



BIMA

BIOMETRICS
IDENTITY
MANAGEMENT
AGENCY

National Defense Industrial Association Biometrics Conference Roadmap to Tomorrow

23 February 2011
Dr. Thomas Killion






Vision: Protect the nation through the employment of Biometrics capabilities



Key Players

- **OSD**
 - **DDR&E (PSA)**
 - **DDB**
- **HQDA**
 - **G-2**
 - **G-3/5/7**
 - **G-6**
 - **ASA (ALT) (PEO-EIS)**
- **Joint Staff**
- **Services**
- **COCOMs**
- **OPMG**
- **TRADOC Capabilities Manager**
- Biometrics & Forensics**



Department of Defense
DIRECTIVE


SUBJECT: Department of Defense Biometrics Implementation

References: See Enclosure 1

1. PURPOSE

Under the authority of Reference (b):

- 1.1. Establish the Department of Defense Biometrics Enterprise.
- 1.2. Designate the Secretary of Defense as the Executive Agent for DoD Biometrics. Staff Assistant positions shall include interagency representation.
- 1.3. Designate the Secretary of Defense as the Executive Agent for the integration of DoD Biometrics with DoD Information Operations. Reference (c).
- 1.4. Reinstate the Department of Defense Biometrics Enterprise Directive (DoD Biometrics Enterprise Directive).
- 1.5. Supercede any conflicting policies or procedures that conflict with this Directive.



Department of Defense
INSTRUCTION

NUMBER 5521.bb

USD(AT&L)

SUBJECT: Department of Defense Biometrics Implementation

References: See Enclosure 1

1. PURPOSE

- a. This Instruction establishes policy, assigns responsibilities, and provides instructions for continuity plan development in accordance with the authority in DoD Directive 5134.01 (Reference (a)) and under the auspices of the Secretary of the Army as the DoD Executive Agent (EA) for DoD Biometrics in accordance with DoD Directive 5521.01E (Reference (b)).
- b. Nothing in this Instruction shall alter the responsibilities, functions, and relationships specified for intelligence purposes included in DoD Directive 5143.01(Reference (c)).
- c. This Instruction incorporates and cancels Under Secretary of Defense for Acquisition, Technology, and Logistics (USD(AT&L) Memorandum (Reference (d))).

2. APPLICABILITY. This Instruction applies to OSD, the Military Departments, the Office of the Chairman of the Joint Chiefs of Staff and the Joint Staff, the Combatant Commands, the Office of the Inspector General of the Department of Defense, the Defense Agencies, the DoD Field Activities, and all other organizational entities within the Department of Defense (hereafter referred to collectively as the "DoD Components").

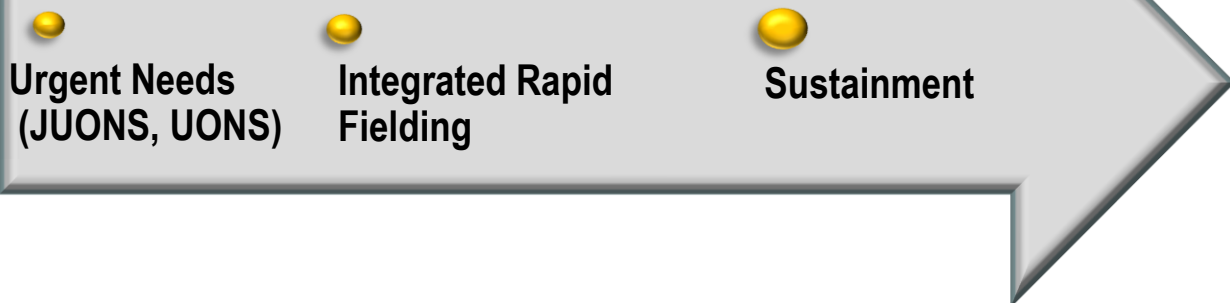
3. DEFINITIONS. See Glossary.

4. POLICY. It is DoD policy that:

- a. DoD Biometrics shall be implemented in accordance with Reference (b), National Security Presidential Directive 59 and Homeland Security Presidential Directive 24 (Reference



Rapid Acquisition

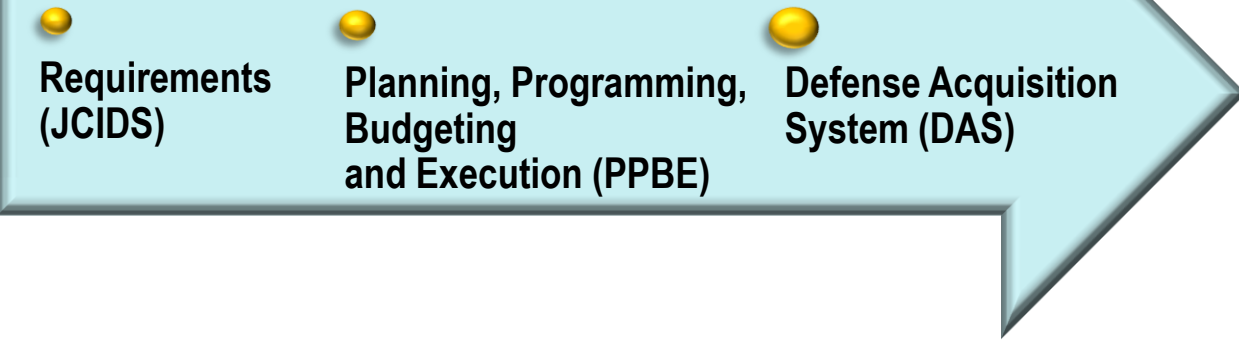


Urgent Capabilities

ABIS
BAT-A (w/ refresh)
HIIDE
BISA
SEEK

If need is Persistent

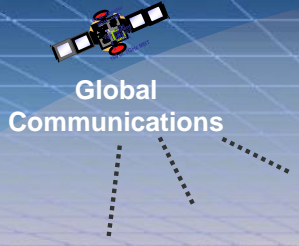
Deliberate Acquisition



BEC – Milestone B, 4Q FY 12
JPI v2 – Milestone B, 4Q FY 12
IDS – FY 14+

Program of Record

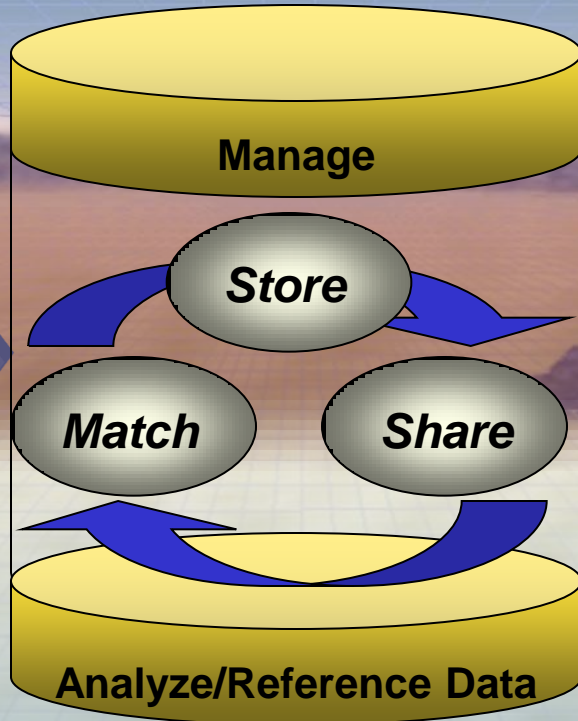
Biometrics Process in Support of DoD Operations



Biometric Modalities

- Fingerprint
- Iris
- Face
- Palm
- DNA
- Voice
- Future Modalities

Collect



Decide Act

Operational Applications

- Populace Management
- Force Protection
- Access
- Surveillance
- Monitoring
- Combat ID

Military Operations and Business Functions



Border Control Points

Criminal Investigators

Special Operations Forces

Base Access/Force Protection

HUMINT

Joint, Interagency, Multinational War fighter (JIM)

Humanitarian Relief

Civil Affairs

- DoD ABIS online July 2004 (fingerprints only)
- DoD NG ABIS online 30 January 2009 (multi-modal)
- Stores and matches fingerprint, iris, face, and palm modalities
- 3,800+ transactions per day; rated for 8,000
- 4.2M records rated capacity
- Greater operational capability
 - Single or multi-modal processing
 - Expandable to process additional modalities
 - 95% lights-out matches
 - Latent to latent searches
 - 120k latent fingerprints
 - 8600 latent matches; 3400 latent to latent matches
 - Latent palm print capabilities
- During data migration from ABIS to NG-ABIS, observed 10% new matches the previous system missed

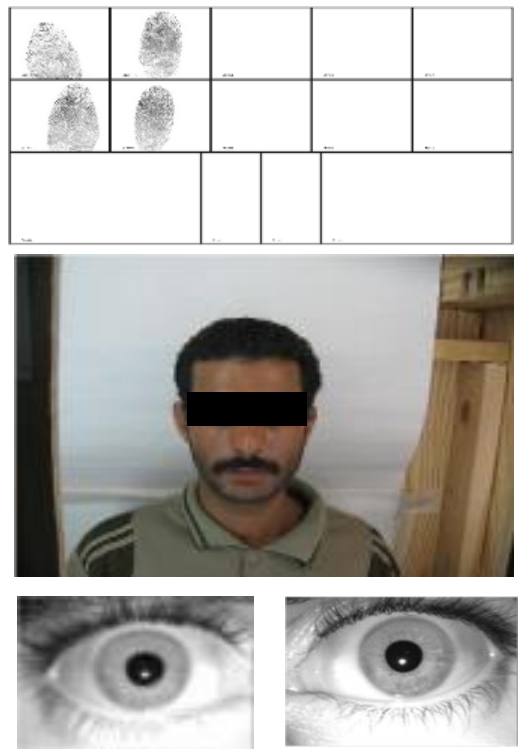




Multi-Modal Biometric Fusion

Multi-modal biometric fusion (currently only DoD ABIS) results in:

- More matches through the correlation of other modalities
- More auto-identification, with lower number of manual examinations required
- Improved overall system accuracy and performance



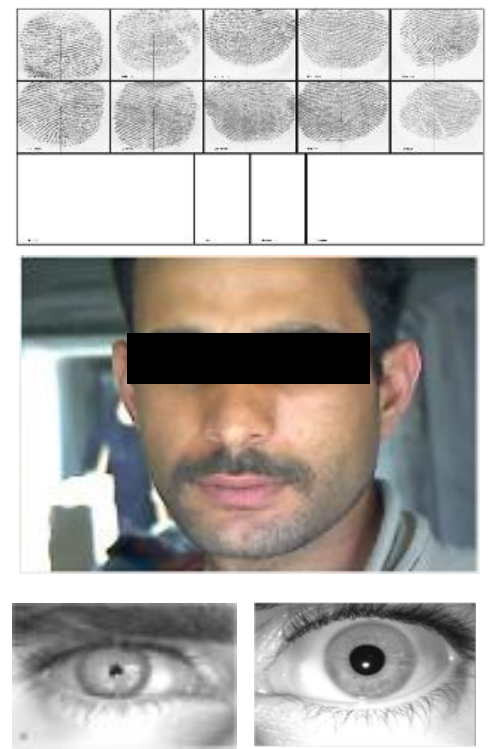
← Prints: Inconclusive →

← Face: Non-IDENT →

← Iris: Inconclusive →

FUSION

MATCH!



The fusion algorithm combined near matches to identify the individual.

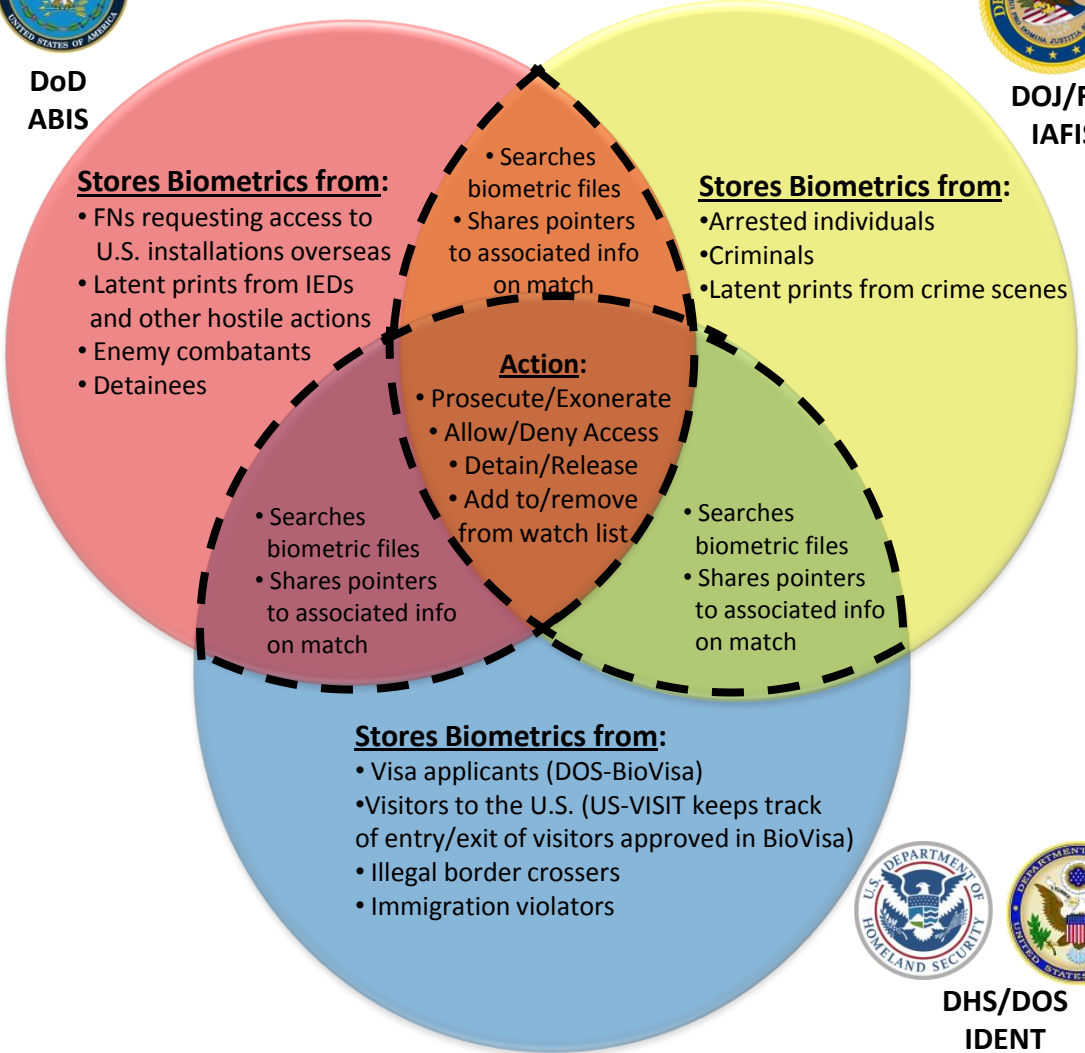
Desired End State



DoD
ABIS



DOJ/FBI
IAFIS



DHS/DOS
IDENT



Current State



- **New Modalities – Voice, Gait, Ear Shape, etc**
- **Enhanced Capabilities**
 - **Facial Image Based Meta Data**
 - **Digitally-signed forensics images**
 - **Matching Algorithm**
- **New Domains**
 - **Friendly Biometrics (IDProTECT)**
 - **Defining New DoD Requirements**
 - **Addressing the Policy Considerations within new domains**

Biometrics is an ENDURING CAPABILITY

Even after the completion of Overseas Contingency Operations, Biometrics will remain an enduring capability that enables DoD Stakeholders to execute their missions.

- **Biometrics will continue to support the Warfighter across the range of military operations**
- **Biometrics capabilities will grow to enable operations in new and evolving mission areas**
- **DoD Biometrics will expand our relationships and interaction with Interagency Partners**



Questions