DEPARTMENT OF JUSTICE
FORENSIC SCIENCE DISCIPLINE REVIEW DRAFT METHODOLOGY
RESPONSE TO COMMENTS

On June 24, 2016, the Department posted the Forensic Science Discipline Review (FSDR) draft methodology online on www.regulations.gov and opened a public comment period. The comment period on the FSDR draft methodology closed on August 1, 2016. The Department received 17 public comments. A table reflecting all comments follows this document. On July 21 and 22, 2016, the Department held a Statistician Roundtable during which it received substantial comment on various elements of the FSDR draft methodology. A summary of the Roundtable is available online.

Comments from the Roundtable and those received through the public comment process can be generally grouped into four broad categories: overall considerations and miscellaneous comments; comments on the structure of the review; comments related to the standard(s) to apply to the review; and comments addressing implementation, including how to analyze and report the data collected.

The following document reviews each category of comment and presents the relevant FSDR draft proposal from the June 24 draft, the issue(s) identified in comments, and the outcome, including any proposed changes to the methodology.

OVERALL CONSIDERATIONS

FSDR Purpose

Proposal: The FSDR draft methodology proposed to: "Advance the use of forensic science in the courtroom by understanding its use in recent cases and to facilitate any necessary steps to ensure that expert forensic testimony is consistent with scientific principles and just outcomes."

Issue: Public comments raised several issues, including suggesting that the FSDR include closing statements, evaluating reports, and analyzing the testimony of forensic experts who are not FBI employees. Some commenters noted that, in order for the FSDR to meet the stated purpose of advancing scientific principles, testimony should be compared to what is supported by science. Focusing on "just outcomes" may be problematic to the extent that it leads to a focus on what jurors understood the testimony to mean. Commenters and Roundtable participants urged the Department to clearly identify the FSDR purpose, even if that was a narrow purpose, to prevent misperceptions.

Outcome: The Department will be cautious not to draw any unwarranted conclusions from the FSDR data and accompanying analysis. The Department will publish materials that clearly state the purpose of the FSDR, its methodology, and the limitations of the data to be collected.

STRUCTURE

Overall Structure

Proposal: The FSDR draft methodology proposed adopting a validated protocol for reviewing transcripts and training raters to use that protocol to identify and categorize statements of relationship in each transcript.

Issue: Commenters sought more clarity on who might be used as raters and sought additional information on how the FSDR would be structured.

Outcome: The FSDR will be housed institutionally in the Department and overseen by a non-political employee of the Department. Because the FSDR is a limited-scope project, the Department intends to contract out the work of the FSDR to a respected, independent research firm with expertise in social science research, with the expectation that the actual coding and data analysis will be conducted by personnel with expertise in text analysis and statistics. As explained further below, the Department proposes to establish a small group of outside experts to consult on issues like study design, protocol creation and validation, and data analysis.

Study Timeframe

Proposal: The FSDR draft methodology identified 2008-2012 as an appropriate timeframe[1] for analysis of recent testimony, acknowledging that it may be necessary to expand depending on the results of the analysis.

Issue: The proposed five-year timeframe captures several significant events, most notably the publication of the 2009 National Academy of Sciences Report, *Strengthening Forensic Science in the United States: A Path Forward*, that make the timeframe useful for study but complicate any analysis of trend data that might be derived.

Outcome: The FSDR methodology will draw a small sample from testimony in earlier periods at the outset, though it may conduct a more limited review of these transcripts. The sampling methodology will stratify by year and forensic discipline, with the intent of drawing more testimony from more recent years than earlier years.

Pilot Study

Proposal: The FSDR draft methodology proposed a pilot study of transcripts from a discipline outside those selected for FSDR and/or on testimony.

Issue: The focus of the comments has been not about how to pilot, but the importance of doing one and using the results of that pilot study to help structure how the full FSDR is completed.

Outcome: The pilot study will be done, but will begin with reading transcripts in order to determine what data can and should be collected. Once a protocol for coding testimony is developed, it can be tested on an additional pilot data source.

[1] The FBI began developing and adopting Approved Standards for Scientific Testimony and Report for forensic disciplines after 2013, but those standards were not in place in the timeframe covered in this study.

Outside Experts
Proposal: The FSDR draft methodology does not mention a specific organizational structure for the FSDR.

Issue: Commenters are concerned that the Department's administration of the FSDR lacks independence, as all Department components, including the forensic laboratories, report to the Deputy Attorney General and the Attorney General.

Outcome: The decision regarding where the FSDR is housed has not been made, nevertheless it will include a small group of outside experts who are non-Department employees and who represent stakeholders (laboratories, prosecutors, defense attorneys, academic statisticians and social scientists with subject matter expertise) who can consult on issues like sampling and protocol validation.

STANDARD

Study Standard
Proposal: The FSDR draft methodology proposed using a version of the Department's proposed Uniform Language for Testimony and Reporting (ULTR) modified to reflect the retrospective nature of the testimony review. The FSDR methodology indicated that there would be no review of reports.

Issue 1: The ULTRs, which are proceeding through a public comment and review process, have received comments expressing concern that while they may accurately reflect the consensus of the forensic examiner community, there is disagreement with other stakeholder communities.

Issue 2: Comments and participants at the Roundtable felt the FSDR should review both whether the examiners' testimony is consistent with community standards (compliance) and whether their testimony is consistent with current state of the science (correctness).

Issue 3: Commenters and participants at the Roundtable believed that failing to review corresponding forensic reports – together with the testimony – would be a serious flaw. They strongly recommended that the methodology incorporate some review of reports.

Issue 4: Commenters and participants at the Roundtable strongly discouraged the Department from beginning to review cases until after the ULTRs (or at least some ULTRs) had been revised and adopted. They identified significant issues with the ULTRs that would prevent effective implementation and suggested that FSDR implementation await agreement on standards.

Outcome: There is significant disagreement over not just what the correct standard was in the past, but what the correct standard is for current testimony and any benefit of attempting to compare past testimony against a current scientific "correctness" metric is less apparent given the current state of flux. The ULTR process is proceeding but this uncertainty makes the ULTR a less attractive starting point for a retrospective analysis. Moreover, comment was virtually unanimous that the FSDR would be remiss in failing to examine the reports. Because the reports were reviewed multiple times prior to issuance to ensure they were consistent with the standards

then in effect, a comparison of the testimony to the report permits the FSDR to identify whether there was testimonial overstatement with the standard then in effect. [2] As such, the FSDR will evaluate the testimony to assess whether it is consistent with the underlying report completed by the FBI laboratory for the case in which the testimony was given. In addition, the FSDR will collect information on many variables (as discussed below) and may be able to conduct additional analysis at a later time.

ANALYSIS AND REPORTING

Notification

Proposal: The FSDR draft methodology does not mention a specific notification method when nonconforming testimony is found. Nevertheless, reexamination of cases where there was a conviction during a retrospective review can trigger a legal or ethical obligation to notify relevant parties of the outcome. Previous Department and non-Department reviews have incorporated notification.

Issue: There are several ways to approach notification, ranging from notifying all parties to all cases when notification begins, to only notifying those defendants who were convicted, remain imprisoned, and whose convictions were determined to have been materially impacted by nonconforming testimony.

Outcome: The FSDR will notify prosecutors, defense attorneys, and defendants of testimonial nonconformities in comparison to the report. Such notification would indicate that an FSDR finding is not dispositive to any legal or professional outcome including a determination of whether the examiner met employment standards or whether an attorney complied with professional responsibility standards, or to any subsequent materiality review.

Data Analysis and Reporting

Proposal: The FSDR draft methodology proposes collecting data on statements of relationship, threads, and testimonies, then performing exploratory data analysis to determine the appropriate characterization of the data collected. With regard to reporting, the FSDR draft methodology proposes to make the outcome of any implementation of the FSDR of testimony available to the public.

Issue: Concerns were raised about sufficient focus on the proper unit of analysis and reporting (statement of relationship, thread, or testimony), the ability to identify limiting or bolstering language, and the possibility that there may be one statement of relationship that outweighs other statements (*i.e.*, one positive association that shapes the entire testimony).

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[2] Reports are believed to be a reasonable measure of compliance because FBI reports go through both "technical" and "administrative" review. Technical review assesses the notes, data and other supporting records that form the basis for the scientific results and conclusions contained in the report. This review consists of determining whether the appropriate examinations have been performed, the conclusions are consistent with the recorded data and are within the scope of the disciplines or category of testing. Administrative review verifies that the file record is complete and that the report complies with FBI Laboratory policies and practices, and relevant Unit procedures.

Outcome: Consistent with the advice presented at the Roundtable, the FSDR will focus on the testimony as the unit of analysis for reporting purposes. Data collected on statements of relationship and/or threads may be useful for identifying patterns, but the primary focus will be on the testimony as a whole. The FSDR will analyze the data to evaluate the role of limiting or bolstering language. The FSDR will publicly report whether testimony conforms to the report in the underlying case. As noted above, prosecutors and defense counsel in individual cases reviewed will receive an assessment of whether testimony contained any nonconformities.

FSDR Draft Methodology Comments

The Department received comments in the four broad categories noted above and one additional category that was not relevant to the FSDR. The majority of comments contained more than one category of comment. Comments are listed below and categorized to reflect the contents.[3]

1. **Structure:** The largest number of comments related to the proposed structure of the FSDR methodology. This category includes comments related to personnel, data collection, threading proposal, selected time frame, and terminology to use.
2. **Standard:** This category includes comments that criticize the proposal to use the proposed Uniform Language for Testimony and Reports as a starting point and suggest a variety of other standards.
3. **Analysis and Reporting:** This category includes comments that suggest how analysis of data should occur and how to report such information, including identifying issues associated with notification of legal parties.
4. **Overall Considerations and Miscellaneous:** This category includes comments that identify overall considerations, disagree with how the methodology characterized previous reviews, and address the literature review.
5. **Uniform Language for Testimony and Reports (ULTR)**: These comments were responsive only to the proposed ULTRs and not to the FSDR. Those comments have been forwarded as appropriate and will not be further addressed here.

ID	Commenter	Topic	Comment
3	Towanna Aiken Harris	ULTR	Use of Analysis, Comparison, Evaluation, and Verification (ACE-V) should cause no error
4	Stu Caplan	Miscellaneous	Requirements of testimony by odontology fellows of AAFS
5	Elizabeth Lansky, Cape Coral Police Department	ULTR	Latent print ULTR raises a series of questions about identification
6	Brandon Garrett	Standard	ULTRs not scientifically valid; use Hair typology
7	Michael Smith	ULTR	Toxicology ULTR should say effects on “humans similar to those cited in scientific studies”
8	Wendy Adams	Structure	Should include lay coders to reflect lay jurors
9	Simon Cole	Standard	Choice of standard will determine outcome of review

[3] This table attempts to discern and summarize high-level issues cited by each comment. While the table is unable to capture the nuance of the comments, it is hoped it will be helpful to those unable to review each comment individually.

ID	Commenter	Topic	Comment
10 11	Organization of Scientific Area Committees Friction Ridge Subcommittee	Structure	Department should provide more information on what it means when it says “trained rater”
		Structure	Maintain engagement of forensic practitioners during testimony evaluation
		Structure	Be careful about inferring, as sample will be incomplete
		Structure	“Consider distinguishing between situations where a specific topic was not asked, the examiner’s testimony did not include wording the FSDR felt should be included, and research data was not readily available at the time to suggest including such information could impact the interpretation of the testimony by the jury”
		Structure	Who uttered the words is important to know
		Structure	Department should request assistance from external parties to ensure independence
		Structure	Avoid over- or under-counting testimony; evaluate each statement but consider testimony in its entirety when reporting
		Analysis and Reporting	Tiered notification distinguishing appropriate by current standard vs. appropriate at time of testimony
		Analysis and Reporting	Consider materiality review if testimony is determined to be inappropriate
		Standard	Compare testimony to report
		Standard	Consider likelihood ratio approach recommended by European Network of Forensic Science Institutes
		Standard	Department should provide more detail on the standards
		Standard	Concerns about latent prints ULTR and hence its use as an FSDR standard
		Standard	Evaluate how reports are used when examiner is not available to testify
		Standard	Evaluate reports against testimonial standard
		Standard	Review actual evidence where possible

ID	Commenter	Topic	Comment
12	Michael Saks	Structure	A single statement may trigger a belief that cannot be undone later
		Structure	Identification statements are bolstering (zero-probability statements)
		Standard	There is a distinction between field consensus and what is scientifically supportable
13	Gerry Morris, National Association of Criminal Defense Lawyers	Standard	ULTRs not scientifically valid; use Hair typology
		Miscellaneous	Limiting language often leads directly to exaggerated testimony
		Miscellaneous	Draft methodology mischaracterizes hair review in that if examiner "fully clarifies" a statement of association, it is not regarded as an error
		Analysis and Reporting	Should call any nonconformity an "error"
		Structure	Time limit too narrow; need to go back further
		Structure	Recommend against giving credit for limiting language
14	Jill Spriggs, American Congress of Forensic Science Laboratories	Analysis and Reporting	Concern about unfairly disparaging forensic science
		Structure	Include closing arguments
		Standard	Reconcile FSDR review against accreditation review of testimony
		Standard	Need clear standard
		Standard	Testimony should not be judged against today's standards but by the standards of the time
15	Nelson Bunn, National District Attorneys Association	Structure	Department should create an Office of Forensic Science
		Structure	If other associations are involved, include prosecutorial representative
		Standard	Testimony should not be judged against today's standards but by the standards of the time

ID	Commenter	Topic	Comment
16	Madeline deLone, Innocence Project	Miscellaneous	FSDR does not reflect accuracy of the examiner's determination of the forensic test
		Miscellaneous	Draft methodology mischaracterizes hair review in that if examiner "fully clarifies" a statement of association, it is not regarded as an error.
		Structure	Reviewers should come from outside Department
		Structure	Reviewers should have diverse backgrounds
		Structure	Recommend against giving credit for limiting language
		Structure	Using separate reviewers and coding inter- and intra-rater reliability a good idea
		Structure	Threading promising
		Structure	Open external review panel meetings to public
		Structure	Should develop a consensus decision-making process
		Structure	Use external review panel like Statistician Roundtable to ensure independence
		Structure	Time limit too narrow; need to go back further
		Standard	ULTRs not scientifically valid; use Hair typology
		Analysis and Reporting	Fully develop and test analysis plan before finalizing protocol
		Analysis and Reporting	Should call any nonconformity an "error"

ID	Commenter	Topic	Comment
17	Jody Wolf, American Society of Crime Laboratory Directors	Miscellaneous	No consensus of effect of qualifying statements on jurors
		Miscellaneous	Study is designed to test the ability of courtroom actors to influence testimony, not technical merit of witness
		Structure	Quality assurance and control measures, including inter- and intra-rater reliability, are necessary
		Structure	Testimony reviewers should be evaluated for consistency
		Structure	Should include general comments about the comparative process in specific threads
		Structure	Include closing arguments
		Structure	Should analyze any forensic expert witnesses called who are not FBI examiners
		Structure	Balanced team with defense, prosecution, judges, social scientists, statisticians for oversight
		Structure	Participants should have no financial conflicts
		Standard	Community should develop definition of error and invalid testimony
		Standard	If using current state of knowledge, should say “today’s best practices” rather than “standards”
		Standard	ULTRs may be starting points but are not OSAC-approved
		Analysis and Reporting	Should include testimony of no associations in counting errors
		Analysis and Reporting	Do not extrapolate beyond FBI examiners’ testimony
18	John Kelly	ULTR	DEA’s claim that its testing practices are infallible is invalid
19		ULTR	DEA’s claim that its testing practices are infallible is invalid