ANSI/NIST Workshop

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ANSI/NIST ITL - Law Enforcement and Beyond

- ANSI/NBS-ICST 1-1986   Minutiae-based fingerprints
- ANSI/NIST-CSL 1-1993   Image based fingerprints
- ANSI/NIST-ITL   1a-1997   Face and SMT added
- ANSI/NIST-ITL   1-2000   Tagged-field/palms /higher resolution/latents
- ANSI/NIST-ITL   1-2007   Iris, flats, face
- ANSI/NIST-ITL   2-2008   XML version of 1-2007

- ANSI/NIST-ITL 1- 2010 2013 ? 2011 2012   Brad Wing Revision

Integrated Automated Fingerprint Identification System (IAFIS)

IAFIS

- National fingerprint repository
- Supports over 18,000 Law Enforcement agencies
  - Local, State, Federal, Tribal, and International agencies
- Currently exceeding requirements
- Over 10 years old
- Initial processing capacity = 62,500
- Record high = 297,816
- Accuracy = 92%

NEXT
GENERATION
IDENTIFICATION

- IAFIS has lived up to and vastly exceeded performance expectations

- Now is the time to design for the future, rather than reacting to it

# Today's FBI: Changing to Meet Evolving Threats

Mission Evolution
- Changed since IAFIS went live in 1999
- Supports both criminal and noncriminal justice requirements
- Counterterrorism mission

Focus on Technology Advancements
- Improve biometric services
- Enhanced CJIS services
- Technological advancements to improve the system

Changing Business Needs
- Interoperability
- Increased federal, state and local demand for identification services
- New legislation has significantly increased background checks

Infrastructure

People   Core   Processes

Partnerships
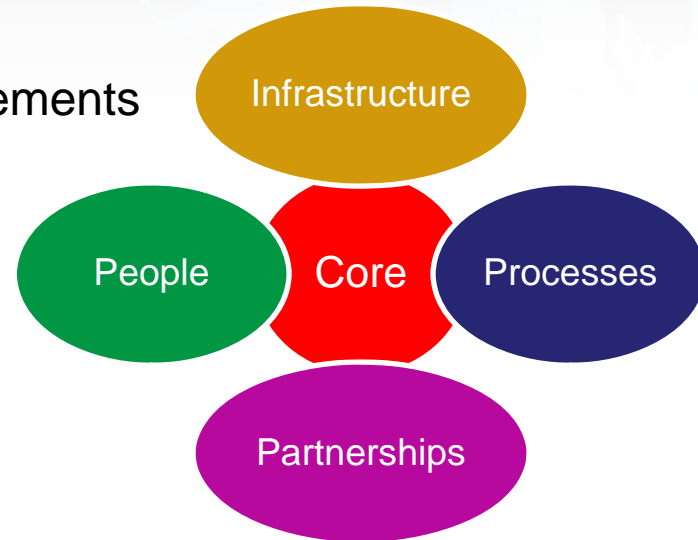
The Path to NGI

NGI is a collaborative effort among the Bureau, the CJIS Advisory Policy Board and members of the Compact Council, comprised of local, state, federal, and international representatives.

NGI Drivers and Requirements

Flexibility   **Additional Functionality**

Capacity   **Interoperability**

Accuracy   **Availability**

Response Times

FBI Biometrics Today

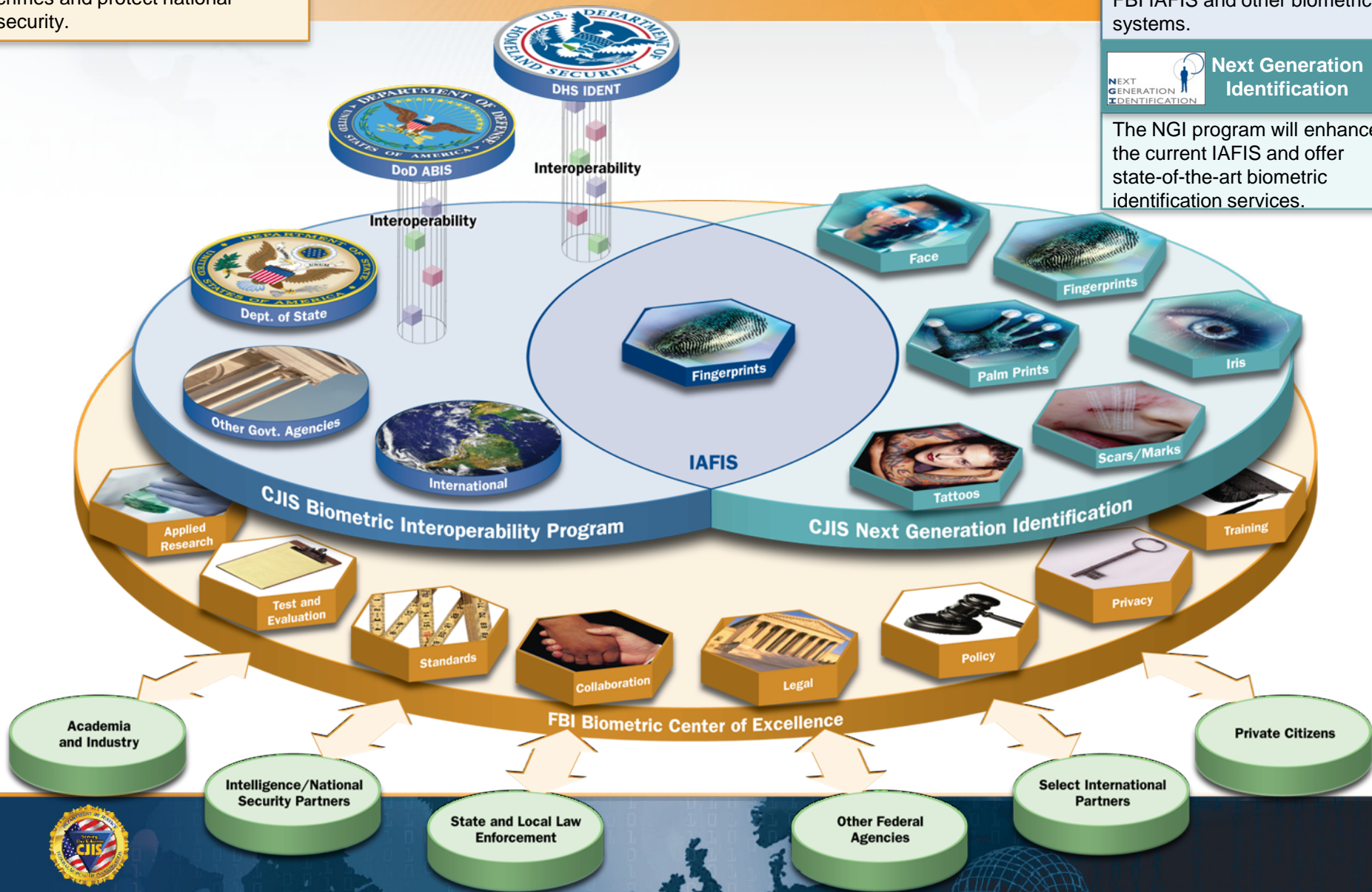The BCOE is the FBI program for exploring new and advanced biometric capabilities to solve crimes and protect national security.

The Biometric Interoperability Program establishes interoperability between the FBI IAFIS and other biometric systems.
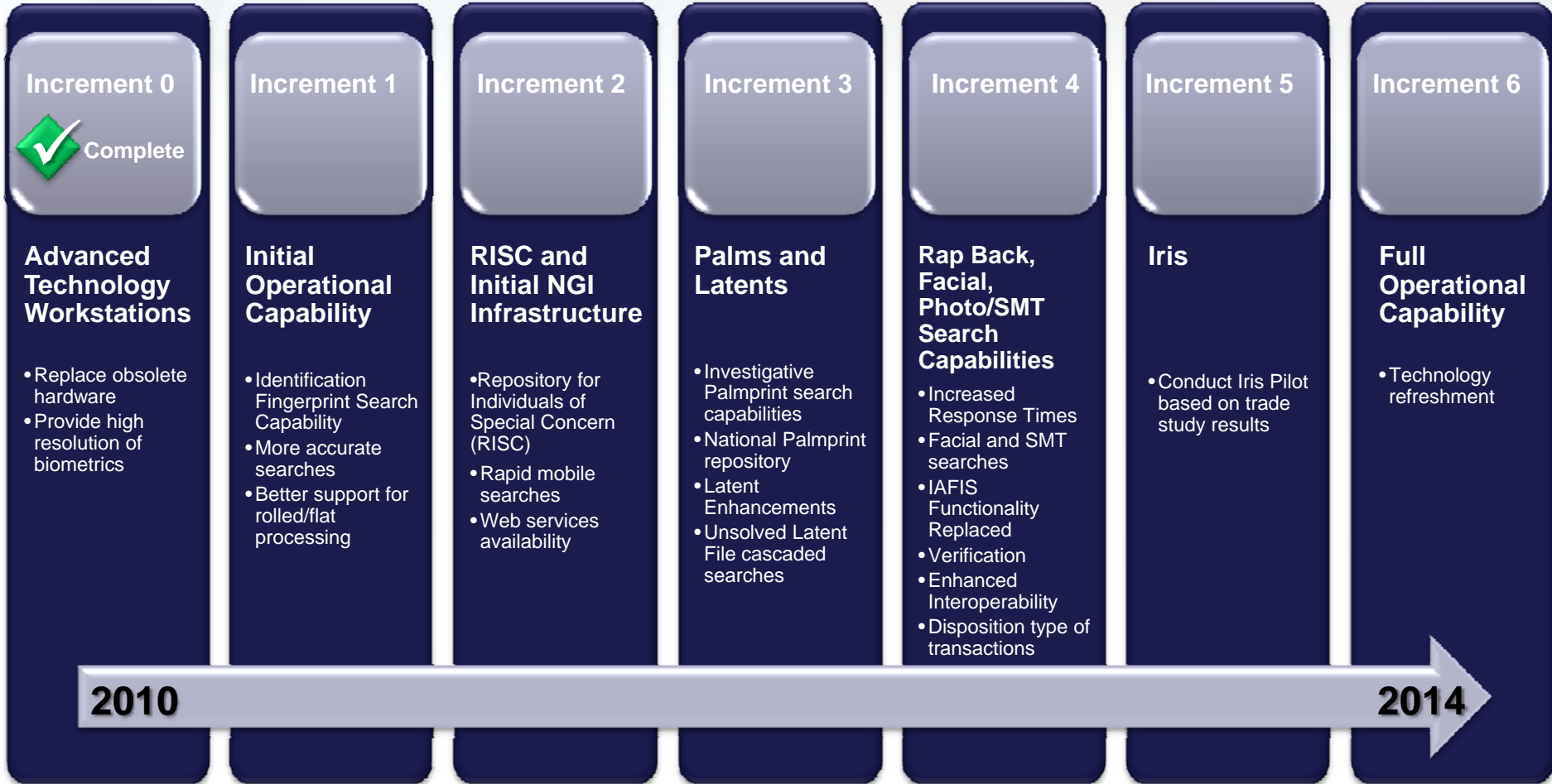
Next Generation Identification

The NGI program will enhance the current IAFIS and offer state-of-the-art biometric identification services.

NGI Tentative Implementation Schedule

Increment 0

✅ Complete

Advanced Technology Workstations

- Replace obsolete hardware
- Provide high resolution of biometrics

Increment 1

Initial Operational Capability

- Identification Fingerprint Search Capability
- More accurate searches
- Better support for rolled/flat processing

Increment 2

RISC and Initial NGI Infrastructure

- Repository for Individuals of Special Concern (RISC)
- Rapid mobile searches
- Web services availability

Increment 3

Palms and Latents

- Investigative Palmprint search capabilities
- National Palmprint repository
- Latent Enhancements
- Unsolved Latent File cascaded searches

Increment 4

Rap Back, Facial, Photo/SMT Search Capabilities

- Increased Response Times
- Facial and SMT searches
- IAFIS Functionality Replaced
- Verification
- Enhanced Interoperability
- Disposition type of transactions

Increment 5

Iris

- Conduct Iris Pilot based on trade study results

Increment 6

Full Operational Capability

- Technology refreshment

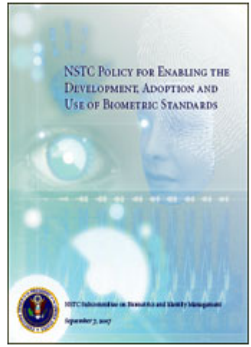**2010** ——————————————————————————————→ **2014**

Biometrics.gov

Home   Biometrics Reference Room   Presidential Directives   NSTC Subcommittee on Biometrics and Identity Management Room   Standards   Partner Sites

Standards

⚙ Standards

NSTC Policy for Enabling the Development, Adoption and Use of Biometric Standards

The goal of this Policy is to establish a framework to reach interagency consensus on biometric standards adoption for the Federal government. Federal agency adoption of these recommended standards, and associated conformity assessment programs, will enable necessary next generation Federal biometric systems, facilitate biometric system interoperability, and enhance the effectiveness of biometrics products and processes.   [Download] (2MB)

Registry of USG Recommended Biometric Standards

The Registry of USG Recommended Biometric Standards (Registry) supplements the NSTC Policy for Enabling the Development, Adoption and Use of Biometric Standards. This Registry is based upon interagency consensus on biometric standards required to enable the interoperability of various Federal biometric applications, and to guide Federal agencies as they develop and implement related biometric programs. The Subcommittee will continuously review the content of this document, and release updated versions as required to assist

NGI Specifications – EBTS

- Current Version 9.1 (which will be used for the NGI Increment 2 baseline)
- www.FBIBiospecs.org website contains all previous versions (both redlined and "clean")
- Goal to post both binary SMTP and XML EBTS versions simultaneously
- Placeholders/limited information for NGI future capabilities
- Recently re-arranged (v9.0) to match NGI documentation
  (i.e., formatted into the six separate NGI cores services)
  - Identification
  - Verification
  - Information
  - Investigative
  - Notification
  - Data Management

Final Thoughts - ANSI/NIST Standard Update Considerations

- Is there a need?

- Does it support interoperability?

- How will legacy systems be impacted?

- Is it complete/mature enough?

- Can/Has it been tested before we adopt it?

- Are we fixing a problem or creating a new one?

- If someone broke the rules/guidelines does it mean we have to change them?

THANK YOU – LOOKING FORWARD TO A GREAT WORKSHOP