4.5		The definition of weak, moderate, strong vary from examiner to examiner and lab to lab based on experience and other variables.	Remove the final sentence from 4.3 and 4.5 that include weak, moderate as well as from sliding scale.	Reject. It is up to the FSP to define, explain, and support any descriptors that they use.
2	4.5	T	The standard mandates the use of a statement regarding the degree of support yet does not give objective guidance or a definitive scale on how to apply an inherently subjective qualification of the degree of support for the conclusion. Further, the required degree of support statement does not add value for the end customer who receives the report, nor does it add value to the process of adjudication.	Remove this requirement, or at the very least make it optional.	Reject. The Consensus Body regrets that the scale is subjective but does not feel the discipline is ready to offer guidance on subdivisions of this conclusion with sufficient precision and clarity.
21	4.6 Comment 11, line 100	T	Comment 11, line 100 says rejected, but the proposed resolution was changed.	The resolution box is incorrect, correct the resolution.	Reject with modification. Proposed resolution was accepted in error. "extremely" has been changed to "substantially."
7	4.6	T	The definition of "source identification" has moved from "substantially stronger support for identification" to "extremely strong support," but juries will still view the phrase "source identification" as a statement that there is one identifiable source of the print. The fact that the document then says you cannot say 100% or "infallible" and the like will be lost on lay juries. The addition to the note for that opinion, we believe, makes clear that what is being proposed is wordsmithing that will ultimately still be confusing to jurors and would be solved if the term "source identification" were eliminated.	Eliminate "source identification" as a valid term.	Reject. This proposal has been considered by the Consensus Body on previous drafts and rejected.

10	General or Section 6	T	Section 5 specifies prohibitions on what an examiner may say about the probative value or accuracy of latent print examination. Why is there no comparable section that specifies affirmatively what examiners should say on this topic? The AAAS report on Latent Fingerprint Analysis makes a number of helpful suggestions regarding affirmative statements that examiners should make in reports and testimony. Without such information it will be impossible for the average person to gain a clear sense of the probative value of these opinions.	There should be a Section 6 that specifies, or at least gives examples, of statements examiners can make in reports and testimony about the accuracy of their discipline. Examiners should be required to make some affirmative statement concerning what, if anything, is known about how consistently (reliably) examiners can assign print comparisons to the five reporting categories. In other words, how often do examiners agree or disagree with each other (or themselves) about assignment of cases across these reporting categories. There should also be an affirmative statement about what, if anything, is known about how often print comparisons known to involve same and different source prints are classified in each reporting category.	Reject. Out of scope of the document. Would be more appropriately addressed on cross examination.
25	4.6 and 5.1	T	"When one of the five conclusions is reached, the examiner shall not: a) assert that two impressions were made by the same source…"	The conclusion of Source Identification that is being recommended does exactly what you are saying not to do, Source Identification does assert that two impressions were made by the same source, even if that is not what is intended. This is not only how the courts will view the conclusion, but examiners are viewing it this way as well due to the wording 'Source Identification'. If you do not intend for that to be how the conclusion is viewed then the conclusion should be changed to 'Support for Source Identification".	Reject. Please refer to sections 3.20 and 4.6 which state our definition of "source identification."This proposal has been considered by the Consensus Body on previous drafts and rejected.
3	4.6 and 5.a	T	Source Identification is defined as, "the conclusion that the observed data provide extremely strong support for the proposition that two impressions originated from the same source rather than different sources."…[i.e. latent and known finger print compare, as is the purpose/reason for the analysis]	Prohibition 5.a. is in conflict and in error with the whole objective for the analysis in the first place and 4.6. Prohibition 5.a. I would suggest needs to be deleted.	Reject. Please refer to sections 3.20 and 4.6 which state our definition of "source identification."This proposal has been considered by the Consensus Body on previous drafts and rejected.
22	4.6 comment 69, line 103	T	The resolution says the CB agrees that Source ID's and source exclusions need to have the degree of support, but the CB does not want to require it.	Since the CB agrees that a statement saying the degree of support is necessary for Source ID's and Exclusions but doesn't want to require it, then they should add a should statement (not omit an idea that everyone agrees with). Add "Any use of this conclusion should include a statement of the degree of support (weak, moderate or strong)."	Reject. The Consensus Body did not say it " does not want to require it." The CB said it "does not feel the discipline is ready to offer guidance on subdivisions of this conclusion with sufficient precision and clarity. The CB does not support differentiating source identification or source exclusions. Since the definition of Source Identification says "substantially stronger support" modifying this adjective like "weak" or "moderate" will be confusing.
23	4.6 comment 85, line 104	T	The resolution says criteria for conclusions is out of scope and should be in Standard for examination document. Therefore, this document is not useful within itself and if the criteria is in another document, then the conclusions should also be moved to that document.	Due to the CB recognizing that another document is stating the important aspect needed for this document, then either move the information in this document to the Standard for examination document, or add that document as a normative reference.	Reject. The fact that other useful information for the discipline is in another document does not require the incorporation of this document into that other document. STD cannot be added as a normative reference at this time because it is not published (see ASB Manual, F.1).
24	4.6, comment 104, line 106	T	The resolution says: Reject. The Consensus Body agrees with the point, but does not feel the discipline is ready to offer guidance on subdivisions of this conclusion with sufficient precision and clarity.	If the goal is to raise the bar, and to make improvements, then the CB should add elements that they recognize are needed.	Reject. The CB does not feel it could do a good job at what is being asked at this time.
38	4.6	T	The NOTE is unnecessary. The definition of Source Identification speaks for itself. Section 5 "Prohibitions" cover all aspects of appropriate limitations. Inclusion of the language "Source identification is not identification to a single source" at the end of the note is confusing, and contradicts the Source Identification definition. As a courtroom advocate, I'm confident that these extraneuous comments/notes will confuse the prosecutor, defense attorney, judge, and jury.	Remove the entire Note in Section 4.6	Accept. Covered by Section 5(a).
44	4.6 Note		This is my first opportunity to comment on STD 13 since joining the Friction Ridge Consensus Body. Here is my explanation for why I am voting "no". Based on my comments below, I do not believe that FSPs will adopt Standard 13 Standard for Friction Ridge Examination Conclusions. 1) The Section 4.6 NOTE is unnecessary. The definition of Source Identification speaks for itself. Section 5 "Prohibitions" cover all aspects of appropriate limitations. Inclusion of the language "Source identification is not identification to a single source" at the end of the note is confusing, and seems to contradict the Source Identification definition. As a courtroom advocate, I'm confident that these extraneous comments/notes will confuse the prosecutor, defense attorney, judge, and jury. 2) 5(a) is a compound statement. There are two clauses within 5(a). The first portion "assert that two impressions were made by the same source" is unnecessary. See comments in 1. The second clause "imply an individualization to the exclusion of all other sources" is acceptable. I suggest using the limitation language from the DOJ ULTR. The DOJ language is clear and provides appropriate guardrails for conclusions and testimony. 3) I'm concerned that the parenthetical examples within 6.2 will lead to fixed/rigid definitions. In other words, in 6.2 A6 it lists "sixteen ridge endings and an enclosure." In court, if there were fourteen ridge endings and an enclosure, defense will argue that it doesn't satisfy the example listed in STD 13. In 6.2 A6 it says "such as five ridge endings with 30 pore structures and ridge edge shapes." Again, listing specific numbers of data points in these examples will dilute the conclusions/opinions that the examiner provides. Also, listing specific numbers of data points will cause confusion to the jury when the case evidence does not rise to the listed example. 4) In 4.1, "which is inherently subjective" is unnecessary commentary. This Standard should focus on its scope which is to provide Source Conclusion language. As a result of the above-listed issues, this Standard will weaken the value of friction ridge analysis and confuse jurors. I do not believe laboratories will widely adopt this Standard unless the above issues are resolved.		Accept. Covered by Section 5(a).

46			I am voting no because I agree 100 percent with all the points Ray makes in his comment. The goal of this document should be to make every possible conclusion that an examiner can reach scientifically stronger based on advancements in the discipline (and also more clearly understood by end users where possible). The prohibitions section (5.0) already addresses the historical concerns of absolute source attribution, zero error rate, certainty expressions, vouching for one's own opinion based on personal experience, etc. The note in 4.6 and the language noted by Ray from Section 5 are unnecessary and confusing. I fully support the discipline as a whole continually striving to improve the manner in which examiners articulate and explain their opinions to ensure that what examiners are saying is scientifically sound. But the discipline need not and should not cave to outside pressure to water down the confidence with which LP examiners express one of the five possible conclusions (source identification), unless of course as a discipline you feel that science no longer supports the analysis that you do and the conclusions you reach. As a lay person/prosecutor who has been putting on FR evidence for a long time, that's how the note in 4.6 and the phrases identified by Ray in 5.0 read to me… like the discipline is agreeing with the narrative that FR analysis as a whole is scientifically questionable, at least when the end result is a conclusion of source identification. I think source identification should be defined as it is in 4.6 without the note and that the limitations to that conclusion (and the other conclusions as well) should be outlined in section 5 in a manner consistent with Ray's comments.		Accept. Covered by Section 5(a).
39	5(a)	T	The first half of 5a is confusing as it relates to the definition of Source Identification and same source. Including this language eviscerates the entire foundation of friction ridge analysis. The second half of 5a as it relates to individualization is acceptable.	The Prohibitions will be much clearer if they follow the DOJ ULTRs. For example, the "examiner shall not use the terms 'individualize' or 'individualization' when describing a source conclusion or assert that two friction ridge skin impressions originated from the same source to the exclusion of all other sources"	Reject with modification: 5a) not revised. 5d) modified to include: with "absolute" or "100% certainty"
4			But then under 5.a "Prohibitions" 'the examiner shall not…a/ "assert that two impressions were made by the same source-or imply an individualization to the exclusion of all other sources". This prohibition would cancel out the mandate under "source identification".		Reject with modification: 5a) not revised. 5d) modified to include: with "absolute" or "100% certainty"
5			Prohibition 5.a. is in conflict and in error with the whole objective for the analysis in the first place and 4.6. Prohibition 5.a. I would suggest needs to be deleted.		Reject with modification: 5a) not revised. 5d) modified to include: with "absolute" or "100% certainty"
40	5(e)	T	The entire friction ridge discipline relies on the premise that friction ridge skin is unique. If friction ridge skin is not unique to a person, then it cannot be used for a source identification NOR a source exclusion. Including this language eviscerates the entire discipline.		Accept. Language restricted to use of uniqueness as sole support for conclusion.
26	5.1 e	T	Prohibition: "cite the number of friction ridge comparisons performed in their career as a measure for the accuracy of a conclusion offered in the case at hand;" If an examiner cites the number of comparisons, it is not up to them if the jury assumes that is a measure of accuracy. I have read hundreds of transcripts and none of them cite the number as a measure of accuracy, they just cite the number and it is viewed as a measure of accuracy. This prohibition does nothing to stop this from occurring.	Change to, examiners should not track, state or estimate the number of comparisons they have performed over their career.	Reject. Prohibiting examiners from stating the number of comparisons they have done would be unreasonable. This section is intended to prohibit THE EXAMINER from connecting the number of performed comparisons to accuracy. Jurors or attorneys making that connection is outside the scope of the document.
29	Annex	T	The standard says, "shall assess the similarities and dissimilarities in the observed data and consider their probability under each of the two following two propositions:" The examples jump to correspondence, and do not show how similarities and dissimilarities are considered.	Add to the examples how similarities and dissimilarities are considered in order to determine correspondence.	Accept.
14	A.2.1	T	I disagree with the definition of Source Exclusion (Section 3.19) and with the source conclusion category of Source Exclusion (Section 4.2). I hold with the view that an observer can, within a framework of articulated assumptions, hold an opinion that a proposition of common source is disproved by the data. I believe that to hold otherwise denies the basic tenants of the scientific method. As a practitioner, I would be unable to accept this standard for my conclusions as it does not allow for the rejection of the hypothesis of common source. I hold that we should not seek or expect symmetry on the conclusions scale. The opinion of source exclusion does not mirror that of source identification. Most importantly, the sources for uncertainty are quite different. In a conclusion of strong association (i.e. Source Identification) what separates a certainty from substantially strong support is the inability of our cumulative observations of corresponding detail to prove the proposition. (We don't prove that a hypothesis is true by failing to reject it and accumulating data supporting it.) In a conclusion of disassociation (rejecting the proposition of association), any residual uncertainty for absolute rejection of the proposition of common source lies in the validity of the assumptions, the quality of the data, and the rigor of the examination. These sources of uncertainty can be articulated and critically evaluated. After an examination we can reject the proposition of common source, if, based on the observed data, we (1) conclude that the questioned and exemplar impressions are true representations of the friction ridge skin that made them, and (2) find, through exhaustive comparative observations, that no portion of friction ridge skin represented by the exemplar could have made the questioned impression. (We do, in fact, disprove the hypothesis, within the framework of the articulated assumptions).	Following the second sentence, replace the remaining text with: Based on the on observed data the examiner (1) concludes that the questioned and exemplar impressions are true representations of the friction ridge skin that made them, and (2) finds, through exhaustive comparative observations, that no portion of friction ridge skin represented by the exemplar could have made the questioned impression. The examiner could therefore conclude that the questioned impression could not have originated from the skin whose ridge patterns are represented in the exemplar impressions. (i.e., Disagreement observed with high clarity level 1 detail, Source exclusion.)	Accept with modification. Section edited to reflect proposed resolution but remain consistent with the rest of the Annex.

15	A.2.2	T	I disagree with the definition of Source Exclusion (Section 3.19) and with the source conclusion category of Source Exclusion (Section 4.2). I hold with the view that an observer can, within a framework of articulated assumptions, hold an opinion that a proposition of common source is disproved by the data. I believe that to hold otherwise denies the basic tenants of the scientific method. As a practitioner, I would be unable to accept this standard for my conclusions as it does not allow for the rejection of the hypothesis of common source. I hold that we should not seek or expect symmetry on the conclusions scale. The opinion of source exclusion does not mirror that of source identification. Most importantly, the sources for uncertainty are quite different. In a conclusion of strong association (i.e. Source Identification) what separates a certainty from substantially strong support is the inability of our cumulative observations of corresponding detail to prove the proposition. (We don't prove that a hypothesis is true by failing to reject it and accumulating data supporting it.) In a conclusion of disassociation (rejecting the proposition of association), any residual uncertainty for absolute rejection of the proposition of common source lies in the validity of the assumptions, the quality of the data, and the rigor of the examination. These sources of uncertainty can be articulated and critically evaluated. After an examination we can reject the proposition of common source, if, based on the observed data, we (1) conclude that the questioned and exemplar impressions are true representations of the friction ridge skin that made them, and (2) find, through exhaustive comparative observations, that no portion of friction ridge skin represented by the exemplar could have made the questioned impression. (We do, in fact, disprove the hypothesis, within the framework of the articulated assumptions).	Following the second sentence, replace the remaining text with: The examiner can then conclude that, subject to the assumption of the assigned orientation and anatomical source, that the questioned impression could not have originated from the skin whose ridge patterns are represented in the exemplar impressions. (i.e., Disagreement observed, Source exclusion contingent on explicit assumptions.) Alternatively, the examiner could continue the examination, considering and testing all possible orientations and anatomical sources represented in the exemplars. Failing to find the corresponding anchor point, with clear and distinct features above the core, the examiner could therefore conclude that the questioned impression could not have originated from the skin whose ridge patterns are represented in the exemplar impressions. (i.e., Disagreement observed, Source exclusion.)	Accept with modification. Section edited to reflect proposed resolution but remain consistent with the rest of the Annex.
16			I disagree with the definition of Source Exclusion (Section 3.19) and with the source conclusion category of Source Exclusion (Section 4.2). My proposed resolutions extend into Sections 4.1, A.2.1 and A.2.2 I hold with the view that an observer can, within a framework of articulated assumptions, hold an opinion that a proposition of common source is disproved by the data. I believe that to hold otherwise denies the basic tenants of the scientific method. As a practitioner, I would be unable to accept this standard for my conclusions as it does not allow for the rejection of the hypothesis of common source. I hold that we should not seek or expect symmetry on the conclusions scale. The opinion of source exclusion does not mirror that of source identification. Most importantly, the sources for uncertainty are quite different. In a conclusion of strong association (i.e. Source Identification) what separates a certainty from substantially strong support is the inability of our cumulative observations of corresponding detail to prove the proposition. (We don't prove that a hypothesis is true by failing to reject it and accumulating data supporting it.) In a conclusion of disassociation (rejecting the proposition of association), any residual uncertainty for absolute rejection of the proposition of common source lies in the validity of the assumptions, the quality of the data, and the rigor of the examination. These sources of uncertainty can be articulated and critically evaluated. After an examination we can reject the proposition of common source, if, based on the observed data, we (1) conclude that the questioned and exemplar impressions are true representations of the friction ridge skin that made them, and (2) find, through exhaustive comparative observations, that no portion of friction ridge skin represented by the exemplar could have made the questioned impression. (We do, in fact, disprove the hypothesis, within the framework of the articulated assumptions)		Accept with Modification. Based on discussions during CB meetings, the section was revised to be in line with the comment, to read: "Source exclusion is the conclusion that two friction ridge impressions did not originate from the same source. After a comparison of all relevant areas., the observed data are incompatible with the proposition that the two impressions originated from the same source. (See Annex A, Section Source Exclusion)." For clarification, the note was removed.
30	A2	T	The erroneous exclusion rate has been determined to be much higher than thought. These examples do not help reduce erroneous exclusions, in fact they promote them by telling examiners that they can trust in their confidence instead of stating when examiners can be confident.	Conclusions should not rely on confidence. As humans, we are often confident even when incorrect. Examiners should not be encouraged to rely on confidence, they should rely on validated methods. This document should not be implemented as it gives a false impression of standardization and promotes unscientific principles.	Reject. The document is intended to provide standards for methods currently in use, whether they are considered validated or scientific, or not.
30	A2	T	The erroneous exclusion rate has been determined to be much higher than thought. These examples do not help reduce erroneous exclusions, in fact they promote them by telling examiners that they can trust in their confidence instead of stating when examiners can be confident.	Conclusions should not rely on confidence. As humans, we are often confident even when incorrect. Examiners should not be encouraged to rely on confidence, they should rely on validated methods. This document should not be implemented as it gives a false impression of standardization and promotes unscientific principles.	Reject. The document is intended to provide standards for methods currently in use, whether they are considered validated or scientific, or not.
41	6 A.4.1	T	If the print is incomplete, wouldn't it be considered not of value?		Reject. The distinction between "no value" and " inconclusive" differs across FSPs and we consider it a matter of FSP policy
42	6 A.5.5	T	The example using AFIS does not make sense. Why is an AFIS lead a red flag? How is an AFIS lead worse than a case detective asking the examiner to do a direct comparison from a suspect to the latents? It seems like AFIS has less of a chance of bias than the latter example.		Reject. One-to-many comparisons have a greater risk of false match than one-to-one comparisons.
43	A 6.2	T	Addition of specific numbers to describe a source identification will put into question any source identification opinion that does not reach the example threshold.	Remove all numbers in all examples	Reject with modification. Language added to section A.1 to make clear that these examples are not thresholds.
28	A6.1 and A6.3	T	Why does 6.3 have a big red ball and 6.1 have a bunch of small red balls? Is ten points in a hypothenar stronger than 16 points in a tip?	Explain the visual representation.	Accept.

8	Bibliography	T	Elimination of the bibliography is not acceptable. The LTG-member comments on the previous draft suggested a list of references on reporting support-based conclusions. If ASB is purporting to produce science-based standards, they should refer to the scientific literature that underlies them. This one needs such a bibliography lest it be seen as ipse dixit.	Some titles that should be considered as part of a bibliography for a document addressing conclusions and incorporating likihood ratios are: *American Statistical Association, "Position on Statistical Statements for Forensic Evidence," Presented under the guidance of the ASA Forensic Science Advisory Committee, January 2, 2019; PCAST, "Forensic Science in Criminal Courts"; American Association for the Advancement of Science, "Forensic Science Assessments: A Quality and Gap Analysis-Latent Fingerprint Examination," (2017); Defense Forensic Science Center, Information Paper, Subject: Use of the Term Identification in Latent Print Technical Reports, (Nov. 3, 2015); Working Group on Human Factors in Latent Print Analysis, "Latent Print Examination and Human Factors: Improving the Practice through a Systems Approach," National Institute of Justice (2012), Steven P. Lund & Hari Iver, "Likelihood Ratio as Weight of Forensic Evidence: A Closer Look," 122(27) J. Research of Nat'l Ist. Standards & Tech., (2017); Simone Gittelson et al., "A response to "Likelihood ratios as weight of evidence: A closer look'," 299 For. Sci. Int'l; John Buckleton & James Curran, "A discussion of the merits of random man not excluded and likelihood ratios," 2 For. Sci. Int'l Genetics 343 (2008); Jonathan J. Koehler, "Proving the Case: The Science of DNA: On Conveying the Probative Value of DNA Evidence: Frequencies, Likelihood Ratios, & Error Rates," 67 U. Colo. L. Rev. 859, (1996); Kristy A. Martire et al., "The Psychology of Interpreting Expert Evaluative Opinions," 45 Australian J. F. Sci. 305 (2013); Kristy A. Martire et al., "The Expression and Interpretation of Uncertain Forensic Evidence: Verbal Equivalence, Evidence Strength, and the Weak Evidence Effect," 37 L. & Human Behav. 197 (2013); Swaminathan et al., "Four model variants within a continuous forensic DNA mixture interpretation framework: Effects on evidential inference & reporting," 13(11) PLos ONE (2018)*	Reject. Please note that comments on a re-circulation are generally accepted only on revised section of a document. Comments made on text not revised from the previous public comment period are generally not accepted. ASB Manual, section 12.1 calls for normative references only if the document cannot be implemented without them and 19.1 says bibliographies are optional.
27	Comment 72, line 119	T	Reject. The commenter is correct that an informative Annex does not include requirements. However, the ASB Manual does permit informative Annexes. We regret that the commenter does not find this one useful. Previous comments requested examples, which argues for the usefulness of this informative Annex.	Previous comments also requested validated criteria for conclusions. The CB seems to be picking the low hanging fruit (going with the easy comments and ignoring the more useful comments and solutions). Remove the examples until validated criteria is	Reject. The Consensus Body believes the Annex is helpful and its helpfulness is not negated by the fact that the CB is unable to provide validated criteria at this time.
47			I do not believe that the three Inconclusive conclusions can be clearly and easily conveyed to laypeople and attorneys, thus will not be adopted by FSPs. Stating "Inconclusive with Similarities" and "Inconclusive with Dissimilarities" is loaded language that will imply findings that do not accurately represent the actual conclusion of the comparison.		Reject. The CB has found that the reasons for inconclusive conclusions can be, and have been, clearly conveyed to laypeople and attorneys