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Guide for Role-Based Training in Facial Comparison

1. Scope

- 1.1 This guide will provide recommendations for a role-based training to achieve competency in facial comparison tasks.
- 1.2 This guide does not purport to address the specific content of an agency's training program but instead provides an overview of the structure of role-based training and levels of training. This document will not address the specific recommendations for role-based training, such as detailed topics or durations of supervised casework/mentorship programs.
- 1.3 The intended audience of this document is all personnel involved in facial comparison.
- 1.4 This guide was developed by representative members of the Facial Identification subcommittee of the Digital/Multimedia Committee within the Organization of Scientific Area Committees (OSAC) as advisory information and published as a public service.

2. Terminology

See ASTM E2916-13 Standard Terminology for Digital and Multimedia Evidence Examination.

3. Summary of Practice

- 3.1 The consistent and reliable use of facial comparison methods and facial recognition technologies requires the appropriate training of personnel to competence. For a description of the different facial comparison roles, see Section 4.4. The level of training necessary to conduct facial comparison is dependent upon the source, quality, quantity, and complexity of the images that

are being analyzed and the purpose of the analysis. Agencies may choose to provide additional training beyond what is recommended in this document.

3.2 Personnel who perform facial comparisons should be familiar with the capabilities and limitations of relevant tools, technologies, and methods. Those engaged in facial comparisons should be familiar with the procedures commonly followed. They should also be cognizant of, and adapt to, new developments. Additionally, trainers of those performing facial comparisons need advanced knowledge of these areas. In support of these goals, the following recommendations are offered to personnel engaged in this field:

3.2.1 Undertake validated aptitude testing to gauge innate ability prior to employment and/or enrollment in a facial comparison training program, when available. When validated aptitude testing is not available, aptitude testing should still be conducted. Validated or non-validated aptitude testing should continue throughout training to evaluate the trainee's ongoing development for the roles of Facial Reviewer, Facial Examiner, and Technical Reviewer.

3.2.2 Adhere to a structured and documented training program for determining levels of competency.

3.2.3 Undertake a period of supervised casework/mentorship.

3.2.4 Maintain competency after training by pursuing applicable courses, undertaking scheduled proficiency/competency testing, maintaining awareness of the current standards, guidance and research relevant to facial comparison and participating in research when possible.

3.2.5 Where applicable, define and employ a quality management system.

3.2.6 Maintain awareness of legal developments relating to the use of facial comparisons.

4. Significance and Use

4.1 There are three broad categories of facial comparison tasks: facial assessment, facial review, and facial examination; and all may involve interface with a facial recognition system (FRS). The requirement for assessment, review or examination will be dependent upon an agency's end-user requirement and the type and quantity of facial comparison cases. The level of training for staff undertaking each of the three tasks differs. In addition, managers and support

personnel of persons performing facial comparisons also need to be aware of the capabilities and limitations of specific tools, technologies, and methods.

- 4.2 Facial assessment, review and examination are defined in the FISWG Facial Comparison Overview and Methodology Guidelines document.
- 4.3 Roles relevant to facial comparison include facial assessor, facial reviewer and facial examiner. Additional roles may include administrative duties, policy or case management. All relevant roles should be considered when developing a facial comparison training program.
- 4.4 Below is a list of the different roles in a facial comparison environment. **These are not job titles, but instead roles describing the tasks an individual may perform.** Depending upon the organization of an agency one individual may perform multiple roles. This list is not exhaustive and other agency specific roles may exist.
 - 4.4.1 **Facial Assessor:** Performs a quick comparison of image-to-image or image-to-person, typically with controlled images, carried out in screening and access control applications or field operations. Due to limitations such as time constraints, assessors perform the least rigorous of all of the facial comparison processes. For example, a person at a port of entry or in the field using a mobile FR system to assist with an identity verification.
 - 4.4.2 **Facial Reviewer:** Performs a comparison of image(s)-to-image(s) generally resulting from the adjudication of a candidate list generated by an FRS. The comparison results are often used in either investigative and operational leads or intelligence gathering applications.
 - 4.4.3 **Facial Examiner:** performs a comparison of image(s)-to-image(s) using a rigorous morphological analysis, comparison, and evaluation of images for the purpose of effecting a conclusion, often used in a forensic application.
 - 4.4.4 **Manager:** Sets agency policies and/or makes budget decisions.
 - 4.4.5 **Supervisor:** Supervises and/or directs personnel engaged in the use of facial comparison methods, tools, and/or technologies.
 - 4.4.6 **Collector:** Obtains/captures source images to be used in facial comparisons.
 - 4.4.7 **Technical reviewer:** Performs quality assurance review of the work product of facial comparison.

- 4.4.8 **System Administrator:** Performs the system administration required to implement, maintain, and optimize the automated facial recognition program.
- 4.4.9 **Trainer:** Provides instruction in facial comparison methods, tools, and/or technologies. Designs and implements competency and proficiency testing. Designs and implements aptitude testing when validated aptitude testing is not available.
- 4.5 **Education Requirements:** In addition to an agency's own training and testing programs the following may be desirable for facial examiners.
- 4.5.1 **Facial Examiners:** Agencies should consider recruiting facial examiners with a minimum undergraduate degree or equivalent qualification, preferably in a relevant scientific or technical subject such as human anatomy or imaging science, or, individuals with substantial relevant work experience.
- 4.6 **Categories of Training:** A facial comparison training program can be broadly defined as consisting of the following five categories. The specific content for each of these categories will be dependent upon the role and the requirements of an individual agency, but a high degree of consistency should exist between different agencies.
- 4.6.1 **Introductory overview:** The comprehension of the basics of facial comparison.
- 4.6.2 **Skills and abilities:** The ability to use applicable facial comparison tools, methods, and technologies.
- 4.6.3 **Knowledge of processes:** The ability to select and apply the appropriate information, skills and techniques for a given examination, from receipt of evidence through to completion of the report and presentation at court when required.
- 4.6.4 **Court preparation and presentation:** The ability to prepare and review accurate and reliable facial comparison evidence and/or present reliable facial comparison testimony in court.
- 4.6.5 **Instruction:** The ability to instruct others in applicable areas of facial comparison processes.

4.7 The level of assessment for each of the above categories will be dependent upon an individual's role and type of task being performed. The levels of assessment for a facial comparison training program can be defined as follows:

4.7.1 **Awareness:** General acquaintance with the relevant major elements of a given method or technology to include specific capabilities and limitations.

4.7.2 **Competency:** Demonstration that an individual has acquired and demonstrated specialized knowledge, skills, and abilities necessary to conduct examinations in a discipline or category of testing prior to performing independent casework.

4.7.3 **Proficiency:** The ongoing evaluation and assessment of obtained competency, for example by proficiency testing (ref ASTM glossary 2916).

5. Minimum Training Recommendations

5.1 Table 1 shows the level of assessment recommended for each role in the defined categories of training. This table should be considered the minimum requirements for a facial comparison training program.

AW – Awareness C – Competency P – Proficiency N/A – Not Applicable

	Introductory Overview	Skills and Abilities	Knowledge of Processes	Court Presentation	Instruction
Manager	AW	AW	AW	AW	N/A
Supervisor	C	AW	AW	AW	AW
Collector	AW	P	C	AW	N/A
Facial Assessor (non-FR user)	AW	AW	AW	AW	N/A
Facial Assessor (FR user)	C	C	C	AW	N/A
Facial Reviewer	P	P	P	C	N/A
Facial Examiner	P	P	P	P	N/A
Technical Reviewer	P	P	P	P	N/A
System Administrator	AW	AW	AW	N/A	N/A
Trainer*	P	P	P	P	P

Table 1 - Matrix of minimum training recommendations for roles being performed.

*A trainer needs to be proficient at the role they are instructing.

6. Keywords

Training, Facial Identification, Facial Comparison, Proficiency Test

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