Operational Metrics
Providing information needed to support critical decisions in DoD Biometrics Operations
## Operational Metrics: Providing information needed to support critical decisions in DoD Biometrics Operations

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Prescribed by ANSI Std Z39-18
Purpose

• Report current status (from then to now)
• Discuss data collection and reporting mechanisms
• Identify high-level strategic effort…5 year outlook
• Socialize Biometric Enterprise Strategic Plan (BESP)
• Operational Metric Strategy
• Review/develop action plans for key aspects
• Challenges
• Open discussions
Last Year; Session Objectives

- Challenges:
  - Synergize existing efforts to build a strategic approach for the Biometrics Enterprise
  - Recognize “perfect can be the enemy of the good,” scope the problem space and provide initial guidance

- Objective 1: Identify performance criteria, indicators, descriptors, and candidate measures to positively impact the spectrum of end-to-end interoperability

- Objective 2: Identify a governance process to capture and integrate critical information related to performance and metrics (performance metrics are driven by strategy)
Last Year; Findings and Insights

• Met Objective 1; provided, discussed, and modified an initial set of performance criteria, indicators, descriptors, and candidate measures
  – Tasked participants to identify additional measures
  – Estimated Completion Date (ECD): 2 Mar 10

• Met Objective 2; identified a governance way ahead to capture and integrate critical information related to performance and metrics
  – Feed results to existing governance processes
  – ECD: 6 Apr 10
Last Year; Findings and Insights (cont)

• **Breakthroughs**
  – Identified way ahead to successfully answer three significant issues:
    • Who measures and how?
    • Who uses metrics data and for what?
    • What tools are available?
  – Consensus reached:
    • Consolidate enterprise metric efforts; get it done!
    • Provide feedback mechanism via community dashboard
    • Oversee process; metrics collection, analysis, and reporting is not a finite effort with an end point
  – Various tools identified; just scratched the surface
  – Presented seven performance areas and four domains
Last Year; Next Steps and Timeline

- Align Enterprise Metric efforts with BESP
  - Refine goals, strategies, and constraints; and
  - Refine applicable standards, policies, and procedures as needed
- Build upon identified operational metrics for success
- Put governance mechanisms into place
- Develop, collaborate, and finalize an Enterprise Metrics Management Plan by 1 Jun 10
Leaders at all levels need accurate, complete and useful information to assist in making critical decisions and improve results.

Levels of Metrics

- **Guidance and Direction**
- **Mission and Objectives**
- **Processes and Procedures**
- **Functional**

- **STRATEGIC ENTERPRISE**
  - Planning, Execution, Progress and Results

- **OPERATIONAL**
  - Mission and Tactical

- **BIMA**
  - ORGANIZATIONAL

- **PROGRAMS AND PROJECTS**
  - Tasks and Activity

Metrics provide results based information to support leaders at all levels with critical information on which to base decisions.
Update to Previous Way-Forward

- Align Enterprise Metric efforts with Biometric Enterprise Strategic Plan (BESP)
  - Refine goals, strategies, and constraints; and
  - Refine applicable standards, policies, and procedures as needed
- Build upon identified operational metrics for success
- Put governance mechanisms into place specific to Operational Metrics
- Develop, collaborate, and finalize an Operational Metrics Management Plan
Operational Metrics Strategy

• Static Metrics
  – Key metrics that support reporting needs on a regular basis
    • Daily – Lower level managers – Program and Project Managers
    • Weekly – Leadership meetings
    • Monthly – PMR’s
    • Quarterly – IPR’s
    • Annually – EXCOM

• Dynamic Metrics
  – Present a unique “Operational Area of Concern”
  – Mission Biometric Operational Needs – Not being met

Require a consistent approach to communicate concern, analyze, collect and report information to support key operational concerns.
Approach

• Need to expand strategy throughout COI
• A team approach is recommended composed of:
  ➢ Subject matter experts from various participants
  ➢ COCOMS, etc
  ➢ Program management
  ➢ System operators
  ➢ Decision makers
  ➢ IT professionals
  ➢ Architects
  ➢ Business Process owners
• Persons responsible for making critical operational decisions need accurate information in a timely manner to support their decisions

• Used to identify areas where use of biometrics can be improved

• Metrics can be costly and time consuming

• Develop “critical metrics” to address concerns, which is a subset of the body of metrics

Metrics provide information needed to support decision makers
Operational Metric Lifecycle

Operational Concerns

Analysis – Information Needed

Analyze Data - Results

Collect data

Develop Measures – establish indicators

Implement mechanisms to collect data
Many factors impact the ability to use biometrics effectively and efficiently

- Varying requirements across military operations (timeliness, etc.)
- Data flows are difficult to capture
- Operational concerns need technical analysis to identify information needed to resolve and improve
- Differences exist in cultural areas where biometrics are used
• Operational requirements that have a concern must be communicated – **CONCISELY and COMPLETELY**

• Current process can be time consuming to communicate concerns

• Information can get lost

• Information communicated not communicated correctly or misinterpreted with no communication to validate

• A process is needed to communicate operational concerns to the subject matter experts
• There are many uses of biometrics in the DoD and many variables impact their successful use and end value per each unique mission
• Operational requirements vary depending on mission needs
• When operational requirements are not being met an “Operational Concern” exists – (Focus Area)
• Capture the concerns of commanders and leaders to get complete, correct information of concern

*Problem must be communicated and understood to develop a solution!*!!!!!!
• Subject matter experts identify the indicators that can be measured from mission objectives

• Identify the data needed for the indicators
  – Where in the process can data be collected?
  – Does the data currently exist?

• Identify possible obstacles that may exist in the biometric collection and usage process or informational flow

• Collect Data

• Subject Matter Experts analyze data collected
Organizational Domain

• Includes the managerial, structural and cultural ability and competence to absorb, apply, and review technology and processes in order to achieve strategic goals

  – Management Performance; focuses on issues of management relevance and user quality of service
  – Human Factors Performance; focuses on issues of mission relevance and user quality of service
Technology and Infrastructure Domain

- Includes communications, technology, security, and application capabilities on which enterprise processes are built
  - Technical Performance; focuses on design time and includes the development phase of the lifecycle and data/content integration
  - Security Performance; focuses on core security services
Programmatic Domain

- Includes ongoing improvement opportunities used to monitor bottom-line impacts, maintain momentum, and re-establish performance targets
  - Financial Performance; focuses on issues of business value
  - Business Performance; focuses on issues of business viability and services
Process Domain

- Includes the working methods, procedures and systems by which the enterprise required outputs are delivered and strategic outcomes achieved
  - Operational Performance; focuses on run-time, and is targeted to fielded services and maintenance
Key Aspects

- People
- Management Support
- Financial
- IT Portfolio
- Operational
- Emerging Technology
- Architecture
- Information
- Project Execution
Financial

- Identify key solutions and requirements that meet enterprise needs
- Funding of business and technical solutions support the needs of multiple customers across the enterprise
- Ensure funding for biometric related capabilities are not part of any existing projects
- Funding of a leading edge biometric capability representative as the center of excellence for biometrics capabilities and solutions
IT Portfolio

- Ensure a technology foundation exists that provides messaging, security, and other services
- Identify a governance platform that is part of the EA to enable the automation of policies where possible
- Ensure consensus is built regarding the migration of legacy systems and platforms
- Ensure enhancements coincide with the IT portfolio plan and business services plan
- Failure to enact policies on IT infrastructure will result in incompatible services with poor interoperability…not fit for enterprise wide use
Operational

- Biometrics capabilities are used across the DoD with operational implications required by policy.
- Identify the operational services and resources where metrics can be identified, collected, analyzed and reported to improve performance across the enterprise.
- Operational monitoring and planning ensures critical operational processes that rely on biometrics are measured, monitored and supported to ensure needs are met.
- Ensure metrics policies, processes and results are in place and utilized.
Architecture

- Ensure the product and application lifecycles (upgrade, enhancement, maintenance, and retirement) are consistent with DoD Architecture requirements
- Ensure standards exist and are exercised to enable interoperability
- Ensure hardware and software meet architecture requirements
Information Management

- Ensure data ownership is established
- Identify roles and responsibilities between data providers, customers, and users
- Create a single logical source for key enterprise information
- Eliminate custom interfaces and proprietary data formats
- Make data readily available, accessible and interoperable
- Realize policy driven IA and security for data
Emerging Technology

- Ensure a strong S&T program that focuses on the mid (7-10 year) to long term (11-15 year)
Project Execution

• Create projects to align applications and infrastructure with milestones and goals of the enterprise
• Plan the projects, foundations and technical portfolios such than can be phased in and synchronize with projects that will be utilizing them
• Ensure projects and applications which are a potential source can be leveraged for decisions on new application needed for strategic and enterprise direction
People

• Assigning and empowering employees with responsibility for driving process improvement through use of metrics to drive performance improvements

• Develop and ensure skills for building, testing and deploying metrics and information

• Create incentives to encourage building of performance improvement using metrics
Open Forum Discussion

Recommendations and concerns for furthering Operational Metric Strategy
Discuss/Develop Results