Business Applications Solution (BAS) Program - Program Status Update

UNITED STATES   DEPARTMENT OF COMMERCE
OFFICE OF FINANCIAL MANAGEMENT

November 2021
01 Program Level Status
02 Functional
03 Enterprise Data Warehouse (EDW)
04 Technical
05 Organizational Change Management (OCM)
06 Risk
07 Security
08 Q & As and Polling

Reminder: This session is being recorded
Program Update
Key Program Accomplishments

• BAS Common Solution Phase
  – Completed Sprint 4 of the BAS Common Solution phase including configuration build out in advance of BAS Conference Room Pilots (CRPs)

• Conference Room Pilots (November 2021 – February 2022)
  – Planned and organized CRP activity and documentation
  – Scheduled CRP Kick Off for 11/16/2021

• Conducted Phase 1 Kickoff for NOAA / EDA / BIS / ES-A including follow-up Q&A session

• Finalized EDW reporting analysis and preparation for communication and dissemination on future state EDW and Core Application Reporting

• Continued to meet with DOC bureaus on common and bureau specific integration to the BAS future state environment
BAS Program Goals for Q1 FY 2022

• Conference Room Pilots
  - Kick off and execution of initial phase of conference room pilots (acquisitions and initial finance and property sessions)
  - Documentation to support configuration updates for User Acceptance Test (UAT) and Baseline 3.0

• Continue development of common integration points for BAS applications/DOC bureaus (i.e., SP3, E2 Solutions, webTA, NFC)

• Continued development of bureau specific integration for Phase 1 bureaus

• Communication to stakeholder community on EDW reporting analysis outcomes including future state reporting from EDW and BAS Core Applications

• Continued bureau specific meetings on conversion strategy and milestones for Phase 1 bureaus
### PROGRAM STATUS – Q4 2021– HIGH LEVEL PROGRAM SCHEDULE

<table>
<thead>
<tr>
<th>FY 2020</th>
<th>FY 2021</th>
<th>FY 2022</th>
<th>FY 2023</th>
<th>FY 2024</th>
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</thead>
<tbody>
<tr>
<td>Q3</td>
<td>Q4</td>
<td>Q1</td>
<td>Q2</td>
<td>Q3</td>
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<tr>
<td>GLOBAL DESIGN</td>
<td>COMMON SOLUTION</td>
<td>CORE SYSTEMS IMPLEMENTATION</td>
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<td>CORE SYSTEMS IMPLEMENTATION</td>
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<tr>
<td></td>
<td></td>
<td>NOAA (BIS, EDA, ES-4)</td>
<td>NIST (BEA, ITA, MBDA, NTIA, NTIS, OIG, OS) ~1600 users</td>
<td>Census ~1600 users</td>
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<td></td>
<td></td>
<td>Finance &amp; Acquisition &amp; Property (Real, Personal, and Fleet)</td>
<td>NOAA Legacy System Decommission</td>
<td>NIST Legacy System Decommission</td>
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<tr>
<td></td>
<td></td>
<td>IDM, Network, Security and ATO</td>
<td>Cerfat Legacy System Decommission</td>
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<tr>
<td></td>
<td></td>
<td>CORE SYSTEMS IMPLEMENTATION</td>
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#### LEGEND
- Early Win Deployments
- Deployments
- Decommissions (Confirmed)
- Decommissions (TBD)
Functional Update
GOALS FOR Q4 2021

- Sprint 3 – Closure
- Sprint 4 – Finalize Baseline Configurations
- Phase 1 – Kick off NOAA/BIS/EDA/ES-A Implementation Year
- Property -
  - Real: Complete Hypercare and transition to O&M support; Initiate Change Control Board (CCB)
  - Personal and Fleet: Conduct Requirement Deep Dives; Finalize Baseline Configuration
BAS PROGRAM UPDATE – FUNCTIONAL
WORKSTREAM STATUS – Q4 2021

Sprint 1, 2 and 3
October - June

- Advanced Acquisition Planning
- Requisitions
- General Ledger Overview
- Cross Validation Rules
- Invoicing
- Reimbursables
- Solicitations
- Awards
- Payments
- ACS
- Projects
- Receipts
- Journal Approvals
- Budget
- Cost Allocation

Sprint 3

- Modifications
- Closeout
- ACS
- Reporting and Analysis
- G-Invoicing
- IPAC Processing
- SLA
- Month/Year End Close
- SLT
- Unbilled Collections
- Cost Allocation
- Projects
- Integration Data Flows

Sprint 4

- G-Invoicing
- Vendor e-Invoicing (IPP)
- Reporting and Analysis
- Finalize Baseline Configuration (Projects, AP Invoice Workflow, Unbilled Collections, etc.)

Phase 1

- NOAA/BIS/EDA/ES-A Implementation Year

- G-Invoicing
- Vendor e-Invoicing (IPP)
- Reporting and Analysis
- Data Cleanup
- Mock Migrations / Data Conversion
- Conference Room Pilot
- System Integration Testing
- User Acceptance Testing
- User Training

ACS - Account Code Structure
SLA – Subledger Accounting
SLT – Summary Level Transfer
Impact/Value of Accomplishments

• Completion of Common Solution Sessions (Sprints 1 through 4)
• Critical for enterprise-wide single configuration of BAS applications
• Preparation for Phase 1 activities (BAS PMO-led conference room pilot, system integration testing, and user acceptance testing)

Challenges

• Enterprise-Wide Single Configuration
• Business process changes from bureau to bureau to align to the single configuration
BAS PROGRAM UPDATE – FUNCTIONAL
PLANS AND PRIORITIES

Plans and Priorities – Q1 FY 2022

Common Solution

Phase 1
- Conference Room Pilot
  - PRISM (Nov/Dec)
  - EBS (Jan/Feb)
  - Sunflower (Feb)
- Preparation for User Acceptance Testing and System Integration Testing
- Data Conversion/Cleanup
- Vendor E-Invoicing (Invoice Processing Platform (IPP))

Property

Real Property
- Provide O&M Support
- Continue Change Control Board (CCB)

Personal and Fleet
- Conduct Interface discussions for BAS deployment
- Configure Internal Use Software (IUS) functionality for NOAA
Enterprise Data Warehouse (EDW) Update
BAS PROGRAM UPDATE – EDW

RESPONSIBILITIES

- Develop a **DOC Enterprise Data Warehouse (EDW)** that includes BAS Core Applications, Travel, HR/payroll, and corresponding USPTO data

- Provide **Business Intelligence (BI) reporting and analytics capabilities** in Tableau, to enable enterprise and ad hoc reporting

- Develop **EDW Enterprise reports** that support enterprise-wide business processes
## GOALS FOR Q4 FY 21

<table>
<thead>
<tr>
<th>Support the security assessment for the Early ATO deployment*</th>
<th>✓ Completed support of security assessment activities and received initial Authority To Operate (ATO) for EDW infrastructure and application.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Continue design and start development of National Finance Center (NFC) HR/workforce data ingestion into the EDW.</td>
<td>✓ Completed initial development of data ingest of the NFC BEAR18 file for HR/workforce data.</td>
</tr>
<tr>
<td>EDW initial data ingestion:</td>
<td>✓ Continued development of EBS data ingestion into the EDW.</td>
</tr>
<tr>
<td>• Continue development of E-Business Suite (EBS) data ingestion into the EDW</td>
<td>✓ Design and development of PRISM data ingestion moved to Q1 FY22 to allow time for completion of analysis of reporting and data calls.</td>
</tr>
<tr>
<td>• Initiate design and start development of PRISM data ingestion into the EDW.</td>
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</tbody>
</table>

*Early ATO Deployment is a technical release to enable EDW, ServiceNow, and XDR platforms, establish connectivity, and conduct the security assessment for initial ATO – it does not include end user functionality.*
# BAS PROGRAM UPDATE – EDW
## GOALS, STATUS, AND IMPACT – Q4 FY 2021

<table>
<thead>
<tr>
<th>GOALS FOR Q4 FY 21</th>
<th>STATUS AND IMPACT / VALUE OF ACCOMPLISHMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Continue analysis of Acquisitions, Budget, and Finance data call submissions and</td>
<td>✓ Completed analysis of Acquisitions, Budget, and Finance data call submissions and prepared for Q1 FY 22</td>
</tr>
<tr>
<td>prepare for Q1 FY 22 reporting outcomes update</td>
<td>reporting outcomes update</td>
</tr>
<tr>
<td>Complete Requirements Grooming for Real Property, Personal Property/Fleet BI Marts</td>
<td>✓ Completed requirements grooming and analysis of data calls responses. Results of the analysis will be provided during the Q1 FY 22 reporting outcomes update.</td>
</tr>
</tbody>
</table>
• Identifying EDW requirements in parallel with the definition of Core Application processes, configurations, integrations, data attributes, and reports

• Balancing the effort required to ingest and integrate data from multiple data sources with providing visibility into the to-be integrated reporting data model to stakeholders

• Transitioning from multiple reporting environments with different capabilities to a single reporting environment with a standard DOC-wide set of capabilities
**Integrated data model**

- Continue development of data ingest of BAS Core Applications data (EBS, PRISM, and Sunflower) into the EDW
- Initiate design of the integrated reporting data model*

* Integrated reporting data model joins data from the BAS Core Applications with HR and Travel enterprise administrative systems and is the underlying data foundation from which EDW Enterprise reports and ad hoc reports created in Tableau will pull.

**EDW Enterprise Reports**

- Provide reporting outcomes and operating model / governance update
- Communicate approach for Program Manager requirements grooming
- Write user stories for EDW Enterprise Reports planned for initial release
- Develop UAT approach for EDW Enterprise Report for the initial release

**Legacy Historical Copy**

- Initiate technical planning discussions with the bureaus to copy historical NOAA Commerce Business Systems (CBS) and C.Suite data** into the EDW

** Historical data from legacy BAS systems will be copied into the EDW in the legacy system database structure and data format. Federal Real Property Management (FRPM) data was copied into the EDW as part of the Early ATO Release.**

BAS PROGRAM UPDATE – EDW

PLANS & PRIORITIES – Q1 FY 2022
Technical Update
GOALS FOR Q4 2021

• **Integration** - Continue design iterations for Common Solution and NOAA Integrations; develop BAS-CBS Account Code Structure (ACS) Crosswalk and Business Rules for Conversion

• **Architecture** - Review and implement BAS Technical Architecture (Tech Arch) Design; Refine BAS Information Technology Concept of Operations (IT CONOPS); Implement and integrate Identity and Access Management Architecture

• **Connectivity** - Implement connectivity external to BAS and across Cloud Service Providers (CSPs)
Continued discussions for Network Connectivity, Security Controls, and ICAM solution and reviewed initial designs

Continued development and approval of various external ISAs

Completed initial connectivity tests to external and DOC systems

Integration/Conversion

Architecture

- Achieved BAS Portal milestones; design in progress
- Finalized IDM vendor selection; continued discussion with ICAM
- Architected environment for BAS Phase 1 ATO
- Completed Core Financials architecture and design for OCI; currently migrating AWS to OCI
- Baseline OS and application security/functional patching and implemented best practices

Continued review of BAS impacts with external partners including NFC, Treasury Systems, SP3, CWT, WebTA, eRA/GEMS

Conducted kick-off integration sessions with NOAA, NIST, and Census on standard inbound imports

Conducted conversion kick-off discussion with Bureaus

Connectivity

NFC – National Finance Center
SP3 – Smart Pay 3
CWT – Carlson Wagonlit Travel
WebTA – Web-based Time and Attendance Program

BAS PROGRAM UPDATE – TECHNICAL
STATUS AND IMPACT – Q4 2021

eRA – Electronic Research Administration
GEMS – Grants Enterprise Management Solution
IDM – Identity Management
ICAM – Identity Credential and Access Management
ATO – Authority to Operate
ISA – Interconnection Security Agreement
AWS – Amazon Web Services
OCI – Oracle Cloud Infrastructure
BAS PROGRAM UPDATE – TECHNICAL

CHALLENGES

Integration/Conversion

• Standardizing approaches across the Department for consolidated integration points
• Dependencies on the core application decisions such as Account Code Structure (ACS), Project/Tasks, and associated module readiness

Connectivity

• Supporting the breadth and volume of users/connections across DOC
• Management/development/approval of ISAs

Architecture

• Coordinating with concurrent ongoing projects across DOC:
  - ICAM project
  - GEMS project
  - WebTA
BAS PROGRAM UPDATE – TECHNICAL
PLANS AND PRIORITIES Q1 FY 2022

Integration / Conversion
- Continue design iterations for Common Solution integrations
- Review/refine Bureau specific integrations
- Review/refine conversion rules with bureaus

Architecture
- Review and implement BAS Tech Arch design
- Refine BAS IT CONOPS
- Implement and integrate Identity and Access Management architecture

Connectivity
- Implement connectivity external to BAS and across Cloud Service Providers (CSPs)
Organizational Change Management (OCM) Update
GOALS FOR Q4 FY 2021

- Communications – Continue to host information events for the BAS community (Town Hall, Table Talk, Office Hours); Identify, develop and deploy needed communication products; Continue to build out the BAS Website and CSC Portal

- Stakeholder Analysis and Management – Establish NOAA Change Network; Communicate BAS Role-Based Access Control (RBAC) design and prep for NOAA role selection and provisioning

- Training – Finalize NOAA Training Strategy; Socialize Train-the-Trainer approach; Initiate development of BAS Training Curriculum; Deliver Sprint 3 Business Process Videos
PROGRAM STATUS UPDATE - OCM

STATUS AGAINST Q4 PLANS

- September Newsletter (Edition #6) *
- Numerous Q&A updates *
- July Town Hall *
- August Q&A Office Hours
- Sept. NOAA Implementation Kickoff (Rescheduled)

- CSC Portal Additions
  - 20 Sprint 3 Common Solution Outcomes Documents
  - 1 Personal Property and 1 Fleet Common Solution Deep Dive session recordings
  - 6 new RP Job Aids
  - CBS ACCS to BAS ACS Crosswalk
  - NOAA Implementation Year Kickoff Deck

- CBS ACCS to BAS ACS Crosswalk
- NOAA Implementation Year Kickoff Deck
- August NOAA Change Network (CN) recruitment session with bureau leadership
- August RBAC Oracle EBS Design & September Data Security briefings to CNN

- NOAA CN structure and representation
- Oracle EBS Role Design function matrix, Data Dictionary.

- July Train-the-Trainer session with CNN
- 6 additional Real Property Job Aids
- NOAA Training Resource Plans
- Training curriculum and Finance Training outline drafts
- CRP video recording and posting

* Posted on BAS Website ** Posted on CSC Portal
PROGRAM STATUS UPDATE - OCM

PROGRAM IMPACT AND CHALLENGES

Increased Stakeholder Access to Information

• Significant growth in CSC Portal products from 59 to 88 (+49%)
• Business Process Videos views increased from 978 to 1616 (+65%)
• Q&A posted to the BAS Website increased from 1200 to 1421 (+18%)

Challenges

• Identifying and testing a suitable, stable platform that meets the needs for large BAS online events and can accommodate the breadth of our users for future meetings.
Plans and priorities for Q1 FY 2022:

**Communications**
- Identify, develop and deploy needed communication products
- Host engagement events (Town Hall, Table Talks, etc.)
- Continue BAS Website and CSC Portal additions and updates

**Stakeholder Analysis & Management**
- Kick off CN and conduct monthly engagements/activities
- Coordinate with NOAA, EDA, BIS and ES-A communities to begin selection of BAS system roles
- Coordinate with BAS Technical team to determine Role Provisioning process

**Training**
- Finalize Training Curriculum
- Develop draft Training Materials
- Begin drafting Training Delivery Schedule
Risk Management Update
GOALS FOR Q4 FY 2021

- Add, Monitor, and update risks with imminent trigger dates with an emphasis on NOAA risks
- Assist stakeholders with developing risk statements, mitigation plans, trigger dates, etc.
- Develop Standard Operating Procedures (SOPs) for Risk/Issue Management and update the Risk Management Plan
- Update/enhance dashboards/metrics to share key information on risks
- Escalate critical risks to Leadership if they impact major milestones
Status/Achievement against Plan:

- Added 11 risks
- Closed 20 risks
- Engaged in multiple discussions with risk owners/submitters and provided additional clarification to improve the clarity and conciseness of the risks
- Continued to provide detailed information for the Executive Council meeting
- Developed detailed SOPs for the Risk/Issue management
- Simplified and streamlined the Issue Register
- Updated the Risk Management Plan with changes to the Risk/Issues process
BAS PROGRAM UPDATE – RISK
PROGRAM IMPACT AND CHALLENGES

Impact/Value of Accomplishments

• Sound Risk Management will ensure fewer hurdles down the road
• SOPs allow for continuity and ease of Risk/Issue Management
• Streamlined Issue Register
• Improved executive risk reporting and better collaboration with the risk owners

Challenges/Issues/Points of Interest

• Determining what is a risk/issue vs. a parking lot item
• Identifying risks, developing actionable mitigation plans, and determining accurate trigger dates
• Institutionalizing the Risk Program
## BAS Program Update – Risk

### Risk/Issue Stats

<table>
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<th>Project Risk 5x5 Matrix</th>
<th>Impact</th>
<th>Total</th>
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<tbody>
<tr>
<td></td>
<td>Negligible (1)</td>
<td>Minor (2)</td>
</tr>
<tr>
<td>Extremely Likely (5)</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Likely (4)</td>
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<td>1</td>
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<tr>
<td>Moderately Likely (3)</td>
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<td>0</td>
</tr>
<tr>
<td>Not Likely (2)</td>
<td>0</td>
<td>1</td>
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<tr>
<td>Extremely Unlikely (1)</td>
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<td>9</td>
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<tr>
<td>Total</td>
<td>0</td>
<td>11</td>
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<table>
<thead>
<tr>
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<th>Negligible (1)</th>
<th>Minor (2)</th>
<th>Moderate (3)</th>
<th>Serious (4)</th>
<th>Critical (5)</th>
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<tbody>
<tr>
<td>Initial Risks</td>
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<tr>
<td>Risks Added (Q4 2021)</td>
<td>92</td>
<td>11</td>
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<td>Risks Closed (Q4 2021)</td>
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<td>Current Risks</td>
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<tr>
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<th>Minor (2)</th>
<th>Moderate (3)</th>
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<tr>
<td>Initial Issues</td>
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<tr>
<td>Issues Opened/Realized (Q4 2021)</td>
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<td>Issues Closed (Q4 2021)</td>
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<td>Current Issues</td>
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<td>1</td>
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</table>
Plans and Priorities for Q1 FY 2022:

- Continue to monitor and update NOAA risks and risks with imminent trigger dates
- Assist stakeholders with developing risk statements, mitigation plans, trigger dates, etc.
- Continue to improve the Risk/Issue Management Processes
- Update/enhance dashboards/metrics to share key information on risks
- Escalate critical risks to Leadership if they impact major milestones
Security Update
**RESPONSIBILITIES**

- Lead the Security effort for BAS
- Document Control Implementation
- Coordinate Assessment and Authorization (A&A)
- Security Monitoring

**GOALS**

- Begin Control Assessment for FY22 ATO
- Complete High Value Asset (HVA) Designation for BAS
- Complete SLA Requirements, KPIs, and Metrics
- Monitor System Logs and Vulnerability Scans
- Complete Interconnection Security Agreements (ISAs)
- Provide Monthly O&M Security Reports

ATO – Authority to Operate
SLA – Privacy Threshold Analysis
KPI – Key Performance Indicators
O&M – Operations and Maintenance
BAS PROGRAM UPDATE – FUNCTIONAL

STATUS/ACHIEVEMENT FOR Q4 2021

• Business Applications Solutions (BAS) OS-077 was independently assessed by Coalfire from May 2021 to July 2021
• For this initial assessment, the following solutions were included in the initial ATO:
  - Enterprise Data Warehouse (EDW) on Accenture Insights Platform (AIP) FedRAMP Moderate PaaS
  - ServiceNOW FedRAMP Moderate SaaS
  - Accenture Xtended Detection and Response (XDR) FedRAMP Moderate SaaS
• An ATO was granted for BAS OS-077 on August 19th, 2021
• 15 POAMs were open as a result of this assessment
  - All POAM are currently under review with the DOC ITSO
  - Once approved, POAMs will be submitted for closure as all associated vulnerabilities have been remediated
• 1 Risk Acceptance was open due to vulnerabilities on a Cloud Service Provider (CSP) Application
  - Application is managed by CSP and a new version and license needed to be purchased for all customer instances
  - Application is in the process of being upgraded in all applicable BAS environments
  - Rescan will be scheduled for Early November to confirm remediation

MANUAL CONTROLS ASSESSMENT

| Total Number of Controls Assessed | 363 |
| Controls Externally Inherited or Not Applicable | 171 |
| Controls that were Satisfied | 182 |
| Controls that were Other than Satisfied | 10 |

Finding Criticality

- 0 C
- 0 H
- 0 M
- 10 L

VULNERABILITY SCAN FINDINGS

- 3 High
- 3 Moderate
- 9 Low

POAM – Plan of Action and Milestones
SaaS – Software as a Service
ITSO - Information Technology Security Officer
PaaS – Platform as a Service
IMPACT:
• Received ATO and Approved Privacy Documentation
• Completed ISAs for Enterprise Application System (EAS) and Treasury
• Developed Dashboard using Xtended Detection and Response (XDR) tool

CHALLENGES:
• Delays in implementation and testing with DOC Enterprise Security Operations Center (ESOC)
• Delays in development of additional ISAs
• New policies and control requirements from OPOG, DOC OCIO, and FedRAMP
**Q1 FY 2022 PRIORITIES**

**Begin required reporting for HVA Requirements**
- DOC
- DHS Cybersecurity and Infrastructure Security Agency (CISA)

**Configure new applications to provide logs to DOC ESOC and XDR**
- PRISM
- EBS
- Sunflower
- IDM

**Continue Monthly Control Review**
- Update Control Implementation
- Collect Supporting Evidence
- Update Security Documentation

**Update Security Documentation based on:**
- NIST 800-53 Rev 5
- New DOC Policy / HVA
- New Systems and functionality

**Continue to address questions regarding Federal and DOC policy requirements**
If you can’t access the Teams chat line, you can use the following link to type in your question:

https://www.menti.com/io9kq3fshw
BAS PROGRAM UPDATE

NEXT EVENT

December 7, 2021

• BAS Table Talk – EDW

February 16, 2022

• Q1 FY 2022 BAS Program Status Update
We’d like your input using Menti.com (authorized by DOC for use at these events)

- Sign in using your computer, phone, or other electronic device
  www.menti.com with passcode 3761 6660
  You can also reach the survey directly using
  https://www.menti.com/nnfvezte8y3

- Answer the questions as they appear – all responses are anonymous