# Industry Video Introduction of the National Background Investigation System (NBIS)

NBIS Program Management Office

30 August 2016

**DISA**

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# Agenda

- **Introduction**
- **Acquisition**
- **Capabilities**
- **Architecture**
- **Summary**

# Introduction of NBIS

Presenter: Martin Gross,

NBIS Director

The NBIS will be the new Federal-wide Information Technology (IT) system to conduct suitability, security, and credentialing (SSC) investigations for all Federal employees to include civilian, military, and government contractors.

# DISA will design, build, test, field, operate, maintain, and secure NBIS.

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Our focus will be to incorporate security into the fundamental design of the systems, strengthening the security of the data environment, and providing robust privacy protections.  We will use the latest modern technology in order to protect the sensitive information used to effectively adjudicate investigations, and bring the fullest security resources to bear against increasingly sophisticated and evolving threats by leveraging Department of Defense's (DOD) significant national security, IT, and cybersecurity expertise.

# Video Purpose

Inform Industry, Stakeholders, and other Federal Agencies on Defense Information Systems Agency's (DISA) approach to replacing and modernizing the legacy background investigation system.

Project potential acquisition opportunities for small and large businesses.

Give our Industry partners an understanding of the technical architecture to strengthen Request for Information (RFI) responses and communications.

# NBIS Acquisition Overview
Presenter: Christopher Catlin,

NBIS Program Manager

# High Level Acquisition Strategy

## The Government will be the system integrator

- DISA is responsible for interoperability, system engineering, operations, and sustainment and will lead a team with the expertise to oversee the development and implementation of NBIS

- The Acquisition will execute the right mix of contract vehicles to implement a solution which will acquire Commercial off the Shelf (COTS) applications and technical services supporting an Agile Acquisition Approach
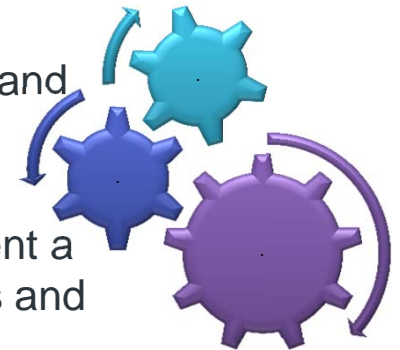
## Evolutionary Acquisition

- Capabilities will be delivered in increments
- First increment is a secure system capable of conducting a full background investigation
- Capabilities in the later increments will be determined based on user priority and technical/cost feasibility
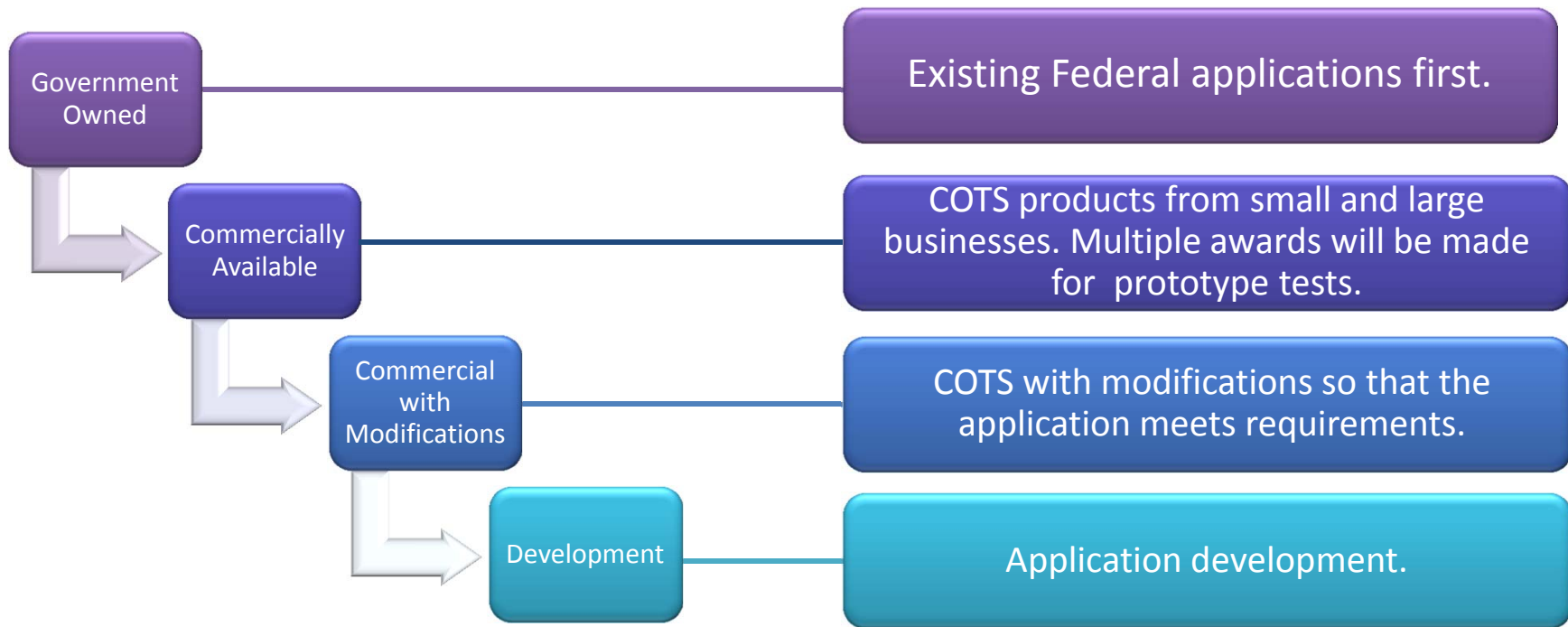
| | |
|---|---|
| Initial Operational NBIS | Increment 1 |
| New Capabilities / Gain Efficiencies | Increment 2 |
| New Capabilities / Gain Efficiencies | Increment 3 |
| New Capabilities / Gain Efficiencies | Increment 4 |

As needed

# Acquisition of Capabilities

## Order of Priority

Government Owned —— Existing Federal applications first.

Commercially Available —— COTS products from small and large businesses. Multiple awards will be made for prototype tests.

Commercial with Modifications —— COTS with modifications so that the application meets requirements.

Development —— Application development.
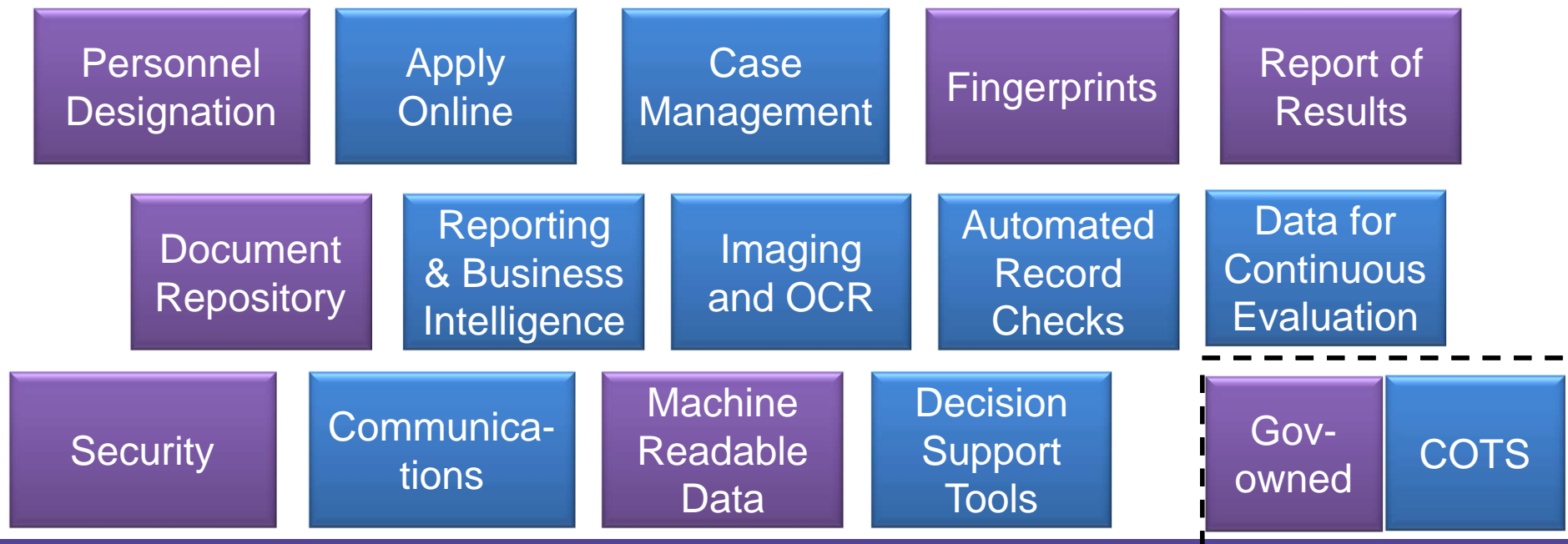
# NBIS Capability Examples

Sampling of the NBIS capabilities. DISA is interested in individual solutions and applications which would be modular and capable to be easily integrated into an overall systems architecture solution.

| Personnel Designation | Apply Online | Case Management | Fingerprints | Report of Results |
|---|---|---|---|---|
| Document Repository | Reporting & Business Intelligence | Imaging and OCR | Automated Record Checks | Data for Continuous Evaluation |
| Security | Communica-tions | Machine Readable Data | Decision Support Tools | Gov-owned / COTS |

# Examples of Acquisition Opportunities

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## Acquisition Scope Areas:

- Interface Management
- System Engineering
- System Integration
- Testing
- Supply Chain Code Review
- Transition to Operations
- Application Support / Sustainment
- Help Desk
- Trouble Ticket Management
- Operations and Monitoring

### DISA Wants to Know:

1. Your Business Size  (Large/ Small)
   - NAICS code(s)
2. Socio-economic status
   - Disadvantaged, Woman-owned, Disabled Vet, HUBZone, 8(A), etc.
3. Your Contract Vehicles
   - DOD Vehicles
   - GSA Vehicles
   - GWACS

# FY17 Acquisition Activities

## Market Research

- Evaluate small business abilities to determine set-asides
- Research COTS applications and capabilities

## System Engineering

- Build the pre-production test environment
- Test Government-owned applications
- Research COTS products to fill gaps
- Incorporate Cyber protections

## Prototypes

- Acquisition Strategy approval
- Award contract for COTS products
- Bake-off tests for COTS applications

# NBIS Capabilities

Presenter: Sheldon Soltis,

NBIS Requirements/Transition Manager

# Capability: Personnel Designation

**Start of the investigation process**

**Capabilities:**

- Establishes risk of position
- Determines if a position's duties and responsibilities present the potential for a material adverse effect on the national security
  - **Determines the degree of that potential effect**
- Establishes the sensitivity level of a position
- Determines what level of investigation should be conducted for a position

# Capability: eApplication

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## Application used to collect information from standard forms from:

- Applicants
- Agencies

## Used for:

- Suitability
- Periodic Reinvestigations
- Continuous evaluation
- Credentialing

## Primary source of information for investigations

## Capabilities:

- Validates there is not a previous investigation that meets the need
- Collection of information
- Contains information on the requesting and receiving agencies
- Type of investigation requested
- Billing information
- Sent to the Case Management system
- Different submission methods used for DOD accessions and Industry
- Ability to export data to other Investigative providers, e.g. State

**APPLY ONLINE**

# Capability: Case Management

**Capabilities:**

- Schedules investigations
- Transmits data for the field
- Collects data from the field
- Collects data from sources
- Readies end product, Report of Investigation
- Delivers end product to requestors
- Tracks transactions to be sent to financial system

- Tracks investigators work
- Tracks Contractor Investigative Services Provider (ISP) work
- Allows reviews of work and products received needed for investigations
- Assigns leads
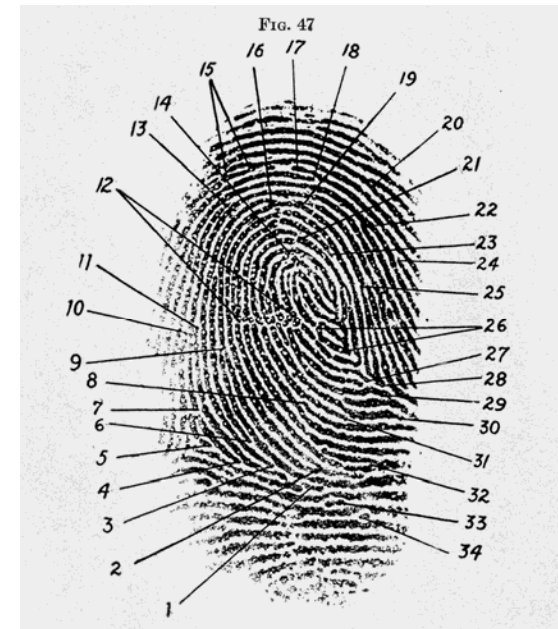- Freedom of Information Act (FOIA) and Privacy Act requests

# Capability: Fingerprints

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## Capabilities:

- Receives and stores fingerprints from applicants
- Interfaces with other systems (8000 interfaces)
- Sends to FBI and receives results

# Capability: Report of Results

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**Capabilities:**

- Communicate with field agents
- Send cases to agents
- Transmit results to case management system
- Used by field offices for case load management

# Capability: Document Repository

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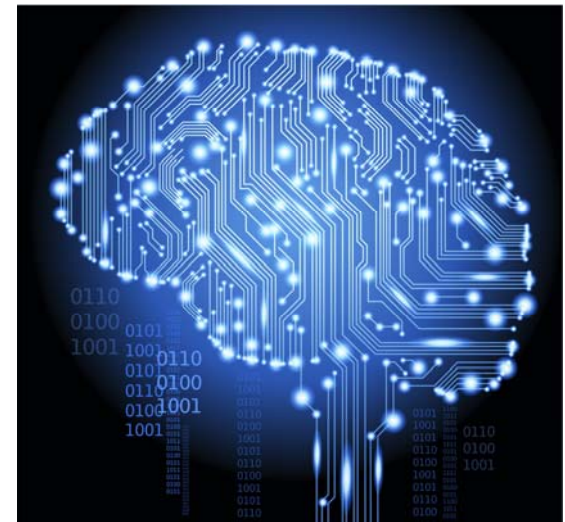
- **Capabilities:**
  - Provide field agents documents (releases, forms, records)
  - Allow agents to download documents
  - Allow agents to upload documents
  - Used by field offices

# Capability: Reporting & Business Intelligence

## Capabilities

- Identify and develop historical, current, and predictive views of operations
- Increase operational reporting
- Pricing
- Analytical processing

# Capability: Imaging & Optical Character Recognition (OCR)

**Capabilities:**

- Converts incoming data
- Converts data to images
- Delivers Report on Investigation
- Archives investigations

# DISA Capability: Automated Record Checks (ARC)

## Automated Record Checks

- Are record checks done on a system to system basis
- There are currently manual record checks that need to be system to system checks

## Capabilities

- Queries external system with an individual's Personally Identifiable Information (PII)
- If information concerning the individual exists, retrieves information from a record system and places that information into the investigation

# Capability: Continuous Evaluation (CE)

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## Continuous Evaluation

- CE is a subsystem of ARC

- It is an algorithm that utilizes individuals Personal Identified Data (PID) to run against certain data sources on a set time period (for example, law enforcement information may be run daily, credit every three months)

- If a change in the data source matching an individual's PID takes place and that change breaks the threshold for an Expanded Focused Investigation (EFI) as defined in the 2012 Federal Investigative Standards an EFI will be undertaken by an ISP

- An investigation will be opened in the investigative case management system

# Overarching Capabilities

## Capabilities

- Security
- Communications
- Machine Readable Data
- Decision Support Tools
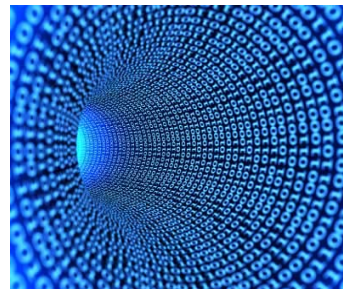
# NBIS Architecture Overview

Presenter: Dr. Glen White,

NBIS Chief Engineer

# Objective of NBIS Architecture Overview

- **Communicate the approach to SECURITY AT EVERY LEVEL in the target architecture**

- **Show basic architectural concepts**

- **Discuss high-level NBIS functionality**

- **Show relationship between DISA  DECC, JFHQ-DODIN, DMDC and NBIS and other  DISA services**

- **Review  NBIS Data Strategy**

# NBIS Scope in the SSC Enterprise

**DISA**

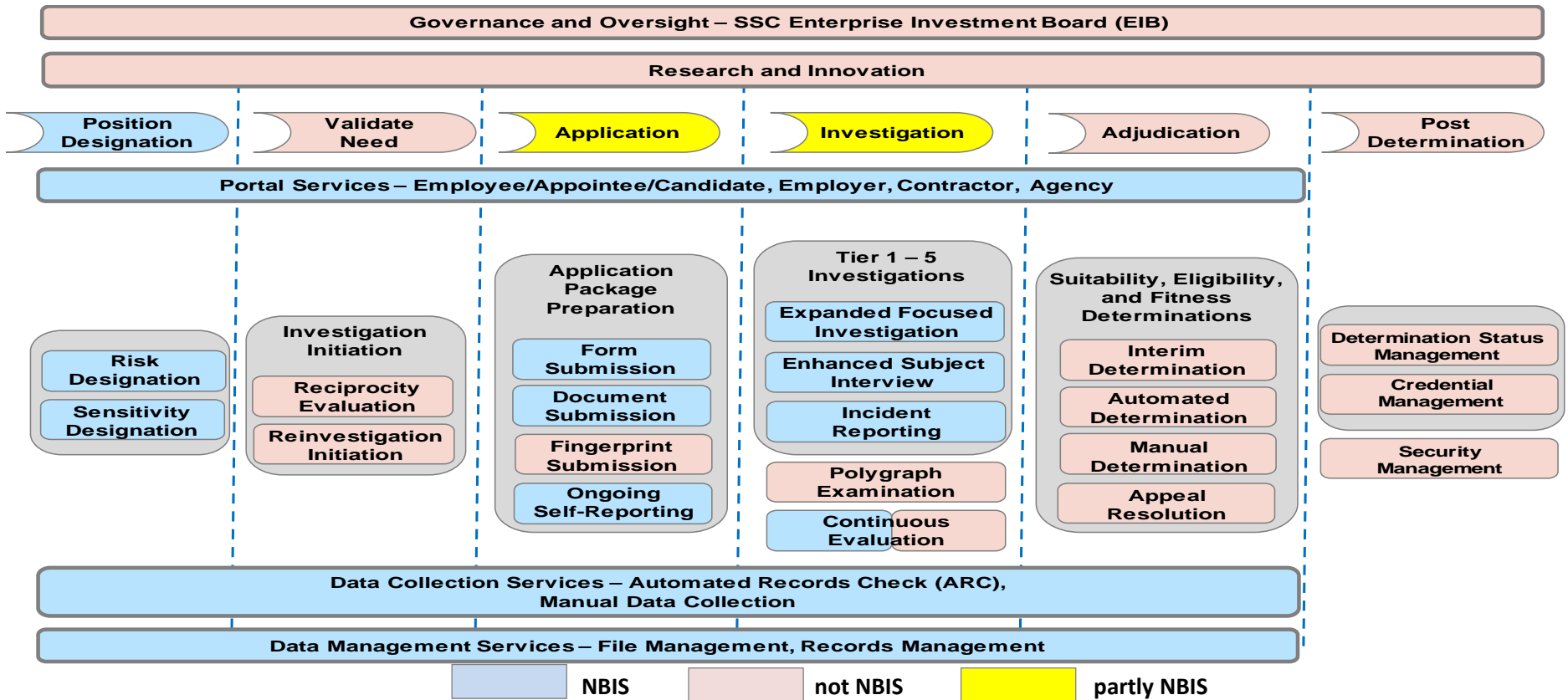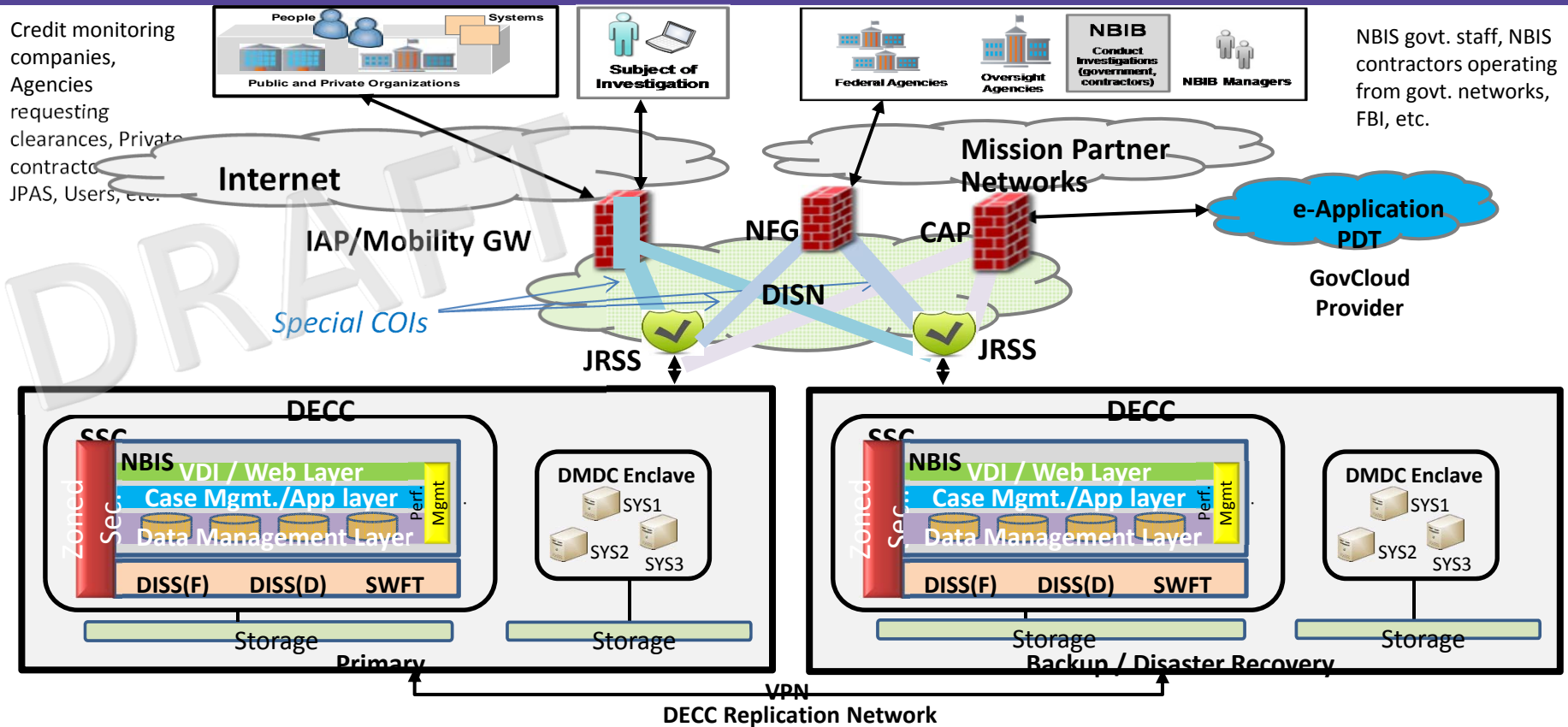Governance and Oversight – SSC Enterprise Investment Board (EIB)

Research and Innovation

| Position Designation | Validate Need | Application | Investigation | Adjudication | Post Determination |
|---|---|---|---|---|---|

Portal Services – Employee/Appointee/Candidate, Employer, Contractor, Agency

**Risk Designation**
**Sensitivity Designation**

**Investigation Initiation**
- Reciprocity Evaluation
- Reinvestigation Initiation

**Application Package Preparation**
- Form Submission
- Document Submission
- Fingerprint Submission
- Ongoing Self-Reporting

**Tier 1 – 5 Investigations**
- Expanded Focused Investigation
- Enhanced Subject Interview
- Incident Reporting
- Polygraph Examination
- Continuous Evaluation

**Suitability, Eligibility, and Fitness Determinations**
- Interim Determination
- Automated Determination
- Manual Determination
- Appeal Resolution

**Determination Status Management**
**Credential Management**
**Security Management**

Data Collection Services – Automated Records Check (ARC), Manual Data Collection

Data Management Services – File Management, Records Management

☐ NBIS    ☐ not NBIS    ☐ partly NBIS

# NBIS High-Level Operational Concept

Credit monitoring companies, Agencies requesting clearances, Private contractors JPAS, Users, etc.

NBIS govt. staff, NBIS contractors operating from govt. networks, FBI, etc.

**People** **Systems**
Public and Private Organizations

**Subject of Investigation**

**NBIB** Conduct Investigations (government, contractors)
Federal Agencies    Oversight Agencies    NBIB Managers

**Internet**

**Mission Partner Networks**

**e-Application PDT**

**IAP/Mobility GW**

NFG    CAP

**GovCloud Provider**

**DISN**

*Special COIs*

**JRSS**    **JRSS**

**DECC**    **DECC**

**SSC**
**NBIS** VDI / Web Layer
Case Mgmt./App layer
Data Management Layer
Perf. Mgmt
DISS(F)   DISS(D)   SWFT

**DMDC Enclave**
SYS1
SYS2   SYS3

**SSC**
**NBIS** VDI / Web Layer
Case Mgmt./App layer
Data Management Layer
Perf. Mgmt
DISS(F)   DISS(D)   SWFT

**DMDC Enclave**
SYS1
SYS2   SYS3

Storage    Storage    Storage    Storage

**Primary**    **Backup / Disaster Recovery**

**VPN**
**DECC Replication Network**

Zoned Sec.    Zoned Sec.

# Concept for NBIS Roles and Functions

**NBIS-eApplication :** <u>Subject </u>of investigation enters initial data for investigation

**NBIS-Case Management:** Includes investigation status view of tasks in progress

- **<u>Investigator</u>:**
  - Conduct Interviews
  - Request consultation/reassignment of task
  - Write summary of investigation
- **<u>Supervisor</u>:** Assign/reassign workload of organization investigators in a region
- **<u>Quality Control</u>:**
  - Assign/reassign workload to Supervisors
  - Review tasks upon completion of some tasks and all investigations

## NBIS-Imaging:

- <u>Image Processor </u>scan paper documents, convert email etc. files to investigation data inputs

# Concept for NBIS Roles and Functions (cont.)

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## NBIS-Portal:

- Review agency status via customer portal
- Review/approve Subject application before final submission
- Evaluation of trends and performance metrics

## NBIS-Position Designation Tool:

- Evaluate PD to justify level of investigation

## NBIS-Templates:

- XML templates for <u>Investigator</u> conducting interviews while off line
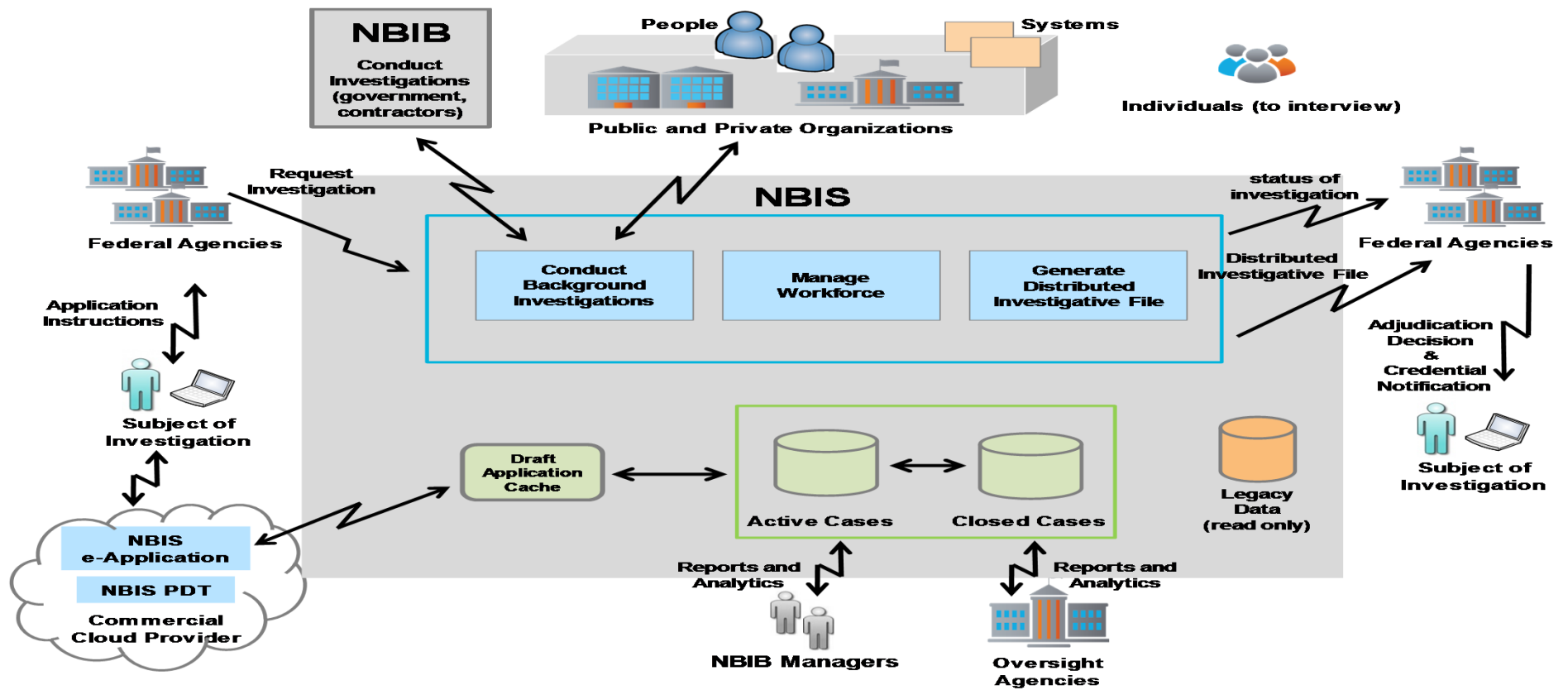
# Shared SSC Infrastructure

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- Virtual Desktop Infrastructure (VDI) for all NBIS users/administrators
- DECC Operations

**DISA Operations and JFHQ-DODIN**

- End-to-End Situational Awareness  and Command & Control

# End-to-End Situational Awareness and Command & Control

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**Internet**

**Internet & Cloud Access Points**

Internal Defense
- Anomaly Detection
- Analysis of Sensor Data
- Behavior based analytics
- Intel Fusion
- Internal Defensive Measures
- Cyber Protection Teams
- HBSS / Active Cyber Defense

Perimeter Defense
- Cyber Sensor Grid
- JRSS & IAP Security
- Break and Inspect
- Intrusion Detection & Prevention
- DDOS Detection & Mitigation
- ACLs, Whitelist, Blacklist
- Web Content Filters
- Zero Day Defense
- Detonation Chamber
- DMZ
- DNS Hardening

**Command Center**

**Global Operations Center**

**Regional Operations Center**

**DECC**

CSAAC
- Events
- Alerts
- Logs
- Incidents
- Configuration
- Performance

**DECC**

# Shared SSC Infrastructure (cont)

## DMDC, DISS and SWFT Programs

- Applications for Fingerprint Collection, Validate Need, Suitability Determination, and FOIA/Privacy Act Support
- Account management, including NBIS roles
  - Register CAC/ECA/PIV using a one time user name and password generated when user is provisioned (TBD)
- User CAC/ECA/PIV is authenticated by F5 at user login
- Oracle RDBMS w/ document management
  - Oracle Exadata appliance
  - Replication for backup/recovery/COOP/archive
  - Encryption for data at rest
- Legacy data archive and access (TBD)
- Management data repository w/ business analytics (TBD)
- Auditing & forensic reporting (Splunk)
- Data Access Layer (Mule ESB) for NBIS external interfaces

# NBIS Protection Zones Concept
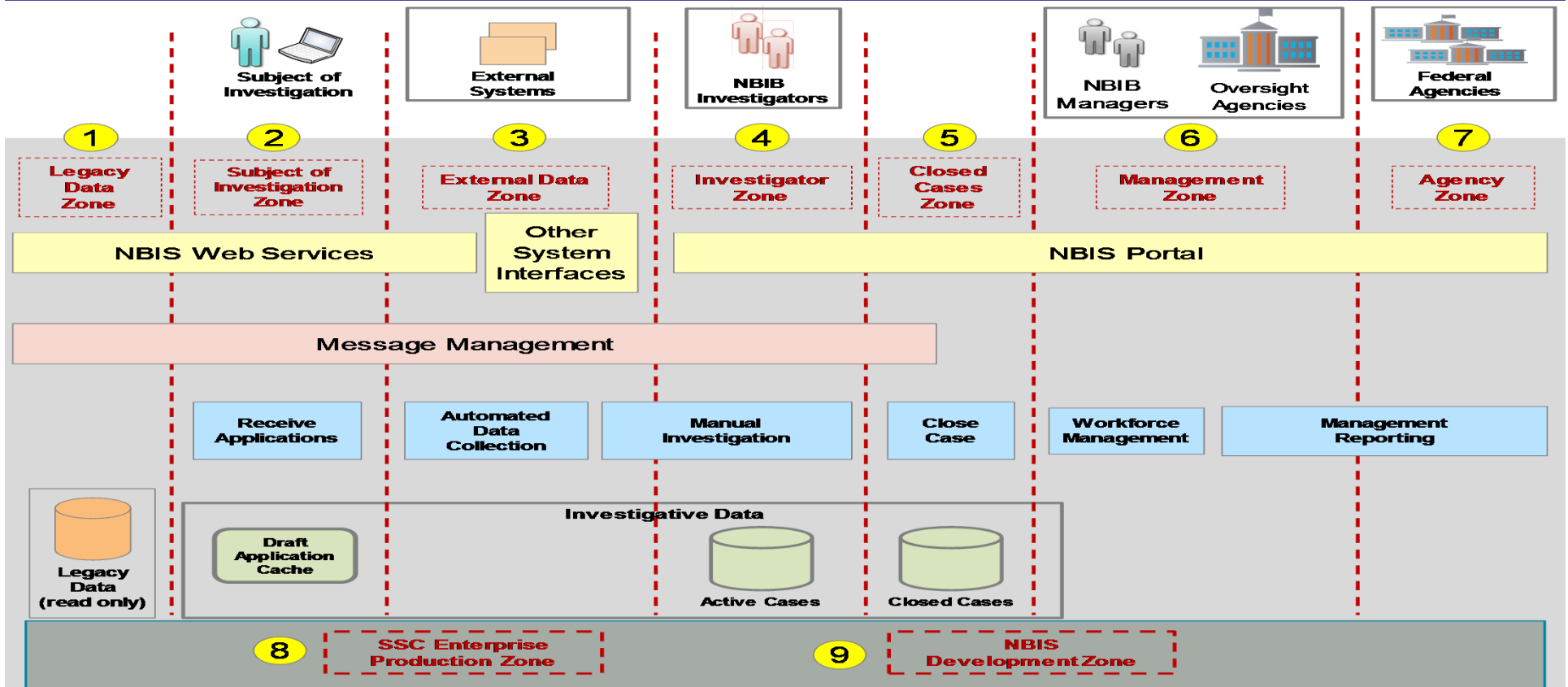
# Current Prototype Goals

**Document behavior requirements with functional community**

**Optimize automated support to**

- Improve user experience
- Improve quality of investigative data
- Improve data exchanges with information sources
- Streamline the process of conducting the investigation

**Validate the end-to-end architecture and infrastructure**

# NBIS Data Strategy

**Strategic Goals:**

- Enhance Data as a Shared Resource
- Maximize Information Utility
- Facilitate Standards-driven Solutions
- Promote Data Protection using Data Tagging
- Employ Standardized Data Exchanges
- Strengthen Information Safeguarding and Protection
- Reduce Risk Associated with Handling PII
- Promote Sound Lifecycle Records Management
- Improve automated visibility of Data Assets and Discoverability
- Support FISMA Metrics Collection

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## Conceptual Model augmented with a Common Profile

- Common Profile is ISO 10000 based using the PM-Information Sharing Environment (ISE) Common Profile Framework
- e-Application Components
- Investigative Items from current business processes and sources
- Data Tagging for protection, handling, & records mgmt.
- Technical Standards from federal, DOD/Intel Community and open standards





**NBIS Common Profile Conceptual View**



**NBIS Data Flows**



**NBIS Logical Data Model**



**NBIS Exchange Profile**
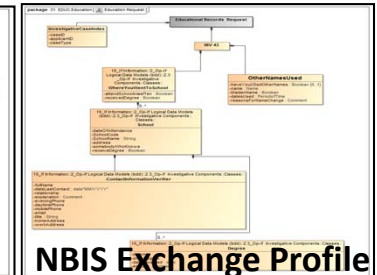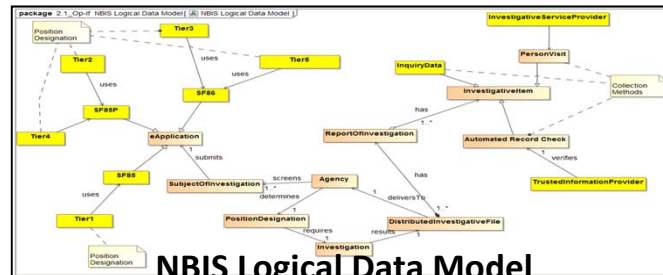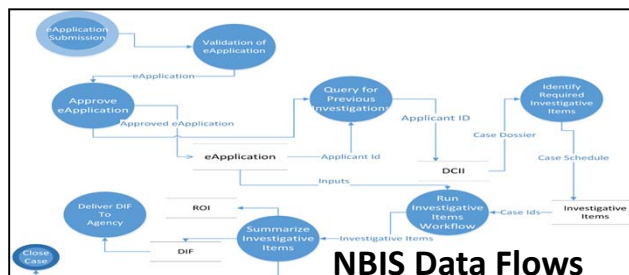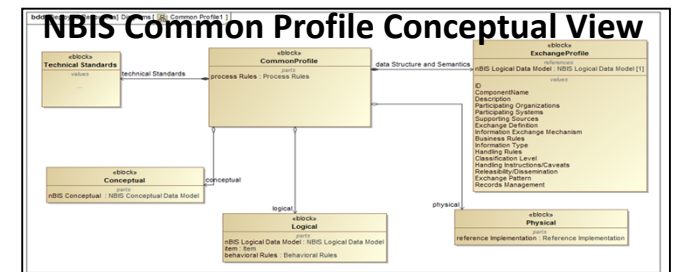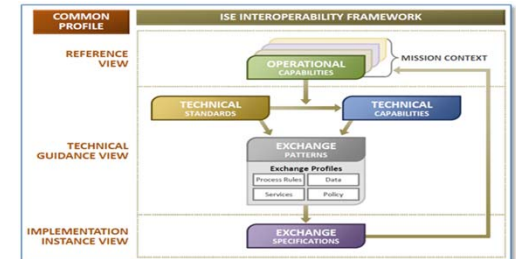
# NBIS Exchange Profiles Description Framework Investigative Component Types

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## Inputs (21 Items)

- Information provided by the applicant via the e-application (case papers: Standard Form (SF)SF86, SF85P, SF85P-S, SF85, or OFI 86C)
- Becomes input to the investigative item

## Investigative Items (63 Items)

- Results of data source queries
- Report of interviews

## Outputs (7 Items)

- Documented result of concluding an investigative item
- For example: Closed Case Transmittal (CCT), Certificate of Investigation (COI), Report of Investigation (ROI), Content Summary Sheet (CSS), Investigative Results Report (IRR), Distributed Investigative File (DIF)

# **DISA** Bureau of Vital Statistics (1 of 2)

| Attribute Name | Description |
|---|---|
| ID | 26 |
| Item Name | BVS – Bureau of Vital Statistics |
| Description | Bureau of Vital Statistics. (BVS).<br><br>Each state, New York City, the District of Columbia (DC), Puerto Rico, Guam, Northern Mariana Islands, American Samoa, and the Virgin Islands have a Vital Records (BVS) repository.  A BVS search is conducted on subjects born in the United States or its territories to corroborate a subject's date and place of birth, and can return information on the subject's birth name, parents' names, and birth certificate number.  (source:  OPM Sys & Automated Ops Manual)<br><br>Requested by agency to certify/verify Birth record on file at listed state of birth. (Source:  OPM FIS)<br><br>Verification or Certification of subject's listed place of birth.  Searches can be conducted in each state, District of Columbia, Puerto Rico, Guam, American Samoa, Northern Mariana Islands, or the Virgin Islands. (Source:  NAC Room PowerPoint 20160401).  Confirmation of birth record on file as listed in the State of Birth Vital Statistics Bureau (OPM Notice 03-01) |
| Participant Organizations | OPM<br>National Association for Public Health and Information Statistics (NAPHSIS)<br>State Bureau of Vital Statistics |
| Participating Systems | Electronic Verification of Vital Events (EVVE)<br>PIPS<br>State Vital Record Systems (for Inquiries) |
| Supporting Sources | National Association for Public Health and Information Statistics (NAPHSIS)<br>State Bureau of Vital Statistics |
| Investigative Item Input | ID #1, ID #3 (Source:  OPM FIS) |
| Exchange Definition | Birth Verification Request, Birth Verification Reply |
| Information Exchange Mechanism | HTTPS, Webservice, Inquiry |
| Exchange Mechanism Type (1) | PIPS linkage/webservice call with BVS. |
| Exchange Mechanism Type (2) | HTTPS Website record search |
| Exchange Mechanism Type (3) | Investigator Record Search at Repository (MA only, DOB prior to 1953) |
| Exchange Mechanism Type (4) | Inquiry via Voucher. sent hardcopy via mail, or softcopy via email. Hardcopy via INV FORM 40 (Voucher): General Request for Investigative Information (SOURCE: OPM FIS) |

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# Bureau of Vital Statistics (2 of 2)

| Attribute Name | Description |
|---|---|
| Business Rules | "For all initial investigations the employing agency is responsible for corroborating the subject's date and place of birth through a check of appropriate documentation. For example, the subject may present a birth certificate to the employing agency. A check of the Bureau of Vital Statistics records should be conducted when any discrepancy is found to exist. If you would like OPM to resolve discrepancies, or if your agency is not in a position to conduct the birth corroboration, we can provide this service. We obtain birth corroboration through a Bureau of Vital Statistics (BVS) search in the state of the subject's birth. An agency may request a BVS search by placing an "L" in Block B (Extra Coverage) on the investigative form. OPM does not automatically schedule a BVS search for any investigation; the requesting agency must ask for it to be done. There is an additional fee of $15 for the BVS search on SAC/NAC/NACI/NACLC/ANACI products. This verification is only applicable to US born citizens." (OPM Notice 03-01)

DOB and POB means to compare the applicant's Name, date of birth, and place of birth with the information with the master file available in the corresponding State's Bureau of Vital Statistics.  The verification result is a match/no-match response and, in the case of a "no match" response, the reason for the "no match". The "match" reply contains the person's name, the date of birth, and the county where it occurred.

This information is only validated for new investigations and not in subsequent investigations because the information would not change (Federal Investigative Standards). |
| Flags | Requester unable to corroborate Date or Place of Birth |
| Action | Tier 2-5 (to include Reinvestigations) – Resolve discrepancies with Subject during ESI or TESI, as applicable. |
| Information Type | PII |
| Handling Rule(s) | |
| Classification Level | Unclassified |
| Handling Instructions/Caveats | The DOB and POB are Identifying properties and considered PII information when used in conjunction with the name and/or social security number. |
| Dissemination/Releasibility | Life of case, releasable to customer agency. |
| Exchange Pattern | Query and Response (for Webservice) |
| Records Management | Destroy cases with actionable issues when 25 years' old<br>Destroy cases when 16 years' old |

# Summary of NBIS Introduction to Industry

Presenter: Christopher Catlin,

NBIS Program Manager

# Summary

- NBIS will be the new background investigation system that will be secure and protect the personal information of millions of Americans and their families.

- Executing the Acquisition for the securing and future development of NBIS will require a balanced approach to not only providing a secure system, but one that also improves efficiency and effectiveness of background vetting, and future capability for post investigation continuous monitoring.

- The NBIS PMO will operate with a great sense of urgency, but with constant awareness that the systems must be secure, delivered in the most cost-effective manner, and meet high performance standards.

- Please check FedBizOps for an Request for Information that will be posted shortly after this video.

    - The RFI will contain information on how to register for one-on-ones with the Program Office. The one-on-ones will be the last week in September.

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The IT Combat Support Agency

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