



NATIONAL COMMISSION ON FORENSIC SCIENCE

NIST
National Institute of
Standards and Technology
U.S. Department of Commerce

Proficiency Testing in Forensic Science

Subcommittee

Accreditation and Proficiency Testing

Type of Work Product

Adjudication of Public Comments on Final Draft Views Document

Public Comment Summary:

The document was posted as proscribed by Commission by-laws. Six individuals or groups submitted comments.

- Two individuals agreed with the document, one said it was “overall well written.”
- Another individual representing the American Society of Crime Laboratory Directors (ASCLD) noted that although the Board of Directors supports the proposed views document in its entirety, they are concerned about the fiscal impact of increased participation in proficiency testing.
- One individual, a member of the Commission, provided multiple comments that provided recommended edits to improve clarity of the document.
- One individual expressed concern about practitioners that do not work in a “laboratory” and the acknowledgement of alternative forms of proficiency testing.
- Finally, one individual commented that the document did not address improvements to the existing system of forensic science proficiency testing.

Adjudication Process Used by Subcommittee:

The subcommittee met via teleconference on February 9, 2016. All comments, responses and proposed changes to the views document were discussed in detail. The revised document was submitted to the subcommittee for a vote on February 25, 2016.

Itemized Issues and Adjudication Summary:

1. In the “Introduction” section, the second sentence states, “Proficiency testing is a current requirement of accreditation programs offered by International Laboratory Accreditation Cooperation Mutual Recognition Arrangement signatory accreditation bodies and is a common requirement of regulatory and oversight programs.” To enhance clarity, consider re-wording this sentence as follows: “Proficiency testing is a current requirement of accreditation bodies recognized as signatories to the International Laboratory Cooperation Mutual Recognition arrangement.”

Subcommittee agreed with suggestion and made the change to the document.

2. On page 2, in the first full paragraph, the second sentence reads, “In the most comprehensive form, proficiency testing involves three distinct entities: the proficiency test participant (user), the

proficiency test provider, and the bodies that accredit the proficiency test providers.” This enumeration is incomplete, as it excludes the laboratory. ISO 17043 clearly contemplates that the laboratory – as an entity – is a major component of the proficiency testing process. This is reflected in points a, b, e, and f, at the bottom of page 1, and the top of page 2 of the draft document. This is underscored by the statement in the draft document that “results, however obtained, are reported within the participant’s quality assurance system.” (Draft Document, p. 2). Consider revising this sentence to state, “In the most comprehensive form, proficiency testing involves four distinct entities: the proficiency test participant (user), the laboratory, the proficiency test provider, and the bodies that accredit the proficiency test providers.”

Subcommittee agreed that clarification would be useful so the sentence was changed to “In the most comprehensive form, proficiency testing involves four distinct entities: the proficiency test participant (FSSP and practitioner), the proficiency test provider, bodies that accredit the FSSPs and the bodies that accredit the proficiency test providers.”

3. In Appendix B, a sentence in the middle of the paragraph reads, “Competency testing is an integral part of the forensic training process and is administered as part of a comprehensive assessment of technical skills and knowledge during basic training.” This description is under-inclusive because competency tests are administered in circumstances beyond “basic training.” These include the administration of competency tests prior to the initiation of case work by a forensic science practitioner on a newly validated technology, technique, or method. Consider revising this sentence as follows: “Competency testing is an integral part of the forensic training process and is administered as part of a comprehensive assessment of technical skills and knowledge during basic training, and prior to the initiation of case work by a forensic science practitioner on a newly validated technology, technique, or method.”

Subcommittee agreed with suggestion and made the change to the document.

4. This document on "Proficiency Testing in Forensic Science" is inadequate. It contains no indications that proficiency testing has anything to do with measuring end result accuracy. Instead, the document is filled with a variety of tortured descriptions of what a proficiency test is that have little to do with what people who must judge forensic science evidence want to know. For example, the document says that proficiency testing is: * a mechanism for checking to see if an organization can "adhere to the organization's procedures" (not sufficient) * "a common requirement" (uninformative) * a tool that "can be utilized prior to achieving accreditation" (uninformative) * "an evaluation of performance against pre-established criteria by means of interlaboratory comparisons" (performance should be compared to "known ground truths" not "interlaboratory comparisons") The fact that other forensic science agencies at other times have offered similar statements about proficiency tests in no way exempts NCFs from putting forth a more cogent and relevant document. NCFs evolved in large part from a recognition that forensic science should not be carried out under the same set of rules and procedures that it has followed for decades. Proficiency testing is an area that has long been problematic for the forensic sciences. Most importantly, perhaps, there is no recognition in this document that a proficiency test is, in fact, a test. If it is a test, then it measures something. That something is accuracy (or conversely, inaccuracy). And the accuracy that is or should be of interest to the broader world (which includes judges and jurors) is not simply whether internal procedures were accurately adhered to. Accuracy in the forensic sciences must pertain to the end result. Therefore at least

some proficiency tests should be designed and conducted to provide information that about the accuracy of forensic science results. The forensic science community has long sidestepped its obligation to identify accuracy rates by arguing that proficiency tests serve many goals other than identifying accuracy and error rates. But this is no reason to leave the measurement of accuracy and error rates out of a proficiency testing program. Courts need to know these rates to make admissibility judgments; jurors need to know these rates to assign weight to reported forensic matches. Without this information, those outside of forensic science will continue to be in the absurd position of judging the accuracy of forensic science by "tests" that were not designed to measure accuracy at all. Finally, a word about the feasibility of proficiency tests designed to estimate casework-relevant error rates. The forensic science community has often claimed that such tests are "difficult" to conduct. But that comment cannot be the end of the story. Difficult or not, high quality blind proficiency tests most certainly can be conducted and they can be done in a way that does not impose impossibly large time or monetary costs on the system.

This is a Views document intended to acknowledge that proficiency testing is one tool that can be used by FSSPs even in the absence of accreditation. The intention of the document was to educate and explain the various definitions and ways proficiency testing is currently used in forensic science. It was not the intent of this first document on proficiency testing to mandate specific requirements (frequency, number, types), make recommendations for changes to FSSP proficiency testing. The design and administration of proficiency tests for data collection is also outside the scope of this first document. The subcommittee plans to have additional work products on proficiency testing and will review these suggestions as future documents are developed.

5. It should be acknowledged that not all "forensic science service providers" work in the context of a "laboratory." It is incorrect to impose requirements based on a structure that does not exist. While we support the ongoing evaluation of proficiency, it should be openly acknowledged that there exist ways to assess proficiency outside of the laboratory paradigm, and that those disciplines that are not laboratory-based can use alternative methods of proficiency assessment, such as peer review.

Proficiency testing is a means for evaluating an FSSP and is not available all disciplines and sub-disciplines of forensic sciences. The document acknowledges and addresses this issue in the third bullet on page 2, which lists the use of "observation, case presentation and peer review" as an alternative.

6. The American Society of Crime Laboratory Directors represents more than 600 members of crime laboratory directors and forensic science managers dedicated to providing excellence in forensic science through leadership and innovation. The membership represents both private and public institutions from all 50 states in the U.S. and eighteen countries from across the globe. Our mission is to promote the effectiveness of crime laboratory leaders throughout the world by facilitating communication among members, sharing critical information, providing relevant training, promoting crime laboratory accreditation, and encouraging scientific and managerial excellence in the global forensic science community. ASCLD is dedicated to advancing forensic science through a multitude of initiatives including the National Commission on Forensic Science. ASCLD currently has twenty-five members serving on the Commission and its sub-committees. The efforts of the Commission are important and have significant implications for

the entire criminal justice community. As a result, the ASCLD Board of Directors offers the following comments, recommendations, and impact statements for consideration by the subcommittee for the “Proficiency Testing in Forensic Science”. ASCLD remains ready to be a continuing resource to assist the Commission and the Department of Justice in the development of these important work products for the forensic science community so that a broader based acceptance and implementation of these products may be realized. The currently proposed views document on “Proficiency Testing in Forensic Science” is supported by the Board of Directors in its entirety. However, the Board does have a significant concern with the fiscal impact to those providers who are not currently participating in a regular program of proficiency testing. To address this concern, two questions must be answered: First, how many individual forensic examiners would be subject to a mandatory requirement and second, what is the cost to provide proficiency testing to all of them? Problem: There is no consensus as to the total number of FSSPs in the United States. A comprehensive study determining the number of FSSPs would allow for an estimation of the fiscal impact for all FSSPs to implement proficiency testing. The criminal justice community must ensure appropriate resources are available for this endeavor. Recommendation: The National Commission on Forensic Science (NCFS) should recommend the Attorney General place dedicated funding for implementing proficiency testing of state and local FSSPs in the DOJ budget recommendation to the President of the United States. The magnitude of the funding request should be responsive to the results of the BJS Census of Publicly Funded Crime Laboratories currently in progress. It is important to note, however, that existing grant funding for forensic laboratories such as the Paul Coverdell grant should not be supplanted by monies made available for this recommendation.

This is a Views document intended to acknowledge that proficiency testing is one tool that can be used by FSSPs even in the absence of accreditation and does not mandate specific requirements (frequency, number, types) for FSSP proficiency testing. The census of FSSPs was requested by NCFS and is in development by the Bureau of Justice Statistics. The subcommittee will bear these concerns in mind as additional documents are considered. No changes were incorporated.