# NATIONAL COMMISSION ON FORENSIC SCIENCE

# Universal Accreditation

**Type of Work Product: Policy Recommendation issued by the Accreditation and Proficiency Testing Subcommittee**

**Recommendation:**
It is recommended that all Forensic Science Service Providers (FSSP)[1] become accredited.

**Statement of the Issue**
The National Academy of Sciences (NAS) Report set forth 13 recommendations for forensic science services providers (FSSPs) to move towards best practices, standardization and improving the quality of services including universal accreditation of FSSPs. Many FSSPs currently providing services in furtherance of criminal, civil, regulatory or administrative proceedings in the United States are not accredited to any national or international standard. To achieve universal accreditation the Commission recommends that the Attorney General take several actions to promote and enforce universal accreditation.

**Background**
Accreditation programs specifically for forensic science service providers have been available in the United States since approximately 1988. Accreditation has been voluntary in many jurisdictions and universal accreditation has not been required or achieved. Several states[2] have passed legislation mandating accreditation and other forms of oversight of FSSPs. The legislation and oversight requirements vary greatly from state to state.

***Benefits of Accreditation***

Accreditation helps to ensure both ongoing compliance to industry standards and continual improvement of a FSSP's operations. Accreditation assesses a FSSP's capacity to generate and interpret results. Accreditation criteria are based on accepted industry standards and applicable international standards. Accreditation uses these criteria to assess the quality of the FSSP's management system by examining staff competence, training and continuing education; method validation; appropriateness of test methods; traceability of measurements and calibrations to national standards; suitability, calibration and maintenance of test equipment; testing environment; documentation, sampling and handling of test items; and quality assurance of data including reporting results and proficiency tests. The accrediting body

[1] For the purposes of this document, a Forensic Science Service Provider is "A person or entity that 1) recognizes, collects, analyzes, or interprets physical evidence AND (2) issues test or examination results, provides laboratory reports, or offers interpretations, conclusions, or opinions through testimony with respect to the analysis of such evidence." Examples of persons or entities that would be included can be found in Appendix A. Providers that render opinions based only on the review of data from examinations conducted by other entities should not be impacted by this recommendation. This document does not address Medical Examiners and Coroners.

[2] As of January 7, 2015, ten states have passed legislation. Information found on http://www.ncsl.org/research/civil-and-criminal-justice/dna-database-search-by-policy.aspx.

prepares the assessment report and monitors any remediation to ensure the appropriate corrective action(s) is implemented prior to the conference of accreditation. Accreditation also includes periodic surveillance by the accrediting body to ensure continued compliance with requirements. Failure to maintain these standards can result in the accrediting body suspending or revoking the accreditation of the FSSP.[3]

Universal accreditation will improve FSSP ongoing compliance with industry best practices, promote standardization, and improve the quality of services provided by FSSPs nationally.[4]

### *Challenges to Achieving Accreditation*

A major challenge facing the forensic community is identifying the forensic science service providers. The NAS report noted that insufficient data exists on the number and expertise of forensic practitioners who are not employed in publically funded laboratories.[5] There are potentially thousands of FSSPs, predominately in law enforcement agencies, providing limited forensic science services. The majority of these providers are not accredited to forensic science standards.

While significant progress has been made in the accreditation of public and private forensic science service providers to ISO/IEC 17025, ISO/IEC 17020, and, ISO 15189 and supplemental forensic science standards by a signatory to International Laboratory Accreditation Cooperation (ILAC) Mutual Recognition Arrangement (MRA), this voluntary accreditation has not resulted in universal accreditation. To improve the overall quality of forensic science, all entities performing forensic science testing, even on a part-time basis, must be included in universal accreditation.

This document acknowledges there are challenges to achieving universal accreditation including, but not limited to:

- There are specialty examinations that are valuable; however, may be outside the scope of existing forensic science accreditation programs.
- There are existing accrediting bodies that do not use ISO/IEC standards at this time, although they have been accepted within the community and standards have been generated by professional organizations.
- There are existing accrediting bodies not recognized by ILAC, and this recognition will take time to achieve.
- Factors outside the control of the forensic science service provider, such as the availability of assessors, subject matter experts, and parent agency resources/funding, may affect the ability of the FSSP to achieve or maintain accreditation within recommended timeframes.
- Compliance with government policies and regulations (e.g., purchasing, contracting, hiring, budget cycles) may also affect a FSSP's ability to meet a mandated timeline. In some enacted state statutes, certain FSSPs are not required to meet accreditation standards and may be excluded from oversight regulations.
- The establishment of the necessary quality management systems may require significant resources and may impact timeliness of services provided during implementation.

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[3] For additional information see *The Advantages of Being an Accredited Laboratory*, ILAC Publications, 2010.

[4] Accreditation should not, however, guarantee the admissibility of analyzed evidence. Accreditation assesses a FSSP's capabilities and does not review all of its casework.

[5] National Research Council of the National Academies. Strengthening Forensic Science in the United States: A Path Forward, Washington, DC., 2009. pg 64

- FSSPs or their parent agencies may eliminate some or all services rather than seek accreditation, thus shifting additional caseload, testimony and travel to other FSSPs. This could impact backlogs, turnaround times and operating costs, thereby adding to existing delays in the justice system.
- Forensic units, small municipalities, law enforcement agencies, entities with part-time practitioners, and private entities that provide forensic science services may misunderstand or misinterpret the applicability of universal accreditation to their organization. It may be necessary to conduct directed outreach through non-government organizations that support these entities to assist with educating the affected forensic science service providers, judicial system and enforcement bodies.

**Proposed Implementation Strategy**

- The Attorney General shall direct all DOJ FSSPs to maintain their accreditation and those FSSPs that are not yet accredited shall prepare and apply for accreditation within five years.

- The Attorney General shall direct DOJ FSSPs to use accrediting bodies that submit to and are in compliance with ISO/IEC 17011 and are a signatory to the ILAC MRA. Accreditation shall be to internationally recognized standards (at a minimum ISO/IEC 17025, General Requirements for the Competence of Testing and Calibration Laboratories, ISO/IEC 17020, General Criteria for the Operation of Various Types of Bodies Performing Inspection and, ISO 15189, Medical laboratories - Particular Requirements for Quality and Competence) including all appropriate supplemental standards.

- The Attorney General shall require that DOJ grant funding provided to non-DOJ FSSPs shall be granted only to those FSSPs who are accredited or are in the process of becoming accredited. In the future any DOJ funding award shall include a special condition requiring that the agency's FSSP be accredited.

- The Attorney General shall require that federal prosecutions, in which the Federal prosecutor is in a position to request forensic testing, contract with accredited forensic science service providers. This provision does not apply to analyses conducted prior to the involvement of a federal prosecutor.

- Finally, the Attorney General should encourage by all means possible the universal accreditation of all non-DOJ FSSPs with any available enforcement mechanisms.

## Appendix A: Examples of Forensic Science Service Providers

For the purposes of this document, a Forensic Science Service Provider is "A person or entity that 1) recognizes, collects, analyzes, or interprets physical evidence AND (2) issues test or examination results, provides laboratory reports, or offers interpretations, conclusions, or opinions through testimony with respect to the analysis of such evidence." Providers that render opinions based only on the review of data from examinations conducted by other entities should not be impacted by this recommendation. This document does not address Medical Examiners and Coroners.

Examples of functions that would be included are below, whether in public or private practice. The list is not inclusive of all FSSPs.

1. Crime scene (e.g., Blood pattern analysis, Fire investigation, Crime scene reconstruction)
2. Identification examinations (e.g., Latent Prints, Ten Prints, Tire impressions)
3. Document examinations
4. Firearms/Ballistics examinations
5. Toolmark examinations
6. Digital and Multimedia examinations
7. Drug or chemical identifications
8. Biological examinations
9. Trace Evidence examinations

## Appendix B: Certification vs. Accreditation

Accreditation is an independent third-party assessment of a **FSSP's** (which can consist of one or many practitioners) quality, administrative and technical systems. Accreditation uses specific criteria and procedures based upon accepted standards to ensure the quality of the FSSP's management system by examining staff competence, training and continuing education; method validation; appropriateness of test methods; traceability of measurements and calibrations to national standards; suitability, calibration and maintenance of test equipment; testing environment; documentation, sampling and handling of test items; and quality assurance of data including reporting results and proficiency tests.

Professional certification[6], which is not addressed in this document, is the recognition by an independent body that an **individual** has acquired and demonstrated specialized knowledge, skills, and abilities in the standard practices necessary to execute the duties of their profession. Certification programs can include: written and/or practical testing; an evaluation of education, training and practical experience; requirements for continuing education; and adherence to a code of ethics. Certification does **not** assess the quality, administrative and technical systems used by the individual in their work. It also does **not** assess methods, procedures, testimony, reports, documentation, equipment, validation, measurement uncertainty, facilities, evidence handling, security, safety procedures used by the individual.

Accreditation and Certification are very different programs that assess and evaluate different aspects of forensic practitioners and FSSPs. They are not interchangeable but both are necessary to strengthen forensic science.

[6] Certification, for purposes of this document, does not include certification of an instrument, equipment or the company manufacturing the equipment.