

National Biometric Security Project

Using biometrics to protect
the critical infrastructure

Biometrics Consortium Conference
Washington, DC
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National Biometric Security Project

- Foundation created by industry/academic coalition
- Mission supports international objectives
- No obligations to any interest group
- Initial funding provided by U.S. Congress



National Biometric Security Project Mission

Assist government and private sector organizations deter security threats to the civil infrastructure by enabling effective, automated human identification through the application of proven biometric technologies.



The Civil Infrastructure Threat

- Government security
- Transportation
- Financial
- Energy
- Communications



Constraints on Broad Use of Biometrics

- No reliable product certification process
 - Requires pre-operational testing
- No objective performance data
 - Now rely on manufacturer's claims
- No means of comparing biometrics
 - No single biometric fits all requirements
- Scalability issues not addressed
 - Infrastructure-level deployment is untested
- Legal & social issues remain
 - Myth often overtakes reality



NBSP Initiatives

Definition of **Requirements** →

- *Advanced standards*
- Applied research & development
- *Testing & evaluation*
- Privacy and civil liberties impact analyses
- Education and training program support
- Publications and guides for biometric applications



Standards

- **Removing barriers**
 - *Facilitating rapid technology revolution*
 - *Replacing volunteer or ad-hoc standards work with experts*
 - *Promptly addressing the interoperability problem*
- **Improving pace and quality of standardization**
 - *Supporting existing effort with resources*
 - *Personnel*
 - *Financial*
 - *Applied research*



NBSP Test Program Components

- Tests of commercial “off-the-shelf” products
 - Test against manufacturers’ claims
 - NBSP certification
- Tests against standards
 - Compliance with international standards
- Tests using “metrics of merit”
 - False match, false non-match, etc.



NBSP Test Program Components

- Operational application testing
 - Pilot trials
 - Field environmental tests
- Innovative technology assessment
 - Internal review of promising concepts
 - Scientific advisory panel



Other NBSP Services

- Operational requirements surveys
 - *Vulnerability assessments*
- Application impact studies
 - *Frame commercial/operational issues*
 - *Minimize impact on ability to function efficiently*
- Defined scenarios for policy planning
 - *Test field operations concepts*
 - *Pre-implementation planning*
- Systems design parameters and reviews
 - *Gap analyses, architecture evaluations*



Other NBSP Services

- Statements of work and source selection
 - *Requirements – not technology – focused*
- Technology performance analyses
 - *Field testing for real-world performance*
- Research program definition
 - *Scientific approach to data acquisition*
- Training and evaluation
 - *End-user programs to ensure effective transition*



Some Current NBSP Projects

- US-VISIT Chip-enabled passport testing
 - Extracting the image from the document
 - Assessing problems with RF collisions
 - Durability
 - “Three-way” comparisons
- National Institute of Standards & Technology and the Transportation Security Administration
 - Multi-biometric collection program (iris, face, fingerprint)
 - Research database (anonymous)



International Cooperation

- Collaborate with other institutions
- Develop database for research
- Offer state-of-the-art testing facilities
- Share results



Agenda: Dept. of Homeland Security

- National Safe Skies Alliance tests
 - **Rick Lazarick, TSA**
- US-VISIT Phase I results and end vision
 - **Bob Mocny, US-VISIT**
- International travel document standards
 - **Brad Wing, US-VISIT**



Agenda (continued)

- Transportation Worker ID Card
 - **Lollie Kull, TSA**
- Registered Traveler Pilot Program
 - **Pam Friedmann, TSA**
- Panel Discussion
 - **Questions and Follow up**



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