OSAC 2022-S-0008
Standard Guide for Facial Image Comparison Documentation

Facial & Iris Identification Subcommittee
Digital/Multimedia Scientific Area Committee (SAC)
Organization of Scientific Area Committees (OSAC) for Forensic Science

OSAC Proposed Standard

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Prepared by
Facial & Iris Identification Subcommittee
Version: 2.0
February 2024

Disclaimer:

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The STR consists of an independent and diverse panel, which may include subject matter experts, human factors scientists, quality assurance personnel, and legal experts as applicable. The selected group is tasked with evaluating the proposed standard based on a defined list of scientific, administrative, and quality assurance based criteria.

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Standard Guide for Minimum Training Recommendations of Iris Image Examiners

1. **Scope**

   1.1 This standard provides minimum guidelines for facial image comparison documentation and reporting.

   1.1.1 Documentation includes notes, images with markups and annotations, narratives, worksheets, electronic records, investigative lead or forensic reports or any combination of these.

   1.2 This standard does not discuss methods for how to conduct a facial image comparison, opinion scales(s), or other requirements that may be agency specific.

2. **Referenced Documents**

   2.1 ASTM Standards:

   E3149 Standard Guide for Facial Image Comparison Feature List for Morphological Analysis

   E1732 Standard Terminology Relating to Forensic Science

   2.2 Other Standard Documents

   FISWG Physical Stability of Facial Features of Adults

   FISWG Guide for Role-based Training in Facial Comparison

   FISWG Standard Practice/Guide for Image Processing to Improve Automated Facial Recognition Search Performance

   FISWG Facial Comparison Overview and Methodology Guidelines

   FISWG Glossary

   OSAC Standard Framework for Developing Discipline Specific Methodology for ACE-V

   OSAC Standard Guide for Image Comparison Conclusions/Opinions

3. Significance and Use

3.1 This standard provides the minimum requirements of information that shall be documented in accordance with the type of report and agency specific procedures.

3.2 This standard outlines the information needed to provide a contemporaneous record of the analysis.

4. Items to Include in a Facial Image Comparison

These items are not presented in order of importance or priority.

4.1 Administrative Data

4.1.1 Indication whether preliminary results, supplemental results, or amends an earlier report

4.1.2 Case identifier

4.1.3 Dates

4.1.3.1 Date received

4.1.3.2 Date searched/compared

4.1.3.3 Date of image capture (if available)

4.1.4 Requestor(s) and contact information

4.1.5 Practitioner(s) name, title, and contact information

4.1.6 Details and scope of the request (if provided)

4.1.7 Filename/identifier of image received

4.1.8 Indication of whether a facial recognition (FR) search was conducted, and if conducted, the results.

4.1.8.1 Database searched

4.1.9 The original image submitted, or a visual example (e.g., still image from video submitted), and the known (or candidate) image being compared.

4.2 Evaluation

4.2.1 Opinion scale used

4.2.2 Opinion reached including definitions or information and interpretation of what drives an opinion (if applicable)

4.2.3 Disclaimer – Agencies should include in all facial image comparison reports their own disclaimer identifying general limitations and the recommended usage of the report.

4.2.4 Reference to Comparison Method used and any other tools, software or technology utilized

4.2.5 Description of the disposition of any items requiring chain of custody.

4.3 Verification

4.3.1 Verifier's name, date, and result of verification

4.3.2 If no verification is completed, a disclaimer stating this shall be included

4.3.3 Printed name of technical reviewer

4.3.3.1 If no technical review of the report is made, indicate "none" or provide an explanation as to why it was not done.

4.3.4 Printed name, title, and signature of author or report and date of signature

4.3.5 Limitations of the method or databases (if used)

4.3.6 Disclosure of:

4.3.6.1 Absence of citable empirical measures of performance

4.3.6.2 If there were any deviations to the procedure, SOP, quality assurance procedures, or from a published method.

4.3.6.3 If the agency is not accredited in the discipline or the procedure used is outside the scope of accreditation, if applicable.

4.3.7 Statement that makes it clear that the report does not contain all documentation associated with the work performed (e.g., "Supporting documentation is maintained separate from this report and is necessary for independent evaluation of the work, interpretation of the data, and rendering of opinions.")

4.4   Comparison

4.4.1   Features of the face (as defined in the ASTM 3149) Facial image Comparison Feature List for Morphological Analysis) visible in each known image used in a comparison

4.4.2   Representation of the images compared

5.   Items to Retain as Part of the Case Record

5.1   In addition to the information above, the following shall also be saved:

5.2   Analysis

5.2.1   Determination of suitability of image(s) for facial recognition search or facial image comparison

5.2.2   Features of the face (as defined in the ASTM E3149 Facial Image Comparison Feature List for Morphological Analysis) visible in each unknown image used in a comparison

5.2.3   Indicate whether images meet agency specific requirements for comparison (e.g., legal or procedural limitations to facial recognition searches.)

5.2.3.1   Explanation for determination that images do not meet specific requirements.

5.2.4   Processed image(s) (if applicable)

5.2.4.1   Filename/identifier of processed image(s) (if applicable)

5.2.4.2   Steps taken to process images (e.g., cropping, rotating, adjusting exposure)

5.3   Comparison

5.3.1   Features of the face (as defined in ASTM E3149 Facial Image Comparison Feature List for Morphological Analysis) visible in each known image used in a comparison

5.4   Administrative Data

5.4.1   All correspondence (e.g., email, case notes, reports)

5.4.2   Relevant case information

5.4.3   Original received images

5.4.4　　Image Analysis Documentation, to include, but not limited to, factors such as lighting conditions, image resolutions, obstructions, pose

5.4.5　　Processed images

5.4.6　　Chain of custofy

5.4.7　　Disposition (if applicable)

5.4.8　　Number of candidates returned (based on maximum number returned or threshold used)

5.4.8.1　　Rank order (number) of the potential candidate

5.4.9　　Verifier's notes and documentation (as per section 4.3)

6.　Additional Information

6.1　　The following shall be documented, as applicable:

6.1.1　　Algorithm

6.1.1.1　　Name of Algorithm Vendor

6.1.1.2　　Version

6.1.1.3　　Specific configurations

6.1.1.4　　Date implemented

6.1.2　　Software

6.1.2.1　　Vendor name

6.1.2.2　　Version

6.1.2.3　　Specific Configurations

6.1.2.4　　Date implemented

6.2　　Agency Accreditation or Quality Management System

6.2.1　　Reference to agency comparison method

6.2.2　　Reference to agency Standard Operating Procedures (SOP)

6.3　　Practitioner Qualifications

6.3.1   Training

6.3.2   Certification