TRANSPORTATION SECURITY ADMINISTRATION OFFICE OF SECURITY TECHNOLOGY

Airport Biometrics Access Control Qualified Products Lists (QPL) Renee Hendricks, OST Engineer



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Agenda

- Mandate
- QPL Process
- QPL Phases
- Current Biometrics QPL
- QPL Protocol Test Requirements
- QPL Biometric Performance Requirements

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Federal Mandate

- Intelligence Reform and Terrorism Prevention Act of 2004 (PL 108-458)
 - Directs the TSA to "issue guidance", "establish requirements", and "list products" meeting requirements
 - Scope use biometrics technology in airport employee access control systems
 - Guidance signed and published September 30, 2005, containing:
 - Implementation Guidance
 - Requirements
 - Plan for QPL (Qualified Products List)



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QPL Process

- Current and planned TSA QPL process major steps
 - Manufacturer selects an approved lab for product testing
 - Current TSA approved lab IBG
 - Lab-Manufacturer agree to business agreement and test schedule
 - Test Report developed by lab, submitted to TSA for review
 - TSA technical review of Test Report
 - Confirm lab recommendation of PASSING status
 - Clarify any additional information or calculations (as needed)
 - · Recommendation for approval of addition to QPL



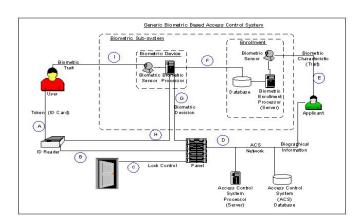
QPL Phases

- Initial Phase (Complete September 2007)
 - Product acceptance and testing conducted at one lab (IBG)
 - Initial qualified products list established
- Transition Phase (Currently)
 - Testing labs qualify for QPL testing (once successful IBG)
 - TSA receives test reports from IBG and updates QPL as products pass
- Sustaining Phase
 - Testing labs must also obtain NIST Accreditation (NVLAP)
 - · Manufacturers submit to accredited lab of their choice
 - · Labs submit test reports to TSA for device inclusion on QPL

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Example Biometrics Schematic



(Only the biometric sub-system is tested for the QPL)



Current Biometrics QPL



Bioscrypt V-Station Mifare V9.50 Integrated Reader



Cogent ID-Gate Integrated Reader



Integrated Biometrics TRU 650 Reader



Lumidigm Lightprint J Series Multispectral Fingerprint Scanner



Lumidigm Lightprint Venus Series Multispectral Fingerprint Scanner



QPL Protocol Test Requirements

- Protocol Details
 - · Indoor, controlled conditions
 - · Manufacturer set matching threshold
 - 250 person test subjects, demographically controlled
 - Enrollment plus three revisits (two week intervals)
 - Five Genuine and Five Imposter transactions per visit
 - Approximately 3,000 Genuine and 3,000 Imposter transactions



QPL Biometric Performance Requirements

- Matching Accuracy
 - < 1% False Reject Rate (FRR)
 - < 1% False Accept Rate (FAR) 1
- Enrollment
 - < 3% Failure To Enroll (FTE)
- Transaction Time
 - < 6 seconds
- •
- ¹ based on up-to-3 attempt transactions

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