OSAC

Organization of Scientific Area Committees for Forensic Science

OSAC Facial Identification Subcommittee & FISWG Update

International Association for Identification (IAI)
Lora Sims
August 3, 2021

OSAC Facial Identification Subcommittee

OSAC
Organization of Scientific Area Committees for Forensic Science

NIST
National Institute of Standards and Technology
U.S. Department of Commerce

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)

U.S. Affiliates

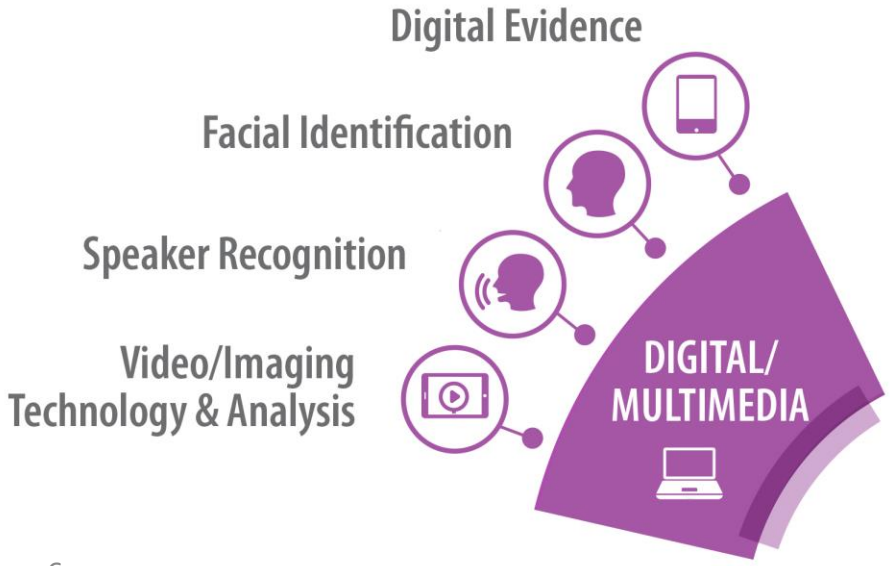
Edward German	Macon County Sheriff's Office
Jodie Linger	Federal Bureau of Investigation
Antonio Trindade	Dev Technology Group
Neal Gieselman	US Government
Krystal Howard	Michigan State Police

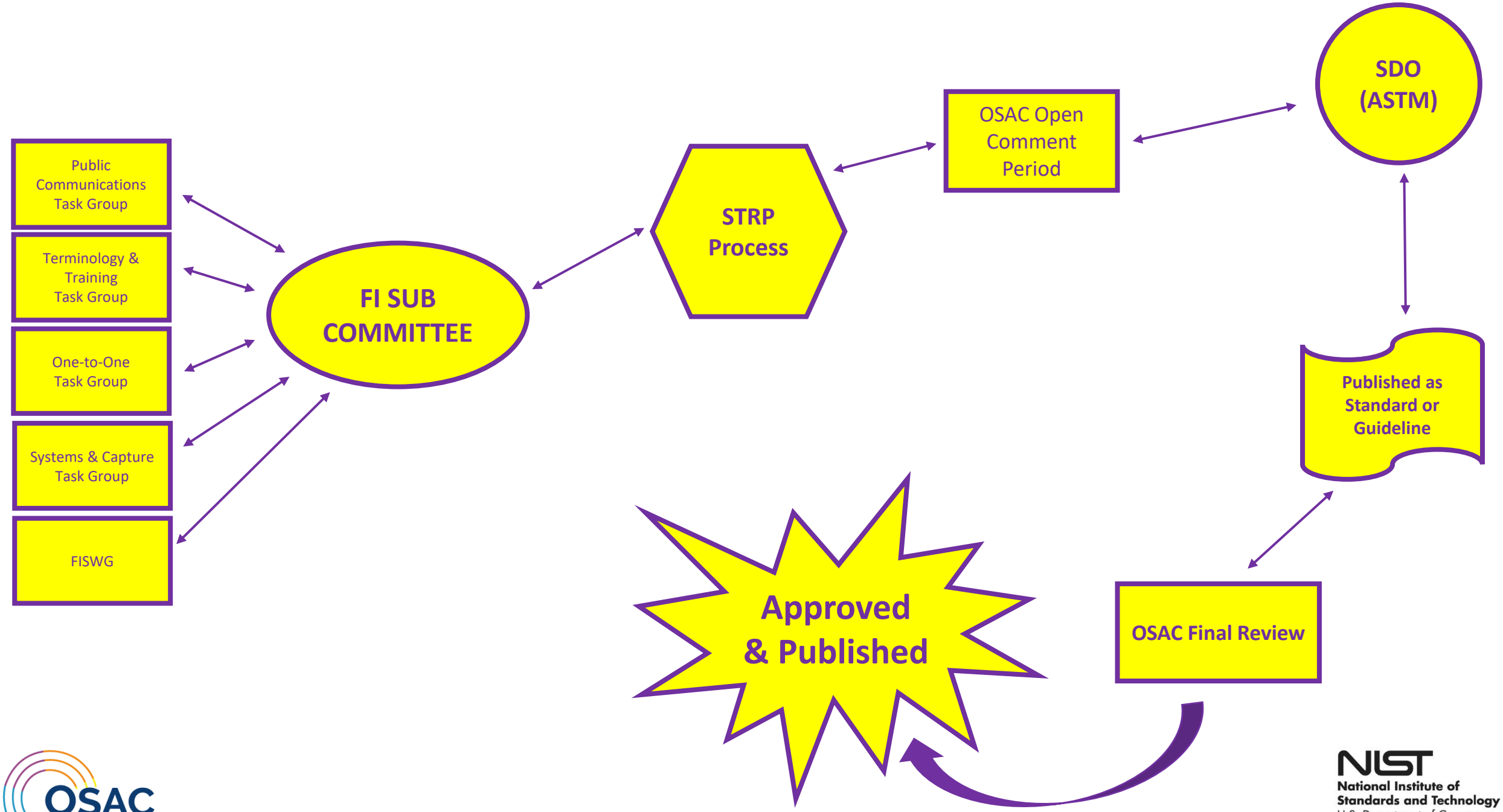
Foreign Affiliates

Carolyn Dutot	Canada Border Services Agency
Dr. Netta Lev Tov Chattah	Israel National Police
Michael Matheson	Department of Foreign Affairs
Campbell McGhee	INTERPOL
Reuben Moreton	Qumodo
Johanna Morley	Metropolitan Police Service
Patricia Moss	Australian Passport Office
Ruth Phillips	Metropolitan Police Service
Jason Prince	Australian Federal Police
Dr. Arnout Ruifrok	Netherlands Forensic Institute
Geoff Whitaker	UK Home Office
Dr. Caroline Wilkinson	Liverpool School of Art and Design
Daniel Ferguson	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.





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OSAC Document Tiers – OSAC-wide #'s

1	2	3	4	5
• Documents on the **OSAC Registry** • Approved by OSAC – highest level of vetting	• OSAC supported standards **published** by an SDO • Completed SDO consensus process	• OSAC drafted standards **sent to an SDO** • Drafted with input from RC and approved by SAC	• **Under development** • Working draft document inside OSAC development process and not yet publicly available	• **Proposed** • Not yet drafted
59 documents	**121** documents	**142** documents	**173** documents	**173** documents

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OSAC Document Tiers – FI Sub #’s

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3 documents	**0 (3)** documents	**3** documents	**15** documents	**9** documents

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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

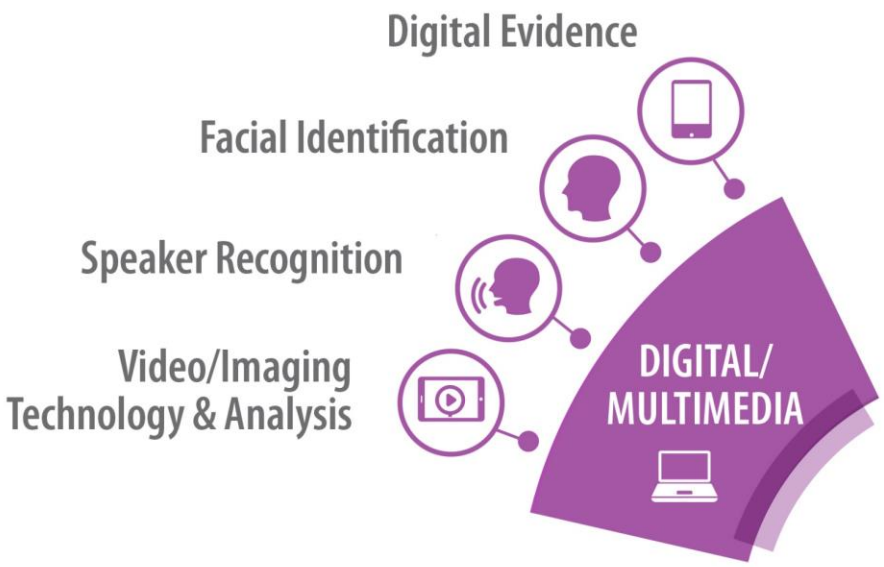
Tier 4: Under Development (drafted)

- 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.

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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 humar 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

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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

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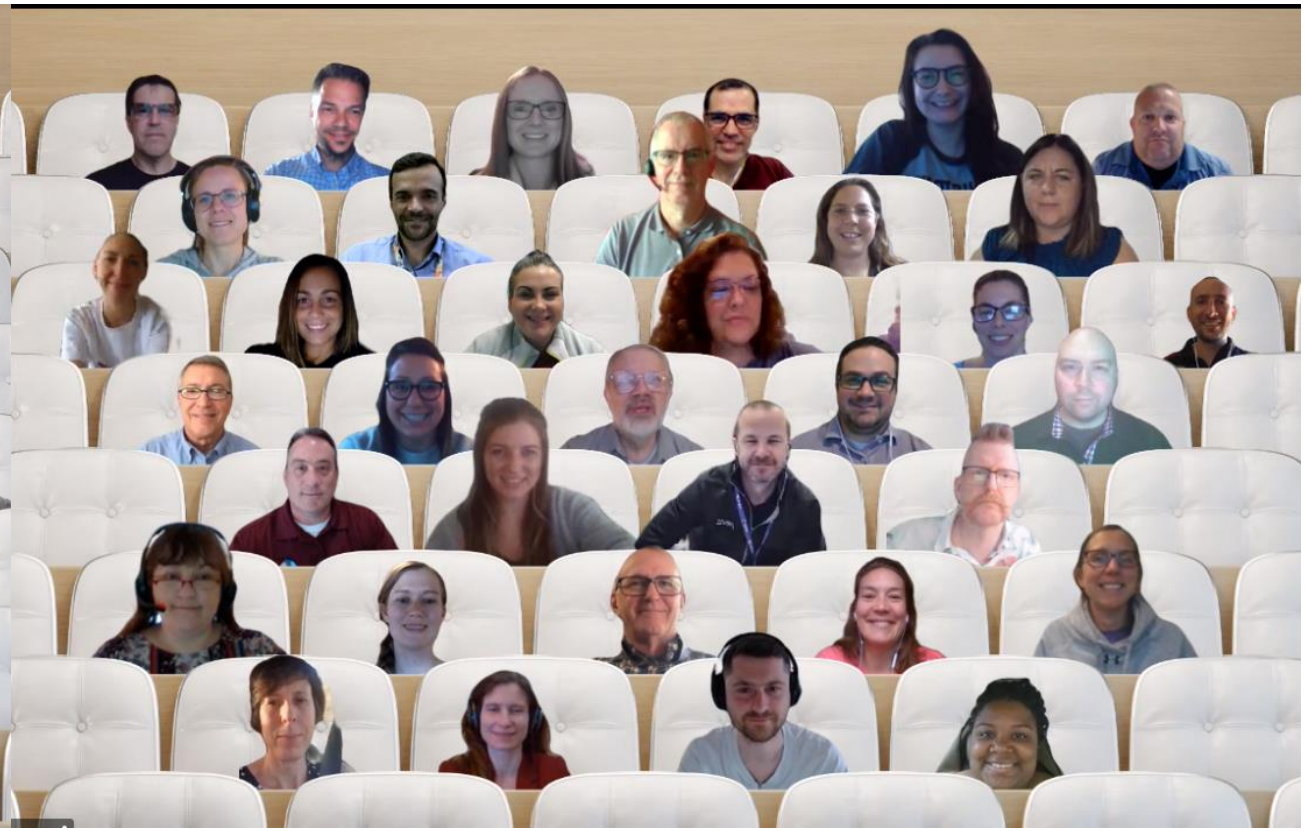
Facial Identification Scientific Working Group (FISWG)



FISWG Leadership

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

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FISWG Membership

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

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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

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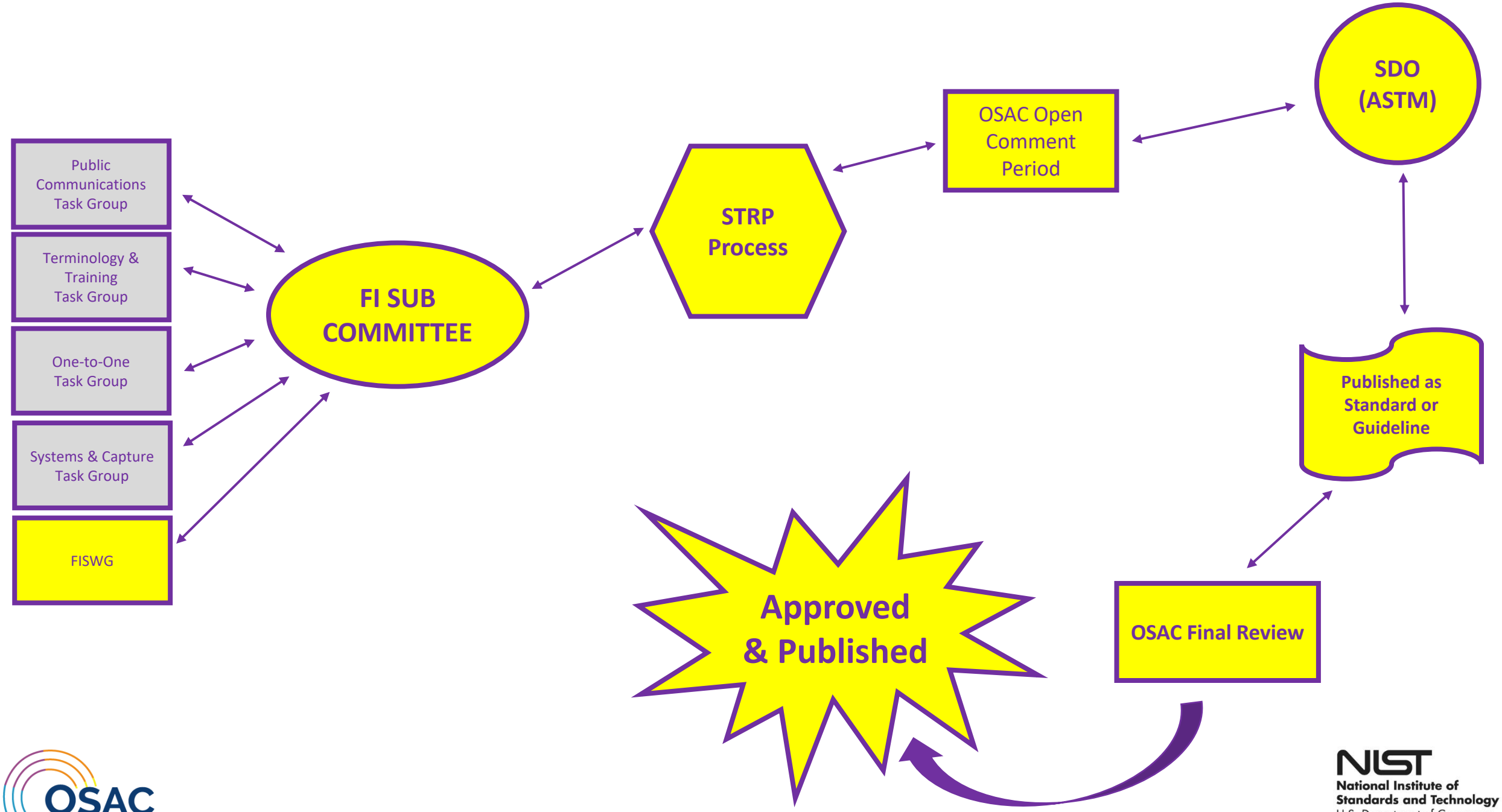

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FISWG Documents – finalized

- 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

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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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