

Interagency Advisory Board

Meeting Agenda, March 5, 2009

1. **Opening Remarks (Tim Baldrige, NASA)**
2. **Federal Identity, Credential, and Access Management (ICAM) – The Future of the Government’s IDM Strategy (Judy Spencer, GSA)**
3. **Co-Development of PKI/BLADE and PIV: Requirements and Roadmaps (Jarrod Frahm, DOS and Bill Macgregor, NIST)**
4. **Winter Chill Exercise Debrief (Craig Wilson, FEMA)**
5. **MSO SSP Update (Steve Duncan, GSA)**
6. **PAIIWG Update (Tim Baldrige, NASA)**
7. **Closing Remarks (Tim Baldrige, NASA)**



Information Resource Management

PKI/BLADE

Your Key to Information Security

Government Smart Card
Interagency Advisory Board

IAB

Department of State

Bureau of Information Resource Management (IRM)

Directorate of Information Technology Infrastructure (ITI)

Systems Integrity Division (SI)

Information Integrity Branch (IIB)

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March 5, 2009

IRM/OPS/ITI/SI/IIB



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Biometric Objectives

- Provide an operational and more secure IT environment for networked users that complies with Federal regulations
 - ✓ Use technology to keep ahead of existing security trends, including the growing weaknesses of passwords
 - ✓ Employ multi-factor authentication
 - ✓ Provide convenience to the user at or above the current level available without compromising security
- Use the existing infrastructure wherever possible
 - ✓ Existing DoS Smart ID badges
 - ✓ Existing High Assurance PKI system
 - ✓ Already approved COTS products reduce risk and costs



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Biometric Solution

- Existing PKI-enabled Smart ID badges replace need for username/password for workstation logon
 - PKI keys on smart card used to authenticate securely using Kerberos
 - Active Directory provides a repository for PKI information and forces smart card logon at clients
- Biometrics used to unlock PKI credentials on card
 - Fingerprint template stored only on smart card
 - Match-on-Card technology performs fingerprint matching for release of PKI credentials



BLADE

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Biometrics for Logical Access, Development & Execution

- Integrates PKI and Smart Card with fingerprint Biometric
- Requires Windows XP and Active Directory

Current Status:

Enabling Single Sign On (SSO) for DoS applications and websites

Completing Overseas deployments and Planning HW refresh

Near Term Goal:

Elimination of Passwords on the Department OpenNet+ system (over 45,000 users at over 300 offices and posts world wide)

Future Goal:

Implementation on the Department's ClassNet.



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BLADE Technology

- Precise MC Series hardware integrates biometric capture device with smart card reader.
- Uses existing smart badges with Match-On-Card (MOC).
 - ✓ Only extracted templates stored on the smart card (up to 4 fingers)
 - ✓ Biometric templates never leave the smart card
 - ✓ 1-1 verification occurs on the smart card
- Matching algorithm is a hybrid of minutiae and pattern matching technologies.



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HSPD-12

- Phase 1 – New applications developed to use either PIV authentication certificate or PKI/BLADE signing certificate for authentication
- Phase 2 – Incorporation of PKI/BLADE container and PIV container on a single PIV compliant smart card.
- Phase 3 – Move PKI/BLADE functionality into PIV Container (w/ NIST-approved authentication)



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BLADE Challenges

- Integration of new logon paradigm
 - Education and training
 - Coordination among various approval groups
- Coordination among multiple vendor products
 - Card Reader / Middleware / Application interaction
 - Use of open standards where possible
- Implementation within DoS environment
 - HW/SW upgrades both domestic and overseas
 - Availability of sufficient smart card memory
 - Failure To Enroll (FTE) mitigation



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Summary

- BLADE/PKI has strengthened IT security & access control to DoS computer networks and applications.
- Biometrics & PKI are mutually supporting and both are stored on the Smart Cards to provide added security.
- BLADE/PKI will return to a single credential that is employed in a number of SSO solutions.



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Questions & Contacts



**... about the
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PKI/BLADE Program**

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