

Summary of the NIST Proposed Plan for the Organization of Scientific Area Committees

Authority: Under the DOJ-NIST Memorandum of Understanding announced in February 2013, the National Institute of Standards and Technology (NIST) is responsible for developing “guidance groups,” which are intended to replace the current Scientific Working Groups (SWGs). NIST has named this new infrastructure the Organization of Scientific Area Committees (OSAC).

Relationship to NCFS: The National Commission on Forensic Science (NCFS) focuses on policy issues while the OSAC will be practice-focused. OSAC will not provide advice to the Attorney General, NIST Director, or the NCFS. OSAC findings will be publicly vetted. OSAC will not report to the NCFS and is not a Federal Advisory Committee in accordance with the provisions of FACA as amended in 5 U.S.C App. 2.

Input Received: Chairs for 18 of the 21 SWGs gathered at NIST on June 18, 2013, where several options for guidance groups were discussed. NIST then sought public comments via a Federal Register Notice of Inquiry (NOI) from September 27 to November 26, 2013, and received 82 responses to questions on structure, impact, representation, and scope. NIST presented the draft OSAC framework during AAFS on February 18, 2014, and received additional feedback.

OSAC Plan Development: During December 2013 and January 2014, a NIST planning team (consisting of nine individuals) developed the proposed infrastructure based on input received and its members’ expertise - including forensic practitioner and laboratory management experience, forensic science research, presentation and publication experience, documentary standards development process experience and membership on SWGs. In March 2014, several additional updates were incorporated based on feedback provided by the forensic science community.

Overview/Objectives: To create a sustainable infrastructure that produces best practices, guidelines, and standards to improve quality and consistency of work in the forensic science community.

Overall Structure: The OSAC decision-making governance consists of Scientific Area Committees (SACs) that report to a Forensic Science Standards Board (FSSB). Each of the five SACs has discipline-specific subcommittees. The five SACs are (1) Biology/DNA, (2) Chemistry/Instrumental Analysis, (3) Crime Scene/Death Investigation, (4) Information Technology/Multimedia, and (5) Physics/Pattern. A Quality Infrastructure Committee (QIC) and a Legal Resource Committee (LRC) provide input to aid the development and updating of a “Forensic Science Code of Practice” (similar in concept to a Building Code) and a “Professional Code of Ethics”. A Human Factors Committee (HFC) provides input to the OSAC on issues that affect human performance.

Forensic Science Standards Board (FSSB): Composed of 17 members (with a balance of interests where no single interest dominates) including the five SAC chairs, six representatives of large professional forensic science organizations (for example, AAFS, ASCLD, AFTE, IAI, NAME, and SOFT), five members at large from the research and measurement science communities, and one NIST ex-officio member (non-voting except to break tie votes). Provides final approval for standards that will be included in the FSSB Registry of Standards. Ensures consistency across the OSAC and optimal communication flow among SACs and overall infrastructure and the forensic science community.

Legal Resource Committee (LRC): Up to 10 members comprised of judges, lawyers (prosecution and defense), and other experts. As requested by the FSSB, LRC reviews and provides legal perspective on standards submitted to the FSSB for approval. The LRC is responsible for writing and updating the “Professional Code of Ethics.”

Quality Infrastructure Committee (QIC): Up to 15 members comprised of NIST standards experts, accreditation and certification specialists, quality system managers, forensic science practitioners and forensic science laboratory managers. QIC is responsible for writing and updating the Forensic Science Code of Practice, which provides minimum requirements for discipline-specific needs in accreditation, competencies of practitioners, processes for validation and approving new technologies, and performance standards for tools and equipment. QIC provides feedback to the FSSB and interacts with Standards Developing Organizations (SDOs) if desired.

Human Factors Committee (HFC): Up to 10 members comprised of psychologists, quality systems managers, and usability experts. HFC will provide guidance on the influence of systems design on human performance and on ways to mitigate errors in complex tasks.

Scientific Area Committees (SACs): Up to 15 members per SAC, comprised of subcommittee chairs, representatives of the FSSB selected professional forensic science organizations appropriate to the scientific area, researchers, and measurement scientists. Recommends creating, merging, or abolishing subcommittees. May identify and/or develop

standards that affect the entire scientific area of the SAC. Sets priorities for subcommittee work. SAC meetings will be open to the public and agendas reviewed by NIST and DOJ.

SAC Subcommittees: Each subcommittee has a maximum membership of 25 (20 members and 5 invited guests) with a distribution goal of 70% practitioners (20% federal, 30% state & local, 20% civil or other), 20% researchers (including, where appropriate, statisticians and accreditation and certification specialists), and 10% R&D technology partners and providers. *A practitioner is defined as someone actively doing or managing casework in a forensic laboratory.* Develops and vets formal documents to be submitted for approval by SAC (guidelines) and FSSB (standards). Reviews existing SWG documents to be transitioned to standards and guidelines. Regularly communicates activities and progress to SACs. Subcommittee agendas are approved by their respective SAC. The creation of possible term limits will be determined and applied uniformly by the FSSB. Subcommittee meetings will not be open to the public.

Work Products: Guidelines and best practices are written (or adopted from previous documents) and reviewed by their subcommittee and approved by their SAC, but like current SWG recommendations have no “teeth.” Guidelines will be shared via the SAC website following a public input process developed by the FSSB and QIC. Documentary standards are written or identified by the subcommittee, reviewed at the SAC level, and then approved by the FSSB. These standards can be used by an accrediting body for laboratory audits (e.g., ISO/IEC 17025 supplemental materials). FSSB-approved standards become part of the FSSB Registry of Standards and form a Forensic Science Code of Practice, which will be freely available.

FSSB Registry of Approved Standards: Comprised of standards put forth by the SACs and subcommittees and approved by the FSSB. These standards can be developed by other organizations or the OSAC can catalyze the development of needed standards with other organizations, or the OSAC can create new standards according to a pre-defined process. The Registry will be freely available as a website with a series of links to approved standards.

Forensic Science Code of Practice: Defines minimum requirements, with due regard for discipline-specific needs, for: standards used in forensic science services; accreditation of those supplying forensic science services; competencies of forensic science practitioners; processes and procedures for validating and approving new technologies and applications in the field of forensic science; and performance standards for tools and equipment.

Membership Selection: Applications for participation will be solicited for all OSAC committees and subcommittees through a self-nomination process on NIST’s OSAC website (<http://www.nist.gov/forensics/osac.cfm>). Recruitment from previous SWG membership and professional forensic science organizations and professional societies (e.g., American Chemical Society, American Statistical Association, etc.) may also be performed. A selection committee comprised of three NIST and three DOJ scientists will appoint initial FSSB, HFC, LRC, QIC and SAC memberships while subcommittee members will be selected by the FSSB and SAC leadership and approved by the NIST-DOJ membership committee. NIST scientists will participate as standards and coordination experts as appropriate in the FSSB, HFC, LRC, QIC, SACs, and subcommittees.

Implementation Timeline: NIST hopes to solicit membership applications in April 2014, appoint the FSSB in May, appoint HFC, LRC, QIC, and SAC membership in June, hold the first SAC meetings and finalize subcommittee membership by the end of August, conduct virtual training of subcommittee members during September and October, and hold in-person SAC and subcommittee meetings in mid-November 2014.

Administering Organization (AO): Handles logistics of in-person and virtual meetings and ensures communication support. Responsible for rendering a decision in event of an appeal or dispute. Initially the AO will be NIST with a goal to transition OSAC support to an independent professional organization in 3 to 5 years.

Funding: The U.S. Congress has provided funds to NIST in FY14 for administering the OSAC. NIST is working on a contract vehicle that will help to fund travel for OSAC members and to prepare the infrastructure (including a website) for sharing OSAC work products, progress, news and information.

Sharing the OSAC Plan: The National Commission on Forensic Science (NCFS) was briefed on February 4, 2014, regarding NOI responses and the NIST-developed OSAC plan. A two-hour OSAC open forum was conducted by NIST on February 18, 2014, at the AAFS meeting in Seattle, WA, which was also webcasted. A series of public presentations are planned for upcoming IAI, NAME, AFTE and SOFT meetings during 2014. All presentation materials on the NIST OSAC plan are available on <http://www.nist.gov/forensics/osac.cfm>.

Continuation of Certain SWGs: Due to specific operational needs, DOJ may decide to continue funding certain SWGs, such as SWGDAM (for DNA) and SWGDE (for digital evidence), which would operate outside of the OSAC plan.