



OSAC Facial Identification Subcommittee & FISWG Update

International Association for Identification (IAI)

Lora Sims

August 3, 2021

OSAC Facial Identification Subcommittee



OSAC Leadership

- Chair, Lora Sims (Ideal Innovations, Inc.)
- Vice Chair, Angie Yankowski (Michigan State Police)
- Exec. Sec., Dr. Jane Harris (University of Northern Michigan)

OSAC Membership

Name	Organization
Tom Albright	The Salk Institute for Biological Studies (Human Factors Task Group)
Mark Dolfi	LA Co Sheriff Dept
Kaitlyn French	NCTC
Matthew Graves	Defense Forensic Science Center
Steven Johnson	Ideal Innovations, Inc.
Leslie Kelly	NCTC
Mark Lancaster	Battelle (Statistics Task Group)
Dr. Steven Lee	San Jose State University
Allison Miller	Biometrics Operations Division
Paul Moody	Palm Beach County Sheriff's Office
Emily Mullins	USG
Lori Nix	Georgia Bureau of Investigation (Quality Task Group)
Denell Payne	Riverside County Sheriff's Department
Dr. P. Jonathon	NIST
Todd Putorti	New York State Department of Motor Vehicles
Dr. Kirt Simmons	AR Children's Hospital
Lori Varnell	Tarrant County Criminal District Attorney's Office (Legal Task Group)

Edward German

Macon County Sheriff's Office

Jodie Linger

Federal Bureau of Investigation

Antonio Trindade

Dev Technology Group

Neal Gieselman

US Government

Krystal Howard

Michigan State Police

U.S. Affiliates

Foreign Affiliates

Carolyn Dutot

Dr. Netta Lev Tov Chattah

Michael Matheson

Campbell McGhee

Reuben Moreton

Johanna Morley

Patricia Moss

Ruth Phillips

Jason Prince

Dr. Arnout Ruifrok

Geoff Whitaker

Dr. Caroline Wilkinson

Daniel Ferguson

Canada Border Services Agency

Israel National Police

Department of Foreign Affairs

INTERPOL

Qumodo

Metropolitan Police Service

Australian Passport Office

Metropolitan Police Service

Australian Federal Police

Netherlands Forensic Institute

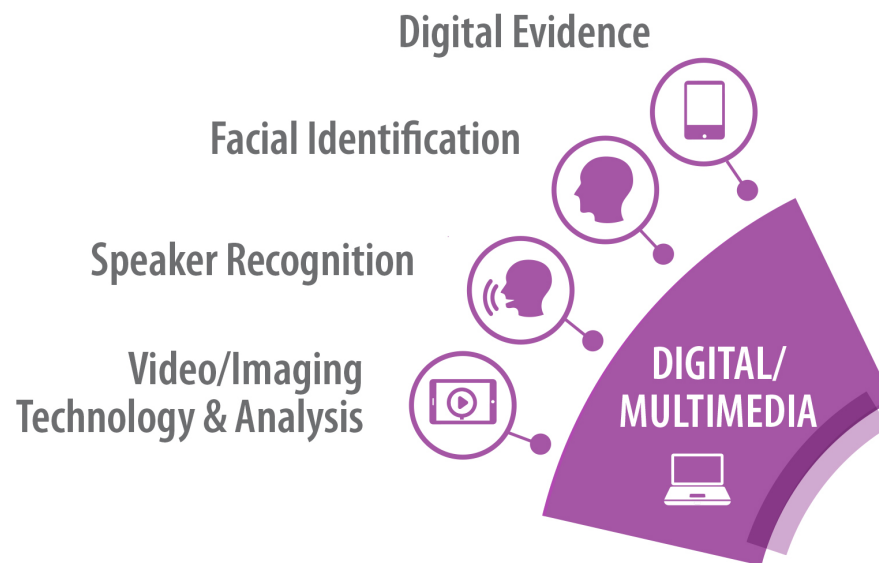
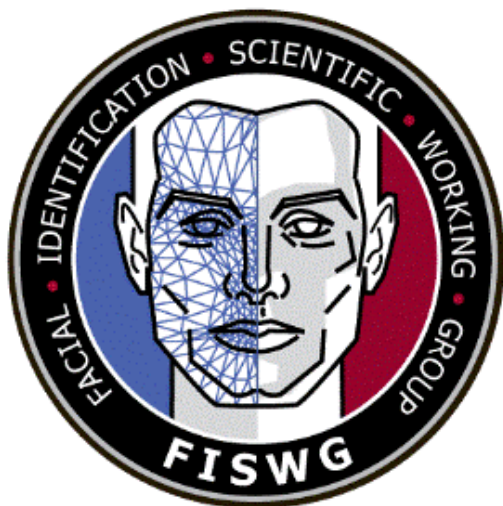
UK Home Office

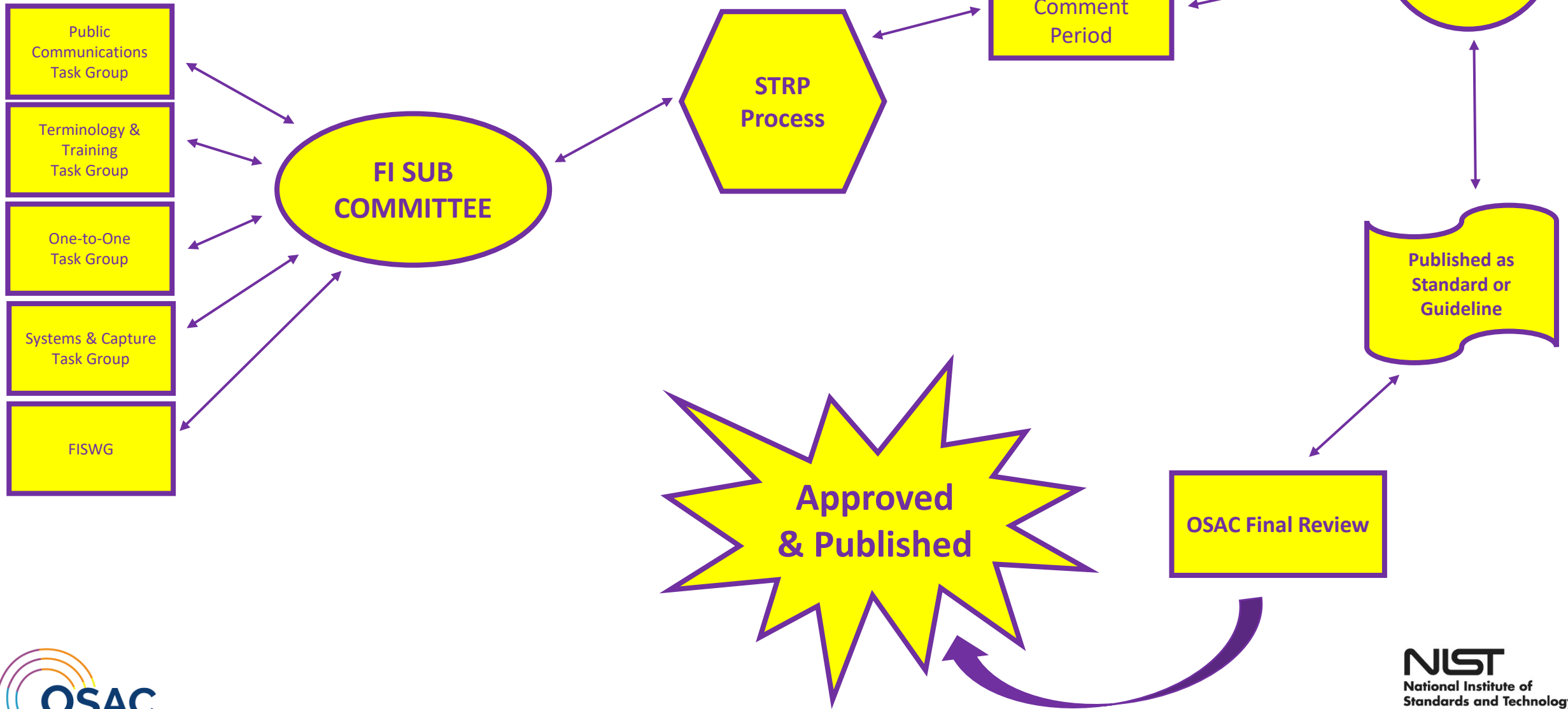
Liverpool School of Art and Design

Australian Passport Office

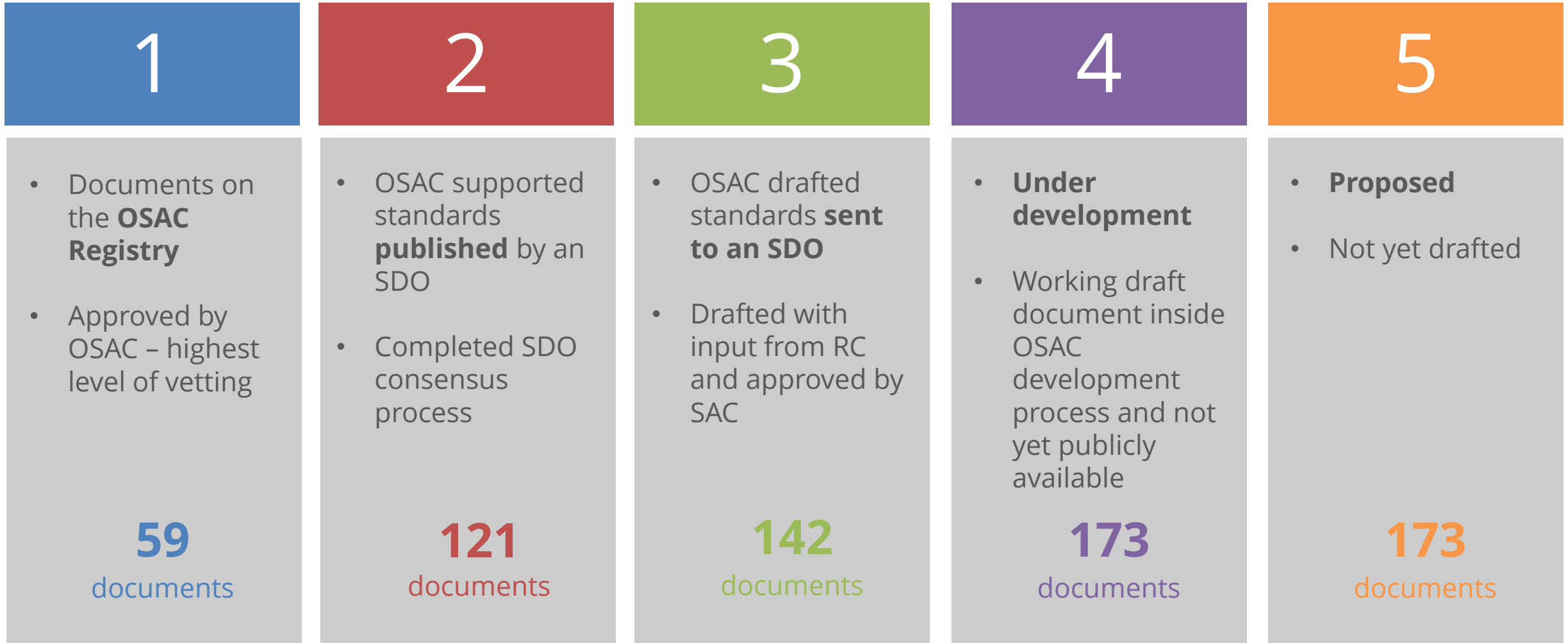
Discipline Description

The Mission of the OSAC Facial Identification Subcommittee is to develop consensus standards and guidelines for the image-based comparisons of human facial features and to provide recommendations for the research and development necessary to advance the state of the science.





OSAC Document Tiers – OSAC-wide #'s



OSAC Document Tiers – FI Sub #'s

1	2	3	4	5
<ul style="list-style-type: none">Documents on the OSAC RegistryApproved by OSAC – highest level of vetting	<ul style="list-style-type: none">OSAC supported standards published by an SDOCompleted SDO consensus process	<ul style="list-style-type: none">OSAC drafted standards sent to an SDODrafted with input from RC and approved by SAC	<ul style="list-style-type: none">Under developmentWorking draft document inside OSAC development process and not yet publicly available	<ul style="list-style-type: none">ProposedNot yet drafted
3 documents	0 (3) documents	3 documents	15 documents	9 documents

Tier 1: OSAC Registry

- *ASTM 3149-18* Standard Guide for Facial Image Comparison Feature List for Morphological Analysis
- *ASTM 3115-18* Capture and Equipment Assessment for Face Recognition Systems
- *ASTM 3148-18* Guidelines for Postmortem Facial Image Capture
- Physical Stability of Facial Features of Adults (*Proposed Standard*)



Tier 2:
Published by
SDO

- *ASTM 3149-18* Standard Guide for Facial Image Comparison Feature List for Morphological Analysis
- *ASTM 3115-18* Capture and Equipment Assessment for Face Recognition Systems
- *ASTM 3148-18* Guidelines for Postmortem Facial Image Capture



Tier 3:
Sent to SDO



ASTM INTERNATIONAL
www.astm.org



- Standard Guide for Image Based Comparison Conclusions (WK74814)*
- Standard Guide for Developing Discipline Specific Methodology by ACE-V (WK72441)
- Guidelines for Image Processing to Improve Automated Facial Recognition Search Performance (WK 74632)
- Guide for Role Based Training in Facial Comparison (WK 74817)*
- Physical Stability of Facial Features of Adults (*Proposed Standard*)

Tier 4: Under Development (drafted)

- Effects of a Scanned Image for Facial Image Comparison
- Effects of a Printed Image for Facial Image Comparison
- Standard Guide for Facial Comparison Overview and Methodology Guidelines
- Minimum Guidelines for Facial Image Comparison Documentation
- Managing Head Coverings, Accessories, and Make-up (HCAM) for Booking Photographs



Tier 4: Under Development (drafted)

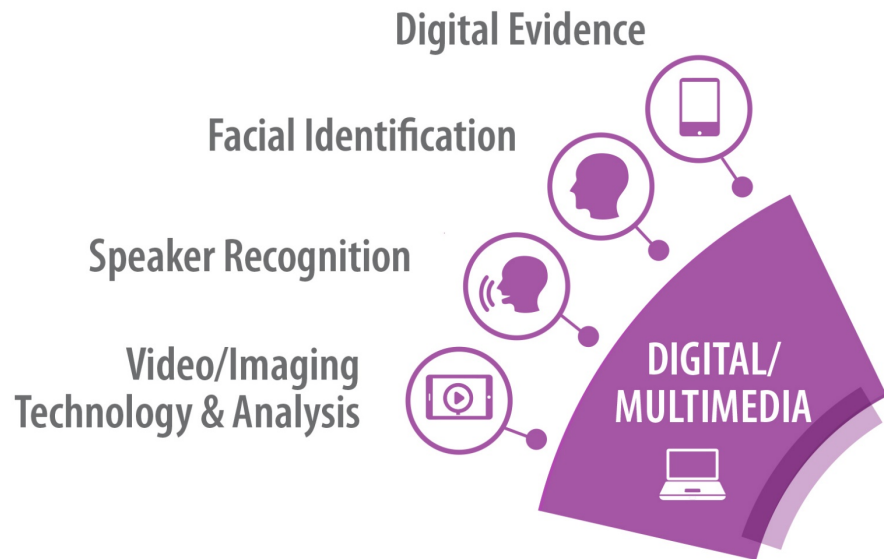
- Minimum Training Criteria When Using Facial Recognition Systems
- Guide for Facial Comparison Awareness Training of Assessors
- Guide for Facial Comparison Training of Reviewers to Competency
- Guide for Facial Comparison Training of Examiners to Competency
- Guide for Mentorship of Facial Comparison Trainees in Role Based Facial Comparison



Other Work Products

- Get approved to publish on OSAC website:
 - Technical Guide on EBTS use with Facial Identification/Application Profiles (*approved*)
 - Technical Guide on Live FR use (*in draft*)

Other Work Products



Guidance on Non-routine Offsite Forensic Examination of Digital/Multimedia Evidence

Prepared by
OSAC Digital and Multimedia Scientific Area Committee

Published July 1, 2020

EXECUTIVE SUMMARY

The emergence of the COVID-19 has led to the implementation of social distancing, travel restrictions, and closure of non-essential facilities. To address these constraints, many organizations have implemented teleworking strategies. Individual organizations have varying abilities and resources to support remote operation and must carefully assess the associated risks. Remote processing is not appropriate for many forensic disciplines but can be feasible for the examination of digital/multimedia evidence. The forensic duplication of digital evidence helps to maintain evidence integrity while permitting remote analysis of working copies.. Encryption, virtual private networks (VPN), Remote Desktop Services (RDS), cloud computing, and secure file transfers can support a secure remote examination environment.

This document provides information on the background, risk mitigation tactics, nonroutine offsite options, and additional considerations for the forensic examination of unclassified forensic digital/multimedia evidence.

BACKGROUND

On March 11, 2020, the World Health Organization (WHO) characterized the COVID-19 outbreak as a pandemic. With the unprecedented impact of COVID-19 on day-to-day interactions, there is a need to address how to maintain a continuity of forensic examination services under such circumstances. Restrictions, such as stay-at-home or shelter-in-place orders, may require a change in how forensic analyses are conducted. To ensure the health and well-being of examiners, as well as the community as a whole, forensic organizations must be aware of strategies and options that reduce the risk of exposure to personnel on-site and for work to be conducted remotely in a secure manner.

Research Gaps Identified – as of 20210803

- Validation of Physical Stability

- Literature review of relevant studies [scientific, medical, academic, and professional] regarding the physical stability of the facial features of adults detailed within the current Physical Stability of Facial Features of Adults document.
- In addition to the literature review, the conclusions reached based on relevant research should be presented to the subcommittee in layman's terms for incorporation into the document.

- Human Factors in Facial Image Comparison

- Research to determine effective strategies for training in facial comparison and to develop testing material.
- Research to validate the methods used by trained examiners to compare faces and establish effective case management and bias mitigation strategies.

- Proper Monitor Selection and Setup for Forensic Image Examinations *new*

- Best practices for the selection and calibration of computer monitors to improve and enhance the human examiner experience when viewing biometric imagery

How Can You Get Involved?

Sign up for OSAC communications

<https://service.govdelivery.com/accounts/USNIST/subscriber/new>



Become an OSAC member

<https://www.nist.gov/topics/organization-scientific-area-committees-forensic-science/apply-join-osac>

Review and comment on documents



Stay informed

<https://www.nist.gov/osac>

How Can You Get Involved?

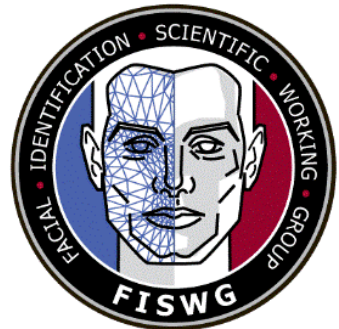


Become an OSAC member:

- Full Member
 - Affiliate
- STRP Member
- Interdisciplinary Member

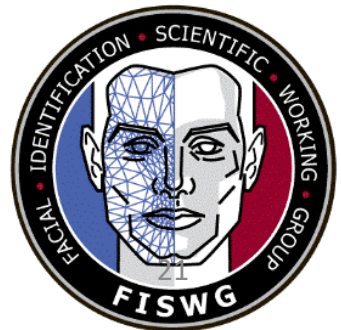
<https://www.nist.gov/topics/organization-scientific-area-committees-forensic-science/apply-join-osac>

Facial Identification Scientific Working Group (FISWG)



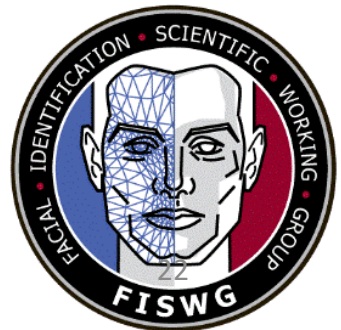
FISWG Leadership

- Chair, Lora Sims (Ideal Innovations, Inc.)
- Vice Chair, Daniel Heltemes (Arizona DPS)
- Exec. Sec., Krystal Howard (Michigan State Police)



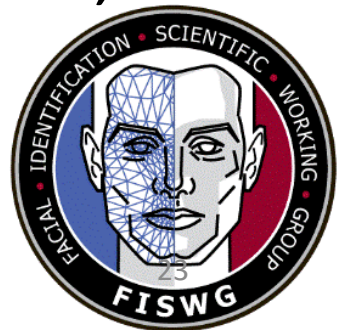
FISWG Membership

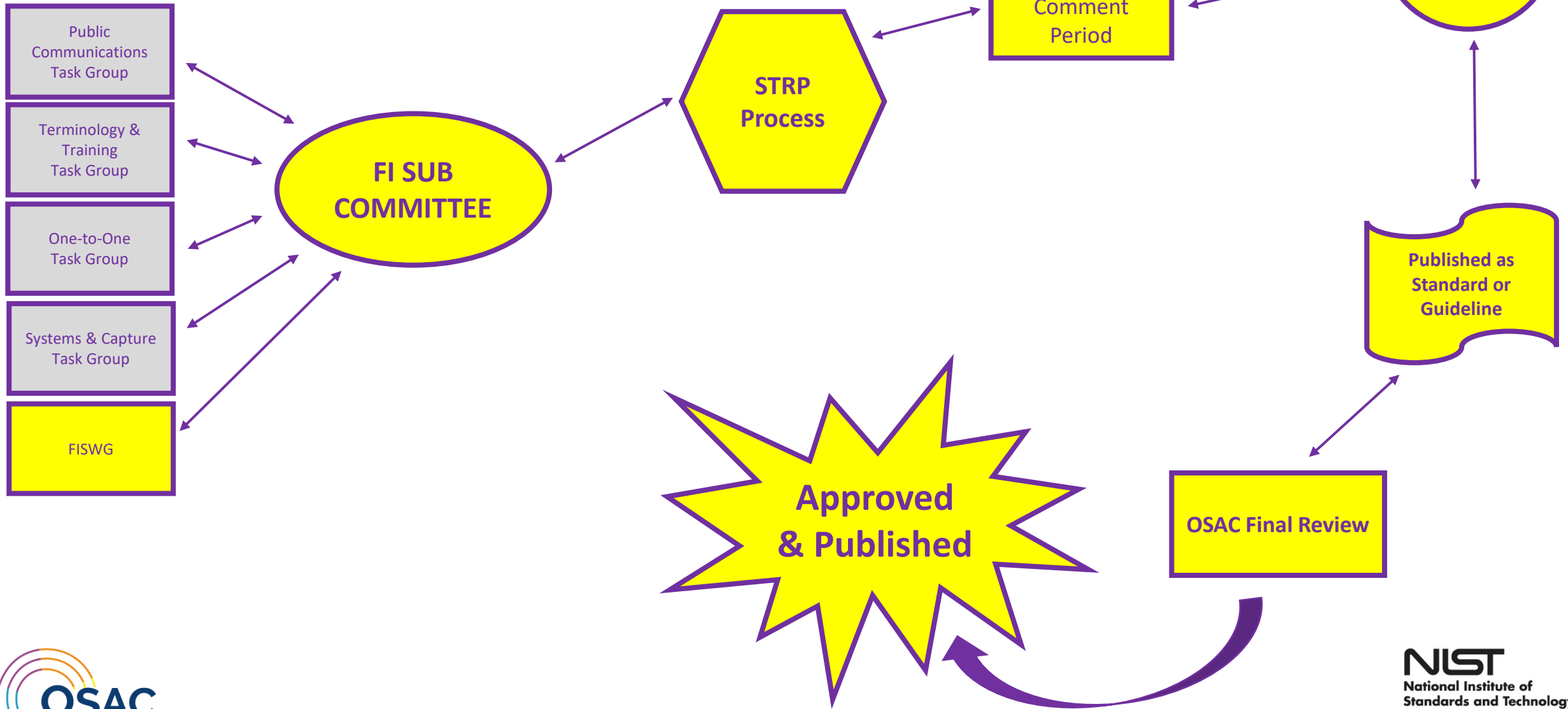
- 90 members
- 60 different agencies
- ~10 different countries



OSAC/FISWG relationship

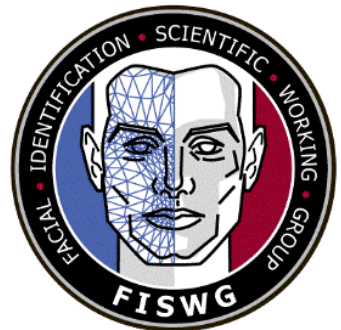
- FISWG & OSAC work together on development of additional standards & guidelines
- FISWG website has many other standards, guidelines, best practices, and use cases
- FISWG website contains FAQs regarding the FI discipline
- Meets separately from OSAC
 - Next FISWG meeting scheduled for October 18-22, 2021, in Phoenix, AZ





FISWG Documents – finalized

- Facial Comparison Overview and Methodology Guidelines
- Facial Recognition Systems Guidelines
- Facial Recognition Systems DMV Use Case
- Understanding and Testing for Facial Recognition Systems Operation Assurance
- Glossary
- Standard Guide for Scanning Facial Images



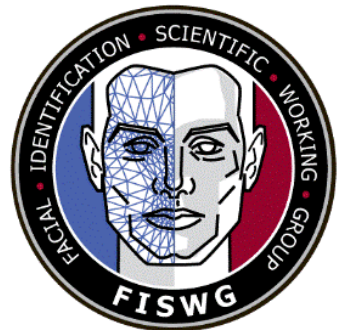
FISWG Documents – finalized

- Effects of Printing Methods on Facial Images used for Comparisons
- Standard Practice/Guide for Image Processing to Improve Automated Facial Recognition Search Performance
- Facial Recognition System Metadata Usage
- Minimum Guidelines for Facial Image Comparison Documentation
- Minimum Training Criteria for Assessors Using Facial Recognition Systems



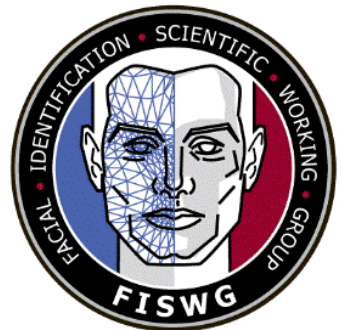
FISWG Documents – recently finalized

- Physical Stability of Facial Features of Adults v2.0
- Face Recognition Systems Operation Assurance: Identity Ground Truth
- Facial Image Comparison Best Practices for Markups and Annotations
- Guide for Facial Comparison Awareness Training of Assessors



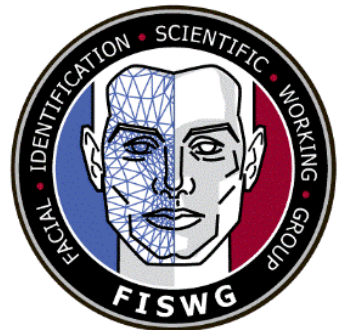
FISWG Documents – draft for comment

- Face Recognition Systems Operation Assurance: Image Quality Assessment
- Minimum Training Criteria When Using Facial Recognition Systems
- *Open for comment until September 30, 2021*



FISWG Application

- Currently accepting membership applications to FISWG
- Application information can be found at www.FISWG.org
- Questions regarding FISWG can be sent to: chair@fiswg.org



THANK YOU!

Lora Sims

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