

Deadline for comment submission: 1/25/2021  
ASB BPR 144, Best Practice Recommendations for the Verification Component in Friction Ridge Examination

#	Section	Updated Section	Type of Comment	Comments	Proposed Resolution	Final Resolution
11	Forward		E	the term 'may' is present throughout the document and needs to be defined how it is being used for clarity as it is being used in more than 1 way (eg as a permission and as a factor that may present itself during an examination)	determine how the word 'may' is to be used within the document and define it in the forward	<b>REJECT WITH MODIFICATION</b> - The ASB Style Manual/Guide defines the use of "may" (optional) and "can" (possibility/capability). All instances of "may" within the document have been reviewed aligned with these standard definitions.
29	General		T/E	There are three different phrases that use "independent" and they all seem to have different meanings. "Independent examination" is used in 4.2, "independent reapplication and documentation of ACE" is used in 4.7.1 and 4.7.2, and "independent ACE" is used in the footnote on page 4. Independent can have a different definition when thinking about blind verification, which is the absence of any prior information. This means that an open verification is not independent if the second reviewer knows the answers prior to their examination. Independent can also mean an examiner can analyze evidence by themselves.	There needs to be a uniform definition for the "independent phrases" if they are the same. If the phrases have different meanings, they need to be defined in section 3. Independent can have many meanings so additional clarity is needed.	<b>ACCEPT WITH MODIFICATION</b> - Clarification on the use of the term "independent" has been added as a note to Section 4.1
30	General		T/E	As a best practice document there is little guidance on how laboratories/examiners can mitigate bias in verification. It seems dismissive to mention confirmation bias in footnote on the last page of a document meant to promote best practices to mitigate something like confirmation bias.	A statement (4.12) needs to address the potential for cognitive bias during verification. Best practice measures to mitigate cognitive bias should also be listed. If confirmation bias is the only type of bias that needs to be accounted for, the term should be defined in section 3 as well. If there are other forms of bias that can occur, an annex with an explanation of the various types of bias should be provided as well.	<b>REJECT</b> - While confirmation bias is not discussed specifically within the document, the recommendations therein provide practices to mitigate this form of bias (see re-numbered Sections 4.4.1 through 4.5)
12	multiple		E	the use of the term 'shall' throughout the document is inconsistent with the purpose of the document. Document is a recommendation that is not being mandated so the use of the term 'shall' to be mandatory and able to be audited for compliance is inappropriate	remove the term 'shall' from document completely and replace with 'should' statements. Any 'shall' statements regarding verification are more appropriately placed in a standard for friction ridge examination document	<b>ACCEPT</b>
13	1		T	We suggest careful thought be given to whether it is appropriate to call this proposed standard a "best practice" recommendation. We urge that the term "best practice" be reserved for describing the most rigorous scientific procedures that are designed to achieve the highest levels of reliability, accuracy and consistency. We recognize that it may not always be possible to achieve "best practices" due to resource limitations and other constraints, and that procedures that fall below "best practices" may nevertheless meet minimum standards of acceptability. We believe it is useful to distinguish between "best practices" (which may be aspirational for some FSPs) and minimal requirements, which all FSPs are expected to meet. Are the procedures set forth here intended to represent "best practices" toward which FSPs should aspire, or are they really minimal requirements that all FSPs are expected to meet?	Consider revising the title and text of this document in order to clarify whether the procedures set forth are aspirational "best practices" designed to identify methods that maximize scientific rigor and accuracy but may not always be achievable in practice, or are minimal requirements that all FSPs must meet.	<b>ACCEPT WITH MODIFICATION</b> - The document was reviewed for "Shall" and "Should" statements and all "Shall" statements were changed to "Should" in accordance with current guidelines for Best Practice Recommendations
57	1		T	This standard's stated objective is to improve the quality and consistency of friction ridge examinations. Friction ridge examiners have long cited to the ACE-V method in arguing that their discipline is founded in scientific practices. The V (verification) stage is an integral part of this process. Indeed, some courts have admitted this feature comparison evidence only when performed according to the ACE-V method. See People v. Cline, 2020 IL App (1st) 172631. This objective can only be served by making these provisions requirements instead of recommendations.	Transition from recommendations that do not implicate accreditation to standards that labs must follow. This change would make these provisions more impactful by ensuring that FSPs adhere to sound practices.	<b>REJECT</b> - The scope of this document was reviewed as is considered appropriate as a Best Practice Recommendation at this time.
21	3.2/3.6	(3.3/3.7)	T	is that really part of the verification component? For me: rather technical review or conflict management	delete	<b>REJECT</b> - These are definitions of terms or concepts that are used within the Best Practice Recommendation and therefore their inclusion is justified.
58	3.5	3.6	T	This form of review is highly susceptible to biasing information and undermines the purpose of requiring verification as a structural safeguard.	While we don't object to defining non-blind verification, this standard should make clear that this practice shall not be permitted at any accredited FSP.	<b>REJECT</b> - The document covers the advantages of Blind over Open Verification and provides a listing of circumstances when Open Verification would be inappropriate (see re-numbered Sections 4.4 and 4.4.1)

#	Section	Updated Section	Type of Comment	Comments	Proposed Resolution	Final Resolution
22	3.7	3.8	T	to be transparent: add that it is valid for TP-TP and Lat-TP	add information	<b>REJECT</b> - The accepted used of the term "friction ridge examination" applies to TP-TP, Lat-TP, and Lat-Lat exams. No confusion over this matter is expected.
49 (2)	3.6	3.7		3.6 Defines QA but then discusses QC. Has it been recognized that these are different things?		<b>NOTED</b> - This is not considered a substantive issue
49 (3)	3.8	3.9		3.8 Verification as 'confirmation' is biasing. This implies that if an independent assessment differs from the original assessment then it did not go through the verification process, when it did. This is not promoting transparency, and it confuses the difference between a verification process and the result of the verification process.		<b>ACCEPT</b> - The definition has been reworded without "confirmation" or an expectation of any result.
49 (4)	3.8	3.9		3.8 If open verification is defined, and BV is defined, I don't understand the need to define verification. Is verification either Open verification or BV? It does not say it is.		<b>REJECT</b> - "Verification" is the general term that is defined here and is appropriate for inclusion as it appears throughout the document
49 (5)	3.8	3.9		3.8 It is not clear what verification is: a review or a re-examination. It cannot be either, which is the BP recommendation being made?		<b>ACCEPT</b> - removed "review" from accepted practice throughout the document
15	3.8	3.9	E	"Verification" is defined as "confirmation" of an initial examiner's conclusion or opinion". The use of the word "confirmation" as part of this definition is problematic because the implication is that the goal of verification is to reproduce the original examiners conclusion. Verification decisions should not begin with the idea that their task is to confirm initial judgments because this can bias the person performing the verification analysis in favor of agreement. The HFTG recognize that the definition is unlikely to be an issue in day-to-day practice, but this term should not appear in a definition within a Best Practices document that may be used to train examiners or used against examiners down the line.	Verification should be defined using neutral language. Examples: (1) "An examination of the same impressions that were evaluated by the initial examiner using the FSP's policies and procedures relating to analysis, comparison, and evaluation of friction ridge impressions. The goal is to compare the resulting decisions in order to determine whether any substantial difference exists between the examiners" (as recommended for Document 142 by the HFTG); or (2) "the process through which an examiner's decisions are evaluated by a second examiner to ensure their reliability and accuracy, and to trigger further assessment if this process results in questions about the reliability/accuracy of the original decisions."	<b>ACCEPT WITH MODIFICATION</b> - The definition for Verification has been reworded to describe the verification process rather than any expected result.
31	3.8	3.9	T/E	This terminology and definition imply (or actually states explicitly) that the initial conclusion will be confirmed.	It would be more objective to define this term as "examination of observed data by another examiner to determine if a conclusion or opinion conforms to specified requirements and is reproducible. Similarly, the more neutral term "examiner" or "reviewer" would be preferred over "verifier" throughout the document.	<b>ACCEPT WITH MODIFICATION</b> - The definition for Verification has been reworded to describe the verification process rather than any expected result. <b>REJECT</b> - The term "verifier" is appropriate to designate their role in the examination process.
59	3.8	3.9	T	Because the evidence itself is the most reliable source of data, this standard should define verification as a blind, independent review of the evidence item(s) upon which the initial examiner relied when reaching their conclusion(s). This standard also should not use the term confirmation, which inappropriately assumes that the second examiner's role is simply to check the first examiner's work and not to reach an independent conclusion. Instead rephrase as "and assessment....of whether...."	Because the evidence itself is the most reliable source of data, this standard should define verification as a blind, independent review of the evidence item(s) upon which the initial examiner relied when reaching their conclusion(s). This standard also should not use the term confirmation, which inappropriately assumes that the second examiner's role is simply to check the first examiner's work and not to reach an independent conclusion. Instead rephrase as "and assessment....of whether...."	<b>REJECT</b> - The document covers the advantages of Blind over Open Verification and provides a listing of circumstances when Open Verification would be inappropriate (see re-numbered Sections 4.4 and 4.4.1) <b>ACCEPT</b> - "Confirmation" was removed from the definition.
16	4.1	Removed	T	Replace the words "that can be applied" so that it reads "Verification is a quality control procedure that is the final..." The HFC suggests this change because "can be applied" suggests that verification is always optional. At a minimum, verification should be encouraged in all cases in a "Best Practices" document. In addition, change "are supported by the data in the impressions" to "are accurate and reliable." There may be some data that does not support what the original examiner concluded, but that might not be enough to ensure accuracy.	Replace the words "that can be applied" so that it reads "Verification is a quality control procedure that is the final..." The HFC suggests this change because "can be applied" suggests that verification is always optional. At a minimum, verification should be encouraged in all cases in a "Best Practices" document. In addition, change "are supported by the data in the impressions" to "are accurate and reliable." There may be some data that does not support what the original examiner concluded, but that might not be enough to ensure accuracy.	<b>ACCEPT WITH MODIFICATION</b> - Section 4.1 was removed. <b>REJECT</b> - Within the recommendations of the document, verification may not always be applied (e.g. inconclusive conclusions) and could occur prior to the final step (e.g. verification of the suitability decision). As the verifier is not privy to the ground truth of an examination, it is more appropriate to state that their verification is based on the data in the impressions than the accuracy or reliability of the examination. [Note: the cited statements in former Section 4.1 were deleted]

#	Section	Updated Section	Type of Comment	Comments	Proposed Resolution	Final Resolution
49 (6)	4.1	Removed		4.1 is a note, not a recommended BP. It seems like this information should go into the definition.		<b>REJECT WITH MODIFICATION</b> - Section 4.1 was removed
32	4.1	Removed	T/E	The statement provides additional context for what verification is by noting it is a quality control measure. It is not necessary, however, to specify a time when this step takes place, and by saying it is the final step you may cause confusion regarding the timing of a technical review.	Consider editing to "Verification is a quality control measure for friction ridge examination."	<b>REJECT WITH MODIFICATION</b> - Section 4.1 was removed
60	4.1	Removed	T	Because verification is critical to a reliable analysis, we recommend "can be applied" be replaced with "must be applied".	Because verification is critical to a reliable analysis, we recommend "can be applied" be replaced with "must be applied".	<b>REJECT WITH MODIFICATION</b> - Section 4.1 was removed
17	4.2	4.1	T	Verification is described as an "independent examination" of fingerprint materials by a second examiner, but verification is not truly independent unless it is blind. Failure to use blind verification undermines the independence of the second examination because the second examiner may consciously or unconsciously be influenced by knowing what the first examiner decided. That is part of the reason that non-blind verification falls short of being a "best practice."	If this language is supposed to cover blind and open verification, instead of "independent examination," we recommend "second or later examination."	<b>REJECT WITH MODIFICATION</b> - Clarification on the use of the term "independent" was added as a NOTE to re-numbered Section 4.1. The definitions of blind versus non-blind verification clearly delineate when a verifier has access to prior information, and as such there should be no confusion over the use of the term independent within this document.
33	4.2	4.1	E	This statement should not be a "should" statement. This statement provides additional context for what verification means.	Consider editing to "Verification includes the independent examination of one or more friction ridge impressions, by another examiner, to evaluate a conclusion or opinion."	<b>REJECT</b> - Proposed edit is reflected in the Verification definition (see re-numbered Section 3.9). The cited section is appropriately phrased as a recommendation for a Best Practice Recommendation document.
61	4.2	4.1	T	This recommendation contemplates the need for verification only of the conclusions reached after an examiner has performed a comparison, and not for other consequential judgement calls made by examiners, such as suitability decisions. This is inappropriate given that the research indicates that suitability determinations are at least as variable as source determinations, if not more so. See Ulery et. al, Repeatability and Reproducibility of Decisions by Latent Fingerprint Examiners, PLOS ONE 7(3); Neumann et. al., Improving the understanding and the reliability of the concept of sufficiency in friction ridge examination, NATIONAL INSTITUTE OF JUSTICE available at <a href="https://www.ncjrs.gov/pdffiles1/nij/grants/244231.pdf">https://www.ncjrs.gov/pdffiles1/nij/grants/244231.pdf</a> . To ensure reproducibility, it is necessary to require blind verification at the suitability determination stage.	Expand the definition of verification to include all subjective judgments made by friction ridge examiners, including but not limited to suitability determinations and comparison conclusions.	<b>ACCEPT</b> - "decision" was added to this section as well as the Verification definition in Section 3.9.
4	4.3	4.2	T	The proposed minimum practice listed here, while an admirable goal, is not in this reviewer's opinion a practicable one for a large number of agencies. I believe this to be a shortcoming of this document as a best practice that is unattainable has little to no value for the recipient (and could be used unfairly to attack said recipient for failure to meet the proposed recommendation). A reality is that agencies that do not impose policies limiting the number of prints that can be considered for source exclusion will likely not have the resources to perform verifications on all source exclusion decisions. Based on discussion of this issue within the main Consensus Body, it was my understanding that the authors of this document understood this real world limitation, but rather than address it within the document, simply left it to be covered under the "Best Practice" umbrella. It is this reviewer's opinion that the document itself should in fact address this issue and provide guidance to the recipient of how to proceed.	Include a Note under Section 4.3 that states "NOTE The ASB FRCB recognizes that some FSPs may not have the resources to perform all of the verifications listed in the previous section. Under this limitation, FSPs should continue to verify all source identification and support for same source conclusions and verify as great a percentage of source exclusion conclusions as is practicable."	<b>REJECT WITH MODIFICATION</b> - While the consensus body agrees that this recommendation may be aspirational for some agencies, it is still considered appropriate for this Best Practice Recommendation. "Shall" statement in this recommendation changed to "Should".
5	4.3	4.2	E	The statement "At a minimum verification shall apply . . ." is in conflict with the ASB Best Practice Recommendation 142 document. The note under section 4.1 of that document states that "Forensic Service Provider (FSP) policy dictates which suitability decisions and source conclusions are verified . . ."	The conflict between the two should be resolved. Perhaps the statement "At a minimum verification shall apply to all source identification and support for same source decisions. Verifications should apply to all exclusion decisions but the FSP policy will dictate which suitability and other source conclusions are verified."	<b>REJECT WITH MODIFICATION</b> - There is no conflict between these two documents. While the current Best Practice Recommendation documents minimum verification requirements, it is ultimately up to the FSP to determine how those recommendations are to be implemented. "Shall" statement in this recommendation changed to "Should".

#	Section	Updated Section	Type of Comment	Comments	Proposed Resolution	Final Resolution
34	4.3	4.2	E	This statement should not be a "should" statement. This statement provides additional context for what verification means.	Consider editing to "Verification applies to all decisions including utility (e.g., suitability determinations) and examination conclusions."	<b>REJECT</b> - The use of the term "should" in this context is considered appropriate as a Best Practice Recommendation. Removal of the "should" could introduce confusion by suggesting that Verification <u>is</u> applied in every decision, conclusion or opinion, which is not the case, nor required under this document. (Note: additional "Shall" statement in this requirement changed to "Should" to be in line with current Best Practice Recommendation guidance)
62	4.3	4.2	T	Each source conclusion reached by an examiner is of critical importance and, if erroneous, risks false conviction and imprisonment. Requiring verification of only some conclusions increases the risk of bias as it signals a certain conclusion to the subsequent examiner.	This standard should prohibit the practice of sampling in the verification stage and instead require that each conclusion be independently verified.	<b>REJECT</b> - Document clearly recommends that all decisions and conclusions "should" be verified (Note: the "Shall" statement in this recommendation changed to "Should" to be in line with current Best Practice Recommendation guidance).
49 (7)	4.3	4.2		4.3 should apply to more than 'decisions' (e.g., conclusions and/or findings - which is different from decisions). If verification is defined as for 'conclusions and opinions' then recommending it be for decisions does not have to do with the definition (modify definition and then improve this recommendation to include more than just decisions).		<b>ACCEPT</b> - The definition of verification (Section 3.9) as well as Section 4.1 have been updated to include "decision, conclusion or opinion" for consistency.
49 (8)	4.3	4.2		4.3 the caveat saying what 'shall' be verified diminishes the recommendation		<b>REJECT WITH MODIFICATION</b> - Per current Best Practice Recommendation guidance, the "Shall" statement in this recommendation was changed to "Should". The inclusion of both "shoulds" in this recommendation is being used here to delineate what is expected best practice versus what is aspirational best practice
49 (9)	4.4	4.3		4.4 is a note, not a recommended BP		<b>REJECT</b> - "May" is an approved qualifier per ASB and is being used correctly within this section
35	4.4	4.3	T/E		ACE is not defined in the document and needs to be defined.	<b>ACCEPT</b> - Definition added as Section 3.1.
14	4.5	Removed	T	As written, the document assumes that open verification will be the default practice and only in particular circumstances is blind verification necessary. Research shows that blind verification promotes independent and unbiased decisions. So, blind procedures should be the default where the accuracy and reliability of initial friction ridge analysis are most likely to be consequential or open to question. Open verification procedures need not be ruled out—concerns about resources, time, and personnel must be acknowledged—but we think that a "best practices" document should encourage blind verification procedures and specify with some precision the situations in which open verification is most likely to be acceptable. For example, incriminating "inclusion" judgments, in our view, should always be blindly verified to reduce the risk of wrongful conviction. In contrast, when the initial examiner has made an "exclusion" judgment with no concern about ambiguity in the materials or conclusion, open verification might be appropriate.	Revise Section 4.5 to acknowledge that blind verification is clearly the "best practice" from the standpoint of scientific rigor and accuracy. Indicate that use of non-blind verification, while not the best practice, may nevertheless be acceptable in some circumstances on grounds of expediency.	<b>ACCEPT WITH MODIFICATION</b> - Section 4.5 was removed.
23	4.5	Removed	T	complex comparison > not case circumstances or case type, it depending on the type of latent	be more precise	<b>ACCEPT WITH MODIFICATION</b> - Section 4.5 was removed.
36	4.5	Removed	E		At this point the in the document the options for verification have not been introduced. This statement introduces open verification as the default method of verification. At minimum, blinded verification should also be added to the statement in order to be consistent with recommendation 5.1. 4.5 and 4.6 should be relocated after 4.8.	<b>ACCEPT WITH MODIFICATION</b> - Section 4.5 was removed. Section 4.6 was moved to after the original Section 4.7.2 (which is now Section 4.4.2). Also the first sentence was updated for clarity.

#	Section	Updated Section	Type of Comment	Comments	Proposed Resolution	Final Resolution
63	4.5	Removed	T	The reliability and integrity of the forensic examination should not operate on a sliding scale depending on the severity of the underlying criminal charge. Non-blind verification should be prohibited.	Re-write as a prohibition on non-blind verification in any forensic casework.	<b>REJECT</b> - The document covers the advantages of Blind over Open Verification and provides a listing of circumstances when Open Verification would be inappropriate (see re-numbered Sections 4.4 and 4.4.1). The original Section 4.5 was removed.
49 (10)	4.5	Removed		4.5 is a note, not a recommended BP		<b>ACCEPT WITH MODIFICATION</b> - Section 4.5 was removed
1	4.6	4.4.3	E	Examiners should be careful with comparisons of known prints to crime scene latent prints no matter how the candidate was developed. An argument could be made that Investigator generated candidate could be even more biasing as an AFIS generated candidate. Tying a candidate to the crime through testimony or circumstantial evidence or circumstances as well as past history of similar activity can also cause a bias.	Be objective in the examination and verification and no special treatment (which can be biasing in itself) is needed.	<b>REJECT</b> - Review of errors and performance studies suggest that Single Identifications (or Single Inconclusive with Similarities) decisions from ABIS have greater risks for false positive errors in some situations. The recommendation is considered appropriate.
64	4.6	4.4.3	T	Per the recommendation in the ASB 142 3.6 Source Conclusions, any probabilistic conclusion must be defined with objective criteria and accompanied by a statistical statement of weight. Because the field has not matured enough to provide these, these conclusions are misleading and should be prohibited.	Per the recommendation in the ASB 142 3.6 Source Conclusions, any probabilistic conclusion must be defined with objective criteria and accompanied by a statistical statement of weight. Because the field has not matured enough to provide these, these conclusions are misleading and should be prohibited.	<b>REJECT</b> - There are no probabilistic conclusions being proffered in the cited section. The wording of the conclusions "Source Identification" and "Inconclusive with Similarities" are not the subject of this document.
65	4.6	4.4.3	T	Because all verification should be blind, this should not qualify as "enhanced verification." Moreover, this standard should establish a floor for what "enhanced verification" requires.	We recommend a specific definition of enhanced verification where (1) blind verification must be conducted by at least two qualified examiners and (2) the verifiers should be furnished with the evidence directly and not made aware of the ABIS hit prior to examination to protect against confirmation bias.	<b>REJECT</b> - Enhanced Verification is defined parenthetically in the statement. The document covers the advantages of Blind over Open Verification and provides a listing of circumstances when Open Verification would be inappropriate (see Sections 4.4 and 4.4.1). Furnishing original evidence is not possible in many circumstances nor necessary when ACE has been performed on captures of friction ridge detail. The prohibition of knowledge of ABIS in blind verification is considered too prescriptive for this document at this time and is therefore left up to the individual FSP to consider for implementation.
49 (11)	4.6	4.4.3		4.6 there is no support for the idea that single ID's are at a higher risk of error. The risk of error is dependent on the complexity of a comparison, not based on the number of identifications.		<b>REJECT</b> - There is a simple statistical argument that supports this (i.e. the more identifications to a single individual, the less likely that any given identification is erroneous) and there is also the biasing of the information that is produced by ABIS searching (biasing towards circumstantial agreement of features that is not found in a random selection process). Complexity is another factor, but it is covered elsewhere in the document.
2	4.7	4.4	E	This statement is full of assumptive language. The push for Blind Verifications without any proof of its value, is another case of doing something that can cause undue burdens on time management and use of resources. This will slow done productivity and can cause or increase back log of cases. It has to be remembered that each case represents a victim looking for justice.	Blind Verifications should be an available option, but should not be held up as a higher standard without supporting proof.	<b>REJECT</b> - This document is a Best Practice Recommendation, and therefore it is up to the individual FSP to decide on the merits of and practicality of the recommendations therein. The broader community acknowledges the benefit of blind verification and it is included in this recommendation as such.
6	4.7	4.4	E	The second sentence "... but the broader scientific community suggests ..." There is no reference or basis for this statement. What broader scientific community? Who? Since the beginning of the sentence admits there are limited studies then what is it the broader scientific is basing this suggestion on.	This statement should either be referenced to a source or removed completely. Making such a generally broad statement without support should not appear in a standard.	<b>ACCEPT</b> - Second sentence removed.
9	4.7	4.4	T	inclusion of wording related to limited studies and lack of demonstration whether open or blind verification is better at reducing errors is irrelevant and not needed in this recommendation.	Remove second sentence in 4.7 completely as the reasoning behind the recommendation is not needed in this section and is inconsistent with the rest of the document	<b>ACCEPT</b> - Second sentence removed.
10	4.7	4.4	E	the list of types of verification should be placed earlier in the recommendation for clarity	move this sentence to appear right after the first sentence in 4.7	<b>ACCEPT</b>

#	Section	Updated Section	Type of Comment	Comments	Proposed Resolution	Final Resolution
18	4.7	4.4	T	While there may be few studies specifically on fingerprint examination, it is well established, both for forensic science decisions and decisions in other disciplines, that blind decisions are superior to non-blind decisions with regard to catching and preventing errors and bias. Research shows that blind procedures are especially important in situations where the other information that the decision-maker might be exposed has strong biasing effects (high risk of confirmation or contextual bias), such as knowledge of another expert's conclusions about the same materials, information about other evidence in the case, or information about the suspect that suggests they might be guilty of the crime.	The Human Factors Task Group recommends the following for Section 4.7: "Scientific research indicates that blind procedures are less susceptible to unintended biases and more likely to catch errors. Consequently, blind verification should be regarded as the "best practice" for assessing consistency (reliability) across examiners. While blind verification is more rigorous, it may also require more time and effort. FSPs should determine, in accordance with their quality assurance guidelines, whether or not the additional time and expense needed for blind verification is justified in a particular case or class of cases."	<b>REJECT</b> - The second sentence of this section referencing studies and benefits of blind verification was removed to maintain the focus of the document on the recommendations therein rather than the support for any given recommendation.
38	4.7	4.4		This section should be restructured. There are multiple types of verification but only two are mentioned. It is never stated that open and blind verification are seen as best practice and that's why the document goes on to give further explanation of these methods.	Consider this reorganization. "There are different types of verification available. These types include but may not be limited to blind verification or open (non-blind) verification. This document presents blind verification and open verification as best practice. Extensive research across multiple scientific disciplines suggests that blind verification is a better way to assess consistency (reliability) across examiners and believed to be more likely to detect errors, but there have been limited studies on whether open or blind verification is more likely to detect errors in latent print examinations. FSPs should balance the advantages of blind verification (for quality control purposes) against the additional time it may require. Therefore, the type of verification used should be determined by the FSP in accordance with their quality assurance measures and stated in the case documentation."	<b>ACCEPT</b> - The first two sentences of this section were reworded. <b>REJECT</b> - The original second sentence of this section referencing studies and benefits of blind verification was removed to maintain the focus of the document on the recommendations therein rather than the support for any given recommendation.
66	4.7	4.4	T	It is misleading to state there are "limited studies" on the question of whether blind verification is superior to non-blind. In fact, the body of scientific research relevant to this question—particularly regarding cognitive bias— is robust. Moreover, the research has demonstrated that there is high variability among examiners looking at the same evidence. For example, in the 2012 Ulery study, the authors report that where blind verification was implemented, 0% of false positives were reproduced, and false negatives were caught in 81% of cases. In contrast, when examiners themselves reviewed the evidence they caught false negatives 69% of the time. These numbers suggest blind verification is a much more effective tool than other measures.  This research, in conjunction with the overwhelming consensus of the greater scientific community, weighs against any qualifying or mitigating language that leaves the impression that non-blind verification remains appropriate under any circumstances.	Strengthen the language in this section to reflect the broadly accepted scientific principle that scientists must take steps to minimize cognitive bias. Remove the "balance" language that allows FSPs to opt out of blind verification. This is necessary to bring verification requirements in line with baseline scientific practice.	<b>REJECT</b> - The document clearly delineates circumstances in which there is higher potential for bias and error justifying the use of blind verification (see re-numbered Section 4.4.1) as well as acknowledges circumstances in which the potential for bias and error is lower justifying the use of open verification (see re-numbered Section 4.4.2). This approach is in line with a risk based approach to quality assurance which is advocated by accrediting bodies. The consensus body finds this approach appropriate for this Best Practice Recommendation and FSPs have the option to apply stricter policies. The second sentence of this section referencing studies and benefits of blind verification was removed to maintain the focus of the document on the recommendations therein rather than the support for any given recommendation.
49 (1 2)	4.7	4.4		4.7 Discusses blind verification but this is not achievable if verification is a review (you cannot review the work of another without seeing their work)		<b>ACCEPT</b> - Removed "review" from accepted practice throughout document
49 (1 3)	4.7	4.4		4.7 This recommendation seems to say that agencies should balance quality vs. time restraints (i.e., sacrifice quality if it is time consuming). That is scary that this is being recommended.		<b>NOTED</b> - Current accreditation requirements have switched to a risk-based approach, so this statement is in line with that approach; furthermore it is a real-world concern that provides some amount of justification for open verification.
24	4.7.1	4.4.1	T	should > shall because it is very important	modify	<b>REJECT</b> - As each examination can be unique in the challenges that it presents, the use of should allows the flexibility to adjust to the case circumstances but still provide guidance to the intended audience. The use of "should" was reviewed and considered appropriate.
39	4.7.1	4.4.1	T/E		An additional note should be added to the section that advises against routinely pairing the same examiners for verification and that all attempts to shield the identities of the examiners involved. This would mitigate any bias that arises from two examiners that have a friendly rapport constantly reviewing each other's work.	<b>REJECT</b> - The requested note for this specific recommendation is considered too prescriptive and is therefore left to the individual FSP to implement as appropriate within their own policies.

#	Section	Updated Section	Type of Comment	Comments	Proposed Resolution	Final Resolution
52	4.7.1	4.4.1	T	Also too restrictive -if the FSP has a policy defining the circumstances in which blind verification will be required - allow their policy to stand don't tell them what their policy is. I would move to strike a through e). Or reword as suggested types of latents that may warrant blind verification. Same comment as above on a) - should be latent dependent.	Single 'Source Identification' or 'Support for Same Source' conclusion has been drawn to a particular individual after an ABIS search involving prints with low clarity or limited features.	<b>REJECT</b> - Document clearly states that the FSP should define the circumstances, but the document also recommends circumstances that can be considered in the development of this policy. The additional requirements of low clarity or limited features into this specific recommendation is considered too prescriptive and is therefore left to the individual FSP to decide whether or not to implement within their own policies.
54	4.7.1	4.4.1	T	d) there is a large examiner variability as to the threshold for what is "complex" I would be more in favor of "complex impressions resulting in a single source conclusion"	Complex impressions (low quality, high ambiguity, distortion, etc. as defined by FSP policy) or comparisons resulting in a single source conclusion	<b>REJECT</b> - Noted; recommendation includes some guidance for what may constitute complexity, but ultimately defers to the FSP policy. The topic of complexity is to be covered under a separate document.
55	4.7.1	4.4.1	T	e) the definition for "Verifier discretion" - seems to be a "conflict resolution" scenario. Is discretion the correct word? Maybe discrepancy?		<b>ACCEPT WITH MODIFICATION</b> - Section "e)" is not supposed to indicate a conflict resolution scenario but rather an enhanced verification scenario with multiple verifications; however Section "e)" was removed to avoid confusion and FSP policy should cover any discretionary permissions.
67	4.7.1	4.4.1	T	Per the previous comments, change the following language. "FSPs should have a policy defining the circumstances in which blind verification will be required." To "FSPs must require blind verification in all casework." The scenarios set out in (a)-(e) should trigger enhanced blind verification as we set out in our proposed resolution to provision 4.6.	Per the previous comments, change the following language. "FSPs should have a policy defining the circumstances in which blind verification will be required." To "FSPs must require blind verification in all casework." The scenarios set out in (a)-(e) should trigger enhanced blind verification as we set out in our proposed resolution to provision 4.6.	<b>REJECT</b> - The document covers the advantages of Blind over Open Verification and provides a listing of circumstances when Open Verification would be inappropriate (see Sections 4.4 and 4.4.1).
49 (1 4)	4.7.1	4.4.1		4.7.1 there is no evidence that these are the situations where BV is valuable		<b>NOTED</b> - These are situations that the discipline has identified as higher risk due to potential for bias; blind verification mitigates bias, therefore it is appropriate to provide guidance here.
53	4.7.1	4.4.1	T	b) Is there research that suggests "greater potential for bias" on high profile cases ? Suggest removing this statement.		<b>REJECT</b> - While there has been limited study of bias in high profile cases, the consensus body has found the inclusion of this category appropriate for recommendation to FSPs when developing their own policies.
7	4.7.1 (b)	4.4.1(b)	E	High profile cases do have a greater potential for bias but some agencies mask this information so the examiner has no idea.	This should be qualified to High Profile cases if the information hasn't been masked.	<b>REJECT</b> - The additional delineation of masked versus unmasked information into this specific recommendation is considered too prescriptive and is therefore left to the individual FSP to implement within their own policies.
68	4.7.1 (b)	4.4.1(b)	T	It would be problematic for an FSP to conduct enhanced verification solely in more serious/high profile cases because such a procedure would increase the risk of bias by signaling irrelevant case information to the examiners. It would also create a dichotomy where cases categorized as less serious receive less scrutiny and therefore become more susceptible to error. This underscores the importance of mandating enhanced verification for all the scenarios set out in (a)-(e).	This provision should make explicit that no FSP shall enact a policy where high profile cases are the only case category subject to enhanced verification procedures and should as specified above, mandate the procedures be used in the scenarios outlined in 4.7.1.(a)-(e).	<b>REJECT WITH MODIFICATION</b> - While ultimately up to the FSPs, the document clearly recommends multiple circumstances for Blind Verification and not just high profile cases. A note was added to this section recommending that FSPs avoid creating blind verification policies that allow Blind Verifiers to infer the decisions, conclusions and opinions of the original examiner.
40	4.7.1 Note	(4.4.1 NOTE)	T/E	The NOTE in 4.7.1 mentions sequential unmasking, but what they're talking about in the note isn't a good example of sequential unmasking. A better explanation of sequential unmasking should be given if it is going to be mentioned. Additionally, sequential unmasking is a process that can be applied to blind and open verification.	As the standard is written the example of sequential unmasking should be deleted in the note should be deleted. A definition and explanation of sequential unmasking should be added to the terms and better incorporated into the document as a best practice. Sequential unmasking can work for both styles of verification mentioned in this document and it should be mentioned as a best practice in 4.7.1 and 4.7.2.	<b>ACCEPT</b> - Removed ", e.g., sequential unmasking" from the NOTE <b>REJECT</b> - As sequential unmasking could be applicable to any part of an ACE exam and not just applicable to Verification, it is considered beyond the scope of this document.
69	4.7.2	4.4.2	T	Per the comments above, non-blind verification should be prohibited in all casework.	Omit.	<b>REJECT</b> - The document covers the advantages of Blind over Open Verification and provides a listing of circumstances when Open Verification would be inappropriate (see re-numbered Sections 4.4 and 4.4.1).
8	4.6	4.4.3	T	not all single source IDs have a greater risk of error if they came from an ABIS search. Moreover, it has not been demonstrated reliably that ABIS generates more errors in Friction Ridge Examinations.	reword 4.6 to say "FSPs should conduct enhanced verification (i.e., blind, multiple, etc.) when a complex, single 'Source Identification' or 'Support for Same Source' conclusion has been drawn to a particular individual after an ABIS search. This is due to the potential risk of error in these types of cases	<b>REJECT</b> - Review of errors and performance studies suggest that Single Identifications (or Single Inconclusive with Similarities) decisions from ABIS have greater risks for false positive errors in some situations. The addition of complexity into this specific recommendation is considered too prescriptive and is therefore left to the individual FSP to decide whether or not to implement within their own policies.

#	Section	Updated Section	Type of Comment	Comments	Proposed Resolution	Final Resolution
19	4.6	4.4.3	E	“Enhanced verification” is not defined anywhere in the document. The goal is to prevent errors in error-prone decisions, so the “enhanced” verification techniques need to be effective at this task. Blind verification is able to do this, and multiple verifications might be appropriate for certain cases. We recommend that the “etc.” be removed, though. Not all verification techniques will effectively catch errors in situations where bias/error is a known issue, thus it is better to be clear about the options here.	Remove "etc."	<b>REJECT</b> - Enhanced Verification is defined parenthetically in the statement. Consensus opinion is also a valid form of enhanced verification that can be included in the "etc."
37	4.6	4.4.3	E/T		Blind verification is defined as enhanced verification in this statement; however, the document does little to encourage or explain why blind verification is an enhanced or better practice. Additional information on the benefits of blind verification should be added to section 4.7.1.	<b>REJECT</b> - Blind verification is referred to as an "enhanced verification" as it has additional restrictions/requirements imposed upon the practitioner than Open verification. The scope of this document is to convey the recommended best practices on how to perform verification. The requested additional discussion of the benefits of blind versus open verification is beyond the scope of this document.
51	4.6	4.4.3	T	Is too restrictive and should be latent dependent. For example if the hit is to a large portion of palm or finger with double digit features, and examiner has taken into account location of those features (forced vs. not forced areas).	FSPs should conduct enhanced verification (i.e., blind, multiple, etc.) when a single ‘Source Identification’ or ‘Support for Same Source’ conclusion has been drawn to a particular individual after an ABIS search involving prints with low clarity or limited features. <del>This is due to the greater risk of error in these types of cases.</del>	<b>REJECT</b> - Review of errors and performance studies suggest that Single Identifications (or Single Inconclusive with Similarities) decisions from ABIS have greater risks for false positive errors in some situations. The addition of complexity into this specific recommendation is considered too prescriptive and is therefore left to the individual FSP to decide whether or not to implement within their own policies.
49 (1 5)	4.6	4.4.3		4.6 "should conduct enhanced..." (no research supporting that any of the examples are 'enhanced' procedures)		<b>REJECT</b> - "Enhanced" is being used in a general sense and you are provided with examples of what is intended (i.e. not open verification)
25	4.8	4.5	T	for me: the whole chapter is part of conflict resolution	delete	<b>REJECT</b> - While consensus opinions have been traditionally used in conflict resolution, consensus can also be used as a form of verification (with or without conflict)
41	4.8	4.5	E	It is not correct to define consensus as a majority opinion. The term consensus means that there is unity in agreement; any differences have been reconciled so that the final decision reflects the views of everyone. If agreement cannot be reached, it is not a consensus conclusion. The use of majority as an example of consensus opinion goes against the meaning of collective judgement where all parties come to an agreement. Additionally, it's dangerous to suggest a majority decision is ultimately the correct decision.	Remove majority as an example of a consensus opinion.	<b>REJECT</b> - There is no requirement that a consensus opinion also be a unanimous one either by definition or in practice. The interpretation of the word "consensus" is clearly defined within the document.
42	4.8	4.5	T/E		Additional context is needed for this sentence. “At a minimum, consensus opinion should be used in complex comparisons (low quality, high ambiguity, distortion).” From a legal perspective there are questions about who would have ownership and who would be responsible for any testimony related to such a case. Consider providing additional context in a note.	<b>ACCEPT</b> - Next to last sentence was rewritten to state ... "FSPs should have a policy defining the circumstances in which consensus opinion is required and how that opinion will be reported (e.g. who is responsible for the reported opinion).".
56	4.8	4.5	T	"At a minimum, consensus opinion should be used in complex comparisons (low quality, high ambiguity, distortion)." per 4.7.1 above you are already doing blind on these - now you are doing blind and consensus? I would ask this statement be removed and allow the FSP to define the circumstances of where and how consensus opinions will be used.		<b>ACCEPT</b> - Removed the last statement to avoid confusion
70	4.8	4.5	t	Per the comments above, prohibit non-blind verification in any independent examination.	Per the comments above, prohibit non-blind verification in any independent examination.	<b>REJECT</b> - The document covers the advantages of Blind over Open Verification and provides a listing of circumstances when Open Verification would be inappropriate (see re-numbered Sections 4.4 and 4.4.1).
71	4.8	4.5	T	Given that consensus opinion necessarily includes conflicting conclusions, it is critical to ensure transparency and the ability to conduct independent review of this process.	Include language requiring that all independent examinations be thoroughly documented and disclosed to the prosecution and defense.	<b>ACCEPT WITH MODIFICATION</b> - Added the following in Procedural Recommendations... "5.5 For consensus opinions, the decisions and conclusions of all examiners contributing to the consensus discussion should be recorded in the case file."



#	Section	Updated Section	Type of Comment	Comments	Proposed Resolution	Final Resolution
49 (16)	4.8	4.5		4.8 recommending that a FSP have a policy is not recommending a BP. What is the BP being recommended?		<b>REJECT</b> - ANAB and ISO requirements include that a FSP have a policy without being prescriptive as to what that policy specifically states (these are similarly non-prescriptive).
43	4.9	4.6	E		In the event of multiple verifications by different individuals, all documentation should be kept in the case file. Consider the edit "Contemporaneous documentation of the verification(s) shall be included in the case record."	<b>ACCEPT WITH MODIFICATION</b> - Recommendation added with "Shall" replaced with "Should" per current Best Practice Recommendation guidance
49 (17)	4.9	4.6		4.9 contemporaneous documentation needs to be defined		<b>REJECT</b> - "Contemporaneous documentation" is being used in its commonly understood meaning, no further definition should be required.
49 (18)	4.10 and 4.11	4.7 and 4.8		4.10 and 4.11 recommending that a FSP have a policy is not a recommendation for a BP. Throughout document: ACE is used and not defined.		<b>REJECT</b> - ANAB and ISO requirements include that a FSP have a policy without being prescriptive as to what that policy specifically states (these are similarly non-prescriptive). <b>ACCEPT</b> - Added ACE to the Terms and Definitions Section
44	5.1		E		As written the standard say that there are many types of verification, yet this statement presents the option as binary. A statement needs to be added that says best practice is to follow this binary approach.	<b>REJECT WITH MODIFICATION</b> - rewrite to state "Determine the appropriate type of verification to be conducted"
72	5.1		T	Per the comments above, remove non-blind verification as an option.	Per the comments above, remove non-blind verification as an option.	<b>REJECT</b> - The document covers the advantages of Blind over Open Verification and provides a listing of circumstances when Open Verification would be inappropriate (see re-numbered Sections 4.4 and 4.4.1).
73	5.1.1		T	Per the comments above, remove non-blind verification as an option.	Per the comments above, remove non-blind verification as an option.	<b>REJECT</b> - The document covers the advantages of Blind over Open Verification and provides a listing of circumstances when Open Verification would be inappropriate (see re-numbered Sections 4.4 and 4.4.1).
26	5.1.2		T	be more precise: TP and Lat	add information	<b>ACCEPT WITH MODIFICATION</b> - reword to "...only receives unmarked original evidence or images of the friction ridge impressions."
27	5.2		T	delete the '2', the V shall be based on the own observations	delete and add information	<b>ACCEPT WITH MODIFICATION</b> - Deleted footnote.
45	5.2		T/E		The standard can be interpreted as the open verifier not having the same responsibilities of blind verifier. Can the document clarify why open verifiers are not expected to perform ACE examinations of evidence and exemplar prints? Exemplar examination seems critical to the verification process.	<b>ACCEPT WITH MODIFICATION</b> - The document has been updated to remove mention of the use of record review instead of independent ACE.
46	5.2		T/E		Additional context is needed for this sentence. "The verifier should ensure that the data are carefully weighed under both propositions (same or different sources), being mindful that consideration of only one proposition can lead to confirmation bias error." A note explaining what the propositions are and how they should be weighed seems appropriate.	<b>REJECT WITH MODIFICATION</b> - The second sentence of the recommendation was deleted. The discussion of propositions is to be covered under a document on the execution of ACE and is outside of the scope of this document.
47	5.2		E		The standard as written does little to address the mitigation of cognitive bias. The footnote for this statement needs to be incorporated into the body of the document as a note since it's the only mention of potential confirmation bias.	<b>REJECT</b> - The footnote was deleted. Blind verification is a best practice recommendation included within this document that directly mitigates confirmational bias (cognitive bias).
74	5.2		T	Per the comments above, remove non-blind verification as an option.	Per the comments above, remove non-blind verification as an option.	<b>REJECT</b> - The document covers the advantages of Blind over Open Verification and provides a listing of circumstances when Open Verification would be inappropriate (see re-numbered Sections 4.4 and 4.4.1).
49 (1)	5.2			5.2 being mindful of bias does not diminish bias. Reference where these are established as best practices, not just ideas from a group.		<b>NOTED</b> Re: References - <b>REJECT</b> - The current ASB process is to establish consensus that the proposed recommendations are best practice or not.
20	5.4		E	"If support for the same conclusion is lacking" is vague, so we recommend directing the reader to ASB 142 containing best practice standards for conflict resolution for more detail on this point.	Consider cross-referencing ASB 142, in the normative reference section and then referring to it here.	<b>ACCEPT</b> - Reworded recommendation to "...If the examiner and verifier came to differing decisions, conclusions or opinions, then the examiner and verifier enter into conflict resolution." A reference to ASB BPR 142 will be added if it is published before this document.

#	Section	Updated Section	Type of Comment	Comments	Proposed Resolution	Final Resolution
75	5.4		T	Per the comments above, remove non-blind verification as an option.	Per the comments above, remove non-blind verification as an option.	<b>REJECT</b> - The document covers the advantages of Blind over Open Verification and provides a listing of circumstances when Open Verification would be inappropriate (see re-numbered Sections 4.4 and 4.4.1).
3	Note	removed	E	Using AFIS for verification on latent prints that have been excluded seems to be in conflict the statements made about bias caused by AFIS generated candidates in section 4.6 .	Remove remarks in 4.6 on biasing effects of AFIS and it will clear up apparent conflicting statement.	<b>REJECT WITH MODIFICATION</b> - removed the note as the practice mentioned is outside of the current scope of verification best practices.
28	Note	removed	T	Use of statistical models as another quality measure not mentioned	add information	<b>REJECT WITH MODIFICATION</b> - removed the note as the practice mentioned is outside of the current scope of verification best practices. The request for inclusion of statistical models is also outside of the scope of verification practices at this point in time.
76	NOTE	removed	T	Provide citations for the proposition that "erroneous exclusions are the most commonly observed error" and include the limitations of the research relied upon.	Provide citations for the proposition that "erroneous exclusions are the most commonly observed error" and include the limitations of the research relied upon.	<b>REJECT WITH MODIFICATION</b> - removed the note as the practice mentioned is outside of the current scope of verification best practices.
77	NOTE	removed	T	To the extent that this Note calls for an FSP to compile a suspect list using law enforcement information, and then compare evidence to the reference prints contained in this suspect list, this procedure requires the examiner to incorporate external biasing information into his or her analysis. This is inappropriate and unscientific.	Omit this recommendation.	<b>ACCEPT</b>
48	From CB member			My vote is Yes but, as with other BPR's that state in the Scope that this is a BPR for "how to", I believe these are more BPRs with a series of policy statements rather than how to/procedural statements. Suggest removing "how to" and leaving the statement as..."best practice recommendations for conducting the verification phase during friction ridge impression examinations"		<b>ACCEPT</b>
50	From CB member			Based on the comments from other members, I believe we should address those comments before sending it out to the public and getting more comments.  If we can resolve the existing comments perhaps we can avoid an excess of new comments from the public		<b>ACCEPT</b> - All comments received from CB members have been resolved.