

**BIOMETRICS**  
Standardization for the Future

# Biometric Standards

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## Agenda

- Need for Biometric Standards
- Current State of Biometric Standards
- Biometric Standards Organizations
- Standards Development Process
- BMO's Approach to Biometrics Standards Development
- Questions & Answers

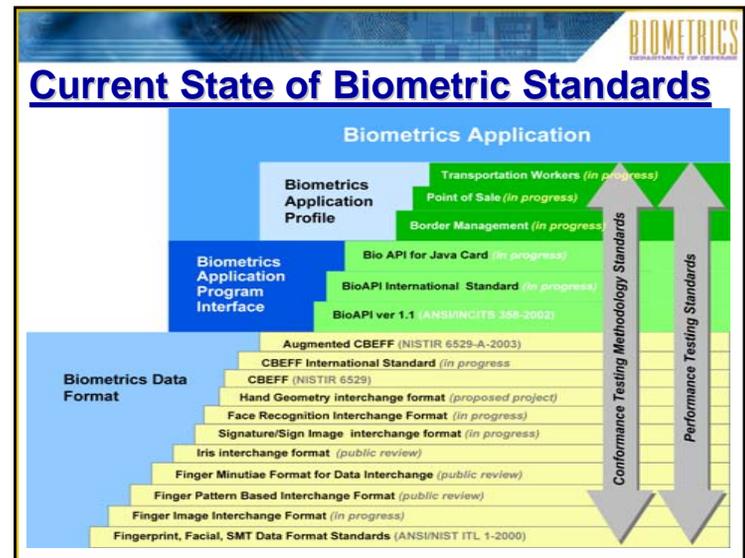
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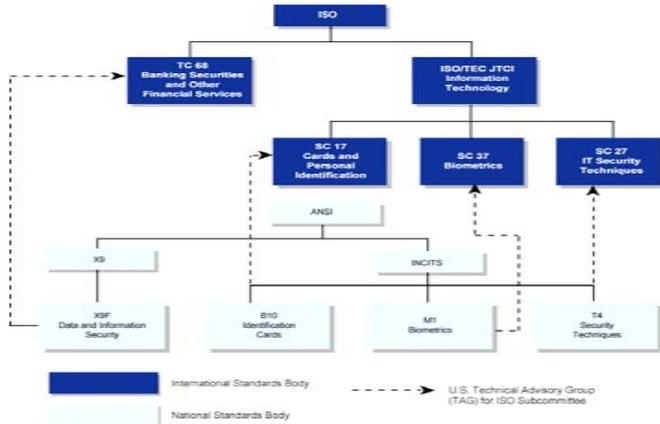
## Need for Biometric Standards

- Currently, there is a general lack of interoperability between biometric data formats generated by various vendors
- There are no established standards for measuring the accuracy of biometrics products
- There are no established standards for conformance testing
- Lack of standards impedes the wide-scale adoption of interoperable biometric technologies

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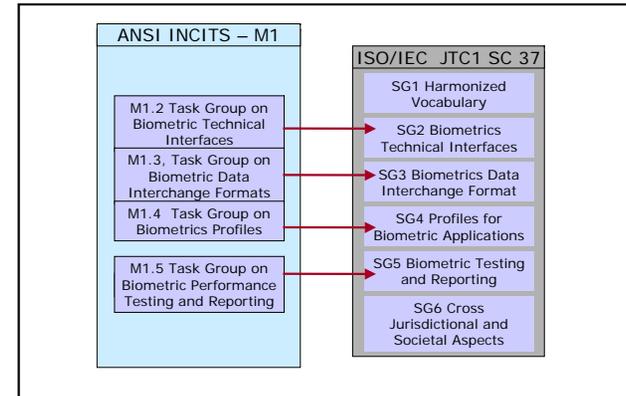


## Biometric Standards Organizations



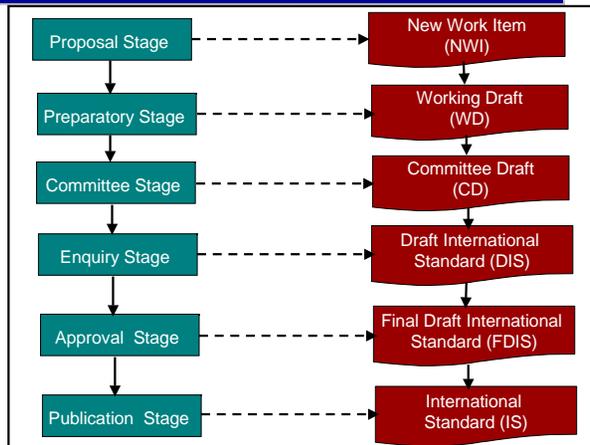
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## INCITS M1 and SC 37 Structure



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## Standards Development Process



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## BMO's Approach to Biometric Standards Development

Coordinate with DoD services and agencies and other federal agencies

Develop biometric standards in priority areas where gaps exist:

- Conformance testing methodology standards
- Conformance test suite
- DoD application profile standards

Exert DoD influence on biometrics industry through participation in standards bodies

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## Coordination in the Development of the Biometrics Standards

- ❑ Coordinating the BMO Biometrics Standards Working Group
  - Includes members from: BMO, BFC, AF, Navy, Army, DISA, NSA, DMDC, Army PMSET-D, and NIST
- ❑ Developed the DoD Biometric Standards Approach Document to:
  - Provide a comprehensive approach for identification, participation, and development of biometric standards within the DoD
  - Ensure the DoD biometric standards development approach is consistent with DoD guidance and federal laws

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## Coordination in the Development of the Biometrics Standards

- ❑ In collaboration with DHS, NIST and NSA, BMO is organizing a US Government workshop to coordinate the development of biometrics standards

“The BMO’s collaborative approach in the development of national and international biometrics standards is an example to imitate. Taking a proactive role in the development of these standards and seeking coordination with other government agencies and the industry will support DoD’s decision of adopting open-system-based biometric technology solutions”

Fernando Podio  
Chair of INCITS M1 & ISO/IEC JTC1 SC37  
Defense Standardization Journal, Mar 2004

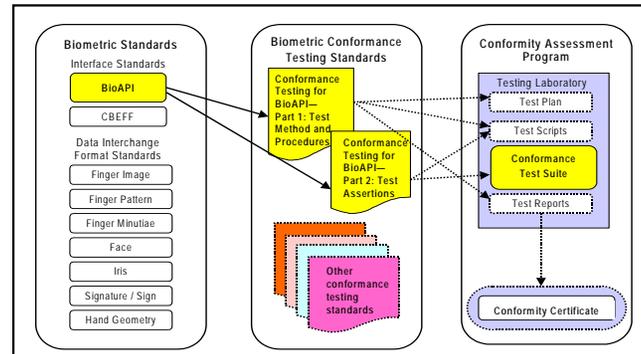
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## Development of Biometrics Standards

- ❑ Currently the BMO is leading the development of the following standards:
  - ISO 24709-1, “BioAPI Conformance Testing – Part 1: Methods and Procedures” (Project approved May 2003, first WD completed)
  - ANSI INCITS Project 1676-D “Information Technology - Biometric Profile - Interoperability and Data Interchange - DoD Implementations” (Project approved Feb 2004, first WD in progress)
  - BioAPI Conformance Testing – Part 2: Test Assertions (Project Proposed to and approved by M1 – Will be submitted to SC37 for vote in June 2004)
  - Conformance Testing for Finger Image Standards (Project proposal will be submitted to M, May 2004)

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## Development of Conformance Testing Standards



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## Development of DoD Application Profile Standard

- ❑ Biometric base standards are not sufficient to achieve interoperability
- ❑ Profiles are used to make decisions about optional data fields, optional functionality in interface standards (such as BioAPI), and places where ranges of values are allowed
- ❑ Profiles are intended to relate base standards to the *system architecture* envisioned for a particular industry or class of applications
- ❑ Profiles can serve as a consolidated list of applicable standards

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## Participation in Standards Organizations

- ❑ BMO is actively participating in the following standards organizations:
  - ❑ INCITS M1: Biometrics
  - ❑ INCITS B10: Identification Cards
  - ❑ INCITS T4: Security Techniques
  - ❑ ISO/IEC JTC1 SC37: Biometrics
  - ❑ ISO/IEC JTC1 SC27: IT Security Techniques
  - ❑ BioAPI Consortium

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## Summary:

- ❑ Biometric standards are essential for interoperability
- ❑ During the past year, there has been significant progress in the standardization of biometrics data interchange formats
- ❑ BMO is actively participating in the development of biometric standards

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