Response to STRP Scientific & Technical Review Panel Final Report for 2021-S-0003 Standards for Determining Analytical and Stochastic Thresholds for Application to Forensic DNA Casework Using Electrophoresis Platforms

The Standards for Determining Analytical and Stochastic Thresholds for Application to Forensic DNA Casework Using Electrophoresis Platforms (AT/ST) committee thanks the insight provided by the Scientific & Technical Review Panel Members. In response to the comments highlighted in this report, the AT/ST committee has made the following changes/modifications to 2021-S 0003:

Report Component 3 Quality Assurance

• The committee has revised standard 4.1.4 and provided parenthetical examples. This standard now reads (with modifications/additions in italics) "Analytical thresholds shall be reevaluated when*ever* modifications to the *detection platform (e.g., performance check following change in laser, recalibration of the instrument)* are made and have the potential to impact the noise output of the instrumentation."

Report Component 5 Terminology

- The committee added the following definition: 3.5 Coverage factor (k factor): numerical factor used as a multiplier of the combined standard uncertainty in order to obtain an expanded uncertainty. As this definition was from NISTIR 6919, this reference was added to Annex A (informative) Foundational Principles.
- The committee made a modification to the following definition: 3.9. Locus (loci): Unique physical location(*s*) on the DNA molecule.
- The committee has included the following statement in the terminology report section "Variations from the FBI Quality Assurance Standards (QAS) definitions are to ensure consistency of the OSAC Lexicon across OSAC disciplines, but do not necessarily contradict or otherwise negate the QAS definitions."
- The committee added a reference to QAS in Annex A (informative) Foundational Principles.

Report Component 7 Reporting Results

• By consensus, the committee agrees with the majority view.