November 12, 2013

Susan Ballou
National Institute of Standards and Technology
100 Bureau Drive
Gaithersburg, MD 20899

Dear Ms. Ballou,

The Scientific Working Group on Friction Ridge Analysis, Study and Technology (SWGFAST) provides the following response to the Notice of Inquiry published by the National Institute of Standards and Technology (NIST) in The Federal Register on September 27, 2013, regarding Possible Models for the Administration and Support of Discipline-Specific Guidance Groups for Forensic Science.

SWGFAST has been establishing guidelines and standards for the development and enhancement of friction ridge examiners’ knowledge, skills, and abilities since 1995. With over twenty published guidelines and standards, SWGFAST has provided guidance for topics such as training programs, examiner qualifications, examination procedures and documentation, and quality assurance. SWGFAST members have included international, federal, state, and local forensic laboratory practitioners and managers, as well as attorneys, academics, and researchers. Given the diverse knowledge base and vast experience of the group, SWGFAST believes it can provide valuable input in the development of the new Guidance Groups (GGs). As such, SWGFAST provides the following recommendations and responses for your consideration:

**Overall Recommendations:**

**Structure**

Critical to the success of the GGs, NIST must create a stable infrastructure capable of supporting a broad range of forensic disciplines. Having a program office to provide oversight offers the potential for more uniform bylaws, membership, and standards development process;
however, consistent funding for meetings and administrative support must be made available. The composition of the GG program office should include a dedicated full-time staff to ensure continuity, prioritize tasks, reduce duplication of effort, and coordinate outreach. Staff should include technical writers, conference planners, and a website administrator.

Membership

The majority of the GG membership should be comprised of a balanced group of discipline specific practitioners from local, state, tribal, federal and private sectors on both national and international levels. The remaining positions should be allocated to other interested stakeholders from the academic, research, and legal communities. Ex-officio members from some of the larger forensic organizations, such as the International Association for Identification and the American Academy of Forensic Sciences, have proven to be extremely beneficial to the SWG groups in the past. However, the group should be authorized to regulate its membership in an effort to maintain balance while being able to select members (or invite guest speakers) with a certain expertise to address specific needs that may arise. This capability can also facilitate a cross-disciplinary approach.

Standards Development Process

Existing SWG guidelines and standards have been implemented in many agencies and accepted by the courts as best practices. Therefore, it is imperative that existing documents be incorporated into the new GGs. For new standards, NIST should implement an SDO-type process to ensure openness, consensus decision-making with multi-stakeholder input, and a standardized work product. However, given the limitations associated with producing documents through an existing Standards Development Organization (SDO), the guidelines and standards generated by the GGs should not be published using a current SDO. Standards generated by an SDO are not readily available to the general public, can be very expensive, are typically not created in a timely fashion nor are they necessarily peer reviewed by individuals with credible experience in a given discipline. As such, the GGs should be issued the authority and provided the ability to generate standards organically within a particular discipline without having to consult an SDO. Additionally, to facilitate and encourage broad adoption of these standards, NIST should make them available open source.
Responses to specific questions:

1. Structure of the Guidance Groups

Question: Given the scope and principles of the Guidance Groups outlined here, what are structural models that could best support the Guidance Groups, taking into account the technical, policy, legal, and operational aspects of forensic science?

Answer: As presented at the June 18, 2013, SWG Chairs meeting hosted at NIST, both Forensic Science Assembly (FSA) #1 and #2 would be appropriate models to support the GGs. Both models provide for leadership from within the forensic science community with administrative support from the GG program office.

Question: What elements or models would facilitate the sharing of best practices and uniform practices across the Guidance Groups?

Answer: FSA #2 would facilitate the sharing of practices across multiple disciplines. FSA #2 is more of a long-term project as there would be an initial adjustment period; however, grouping forensic disciplines that face similar issues may prove to be quite beneficial. With the GG program office providing oversight, multi-discipline committees could be formed to address specific needs. This approach would help to standardize practices across disciplines while reducing duplication of effort.

Question: Are there public policies or private sector initiatives in other countries that have successfully strengthened the nation’s use of forensic science by supporting the development and propagation of forensic science consensus documentary standards, identifying needs of forensic science research and measurement standards, and verifying the scientific basis exists for each discipline? If so, what are they?

Answer:

- Europe – European Network of Forensic Science Institutes (ENFSI)  
  (http://www.enfsi.eu/about-enfsi)


- Canada - Centre for Forensic Science & Medicine of the University of Toronto has brought together Canadian forensic scientists to produce a report titled "Forensic Science in Canada: A Report of Multidisciplinary Discussion" (download the report from http://www.forensics.utoronto.ca/Assets/LMPF+Digital+Assets/Forensic+Science+in+Canada.pdf)

Question: What are the elements which make existing forensic Scientific Working Groups (SWGs) successful? Are there examples of best practices in specific SWGs that ought to be replicated in Guidance Groups? If so, what are they?

Answer: Consistent funding and diverse membership have been critical to the success of existing SWGs. Until 2013, SWGFAST received funding to hold two week-long meetings per year resulting in the production of over twenty guidelines and standards. Membership consisting of federal, state, local, and private practitioners, as well as scientists from the academic, research, and legal communities has also proven invaluable to the success of SWGFAST.

Question: Would partnership with a standards development organization (SDO) in which the standard is issued by the SDO present any obstacle for participation by a broad range of forensic science stakeholders in the development of a standard? If so, why?

Answer: Yes, lack of funding to support membership fees would make it very difficult for a broad range of forensic science stakeholders to participate in the development of a standard by an SDO. In many SDOs, only members are permitted to comment on draft documents. In many forensic organizations, the administrators are not forensic scientists; funding for anything other than law enforcement operations is secondary and usually the first thing cut when budgets are restricted.
Question: Would partnership with an SDO in which the standard is issued by the SDO present any obstacle to broad adoption of a standard? If so, why?

Answer: Yes, standards generated by an SDO are not readily available to the general public, can be very expensive, are typically not created in a timely fashion nor are they necessarily peer reviewed by individuals with credible experience in a given discipline. For many stakeholders, the financial burden would prevent them or their agency from accepting or adopting any issued standards.

Question: Would a fee-based membership model run through a not-for-profit organization (similar to the National Conference of Weights and Measures) present a significant obstacle for participation?

Answer: Yes, lack of funding is a consistent problem across most forensic disciplines. Any fee-based membership model would significantly limit the number of individuals available to participate, which would subsequently inhibit the broad adoption of developed standards.

Question: If the Guidance Groups followed a fee-based membership model, are there appropriately-tiered systems for fees that would prevent “pricing out” organizations, including individuals?

Answer: Because a lack of funding is a consistent problem across most forensic disciplines, any fee-based membership model would significantly limit the number of individuals available to participate, which would subsequently inhibit the broad adoption of developed standards. In many forensic organizations, the administrators are not forensic scientists; funding for anything other than casework is secondary and usually the first thing cut when budgets are restricted.

Question: Other than a privatized model, are there other means to maintain a governance or coordinating body in the long term? If possible, please give examples of existing structures and their positive and negative attributes.

Answer: See previous response regarding initiatives in other countries.
2. Impact of Guidance Groups

Question: Given that the Guidance Groups cannot mandate the adoption of standards, what can they do to best leverage their position and encourage adoption? To what extent does membership and transparency impact possible adoption of guidance at the state and local level?

Answer: There needs to be some coordination/liaison between the GGs and the judicial community. Interaction and training of judges and other legal professionals on a continual basis (conferences, meetings and other continuing education venues) would lend more credence to, and adoption of, the standards set forth by the GGs. This could be accomplished through the funding of an overall NIST representative, or a representative from each specific GG, to travel to these judicial meetings and conferences promoting the standards and guidelines generated by the GGs.

Question: Are there best practices or models to consider with regard to a structure that would encourage effective communication with the scientific community to explore research gaps and aid in recognizing research priorities?

Answer: It is well established that research regarding certain aspects of forensic science is a must; however, the requirement to regulate and oversee large scale research projects funded by federal government entities should not be a function of the GG designed to set standards to guide scientific forensic operations. The creation of a subset within the GG solely dedicated to research would be more beneficial than taking the existing GG in two separate directions (research oversight vs. standards development).

Question: How should NIST researchers engage with the Guidance Groups in support of the goal to strengthen the nation’s use of forensic science by supporting the development and propagation of forensic science consensus documentary standards, identifying needs of forensic science research and measurement standards, and verifying the scientific basis exists for each discipline?

Answer: Propagating standards, identifying research needs and establishing a scientific basis are three very diverse functions which should not be placed on any one group. The traditional SWGs were focused on creating standards and attempting to propagate them through website production
and conference presentations. SWGFAST has traditionally provided a list of research ideas generated as a result of needs identified during standards development. Even though this list was extensive, it was not exhaustive with regards to discipline needs. NIST researchers can request support and ideas for future discipline specific research endeavors; however, it should not be a top priority for the GGs.

3. Representation in the Guidance Groups

Question: Who are the stakeholders who should be represented on the Guidance Groups? What steps can NIST take to ensure appropriately broad representation within the Guidance Groups? What does balanced representation mean and how can it be achieved?

Answer: The majority of the GG membership should be comprised of a balanced group of discipline specific practitioners from local, state, tribal, federal and private sectors on both national and international levels. The remaining positions should be allocated to other interested stakeholders from the academic, research, and legal communities. Ex-officio members from some of the larger forensic organizations, such as the International Association for Identification and the American Academy of Forensic Sciences, have proven to be extremely beneficial to the SWG groups in the past. However, the group should be authorized to regulate its membership in an effort to maintain balance while being able to select members (or invite guest speakers) with a certain expertise to address specific needs that may arise. This capability can also facilitate a cross-disciplinary approach.

Question: What is the best way to engage organizations playing a role in forensic science, standards development and practice?

Answer: Ex-officio members from some of the larger forensic organizations, such as the International Association for Identification and the American Academy of Forensic Sciences, have proven to be extremely beneficial to the SWG groups in the past. Additionally, funding an overall NIST representative or a representative from each specific GG, to travel to meetings and conferences of these organizations to promote the guidelines and standards generated by the GGs would keep other stakeholders engaged.
Question: How should interested parties who may not be direct participants in Guidance Groups, engage in a meaningful way to have an impact on issues in front of the Guidance Groups?

Answer: NIST should implement an SDO-type process to ensure openness, consensus decision-making with multi-stakeholder input, and a standardized work product. With this type of process, interested parties would have the opportunity to submit comments and influence the production of standards. NIST should also implement a mechanism in which interested parties may request an audience with the GGs to present information or raise concerns.

Question: To what extent and in what ways must the Federal government, as well as state, local, tribal and territorial governments be involved at the outset?

Answer: Consistent funding and support must be made available at all levels of government. Additionally, the majority of the GG membership should be comprised of a balanced group of discipline-specific practitioners from local, state, tribal, federal and private sectors on both national and international levels.

4. Scope of the Guidance Groups

Question: Should all of the current forensic Scientific Working Groups (SWGs) transition to Guidance Groups?

Answer: All SWGs that have been effective at creating standards and guidelines for their respective disciplines should be transitioned into the new GGs.

Question: Are there broader groupings of forensic science disciplines that could form the basis of Guidance Groups than the current group of twenty-one SWGs? If so, what are those groupings?

Answer: With the GG program office providing oversight, multi-discipline committees could be formed to address specific needs; however, the core membership for each GG would still need to be comprised of discipline-specific subject matter experts. This approach would help to standardize practices across disciplines while reducing duplication of effort. Many of the
pattern comparison disciplines, such as fingerprints, shoe tread, and firearms, face similar issues and could benefit from a multi-discipline committee approach.

Question: Is there a need for a cross-disciplinary functional approach (i.e. statistical analysis) and how could the Guidance Groups be structured to best address that need?

Answer: With the GG program office providing oversight, multi-discipline committees could be formed to address specific needs; however, the core membership for each GG would still need to be comprised of discipline-specific subject matter experts. The multi-discipline committee would consist of several members representing each of the GGs to address cross-discipline issues.

Question: To what extent do Guidance Groups need to support different forensic science disciplines differently from one another?

Answer: Given the broad range of forensic sciences practiced in the United States, the GGs must be flexible in that a “one size fits all” approach simply will not work. Various forensic science disciplines are based on different scientific premises. As such, an appropriate practice for one discipline may not be appropriate for another.

Sincerely,

Melissa R. Gische, Chair
Scientific Working Group on Friction Ridge Analysis, Study and Technology