



# **Business Applications Solution (BAS) Program - Program Status Update**

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**UNITED STATES DEPARTMENT OF COMMERCE  
OFFICE OF FINANCIAL MANAGEMENT**

December 2021



Expected  
**Structure.**  
Unexpected  
***Flexibility.***



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



# **BAS PROGRAM UPDATE**

**PROGRAM STATUS – Q4 2021**



## **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 UPDATE**

## **PROGRAM PLANS AND PRIORITIES**



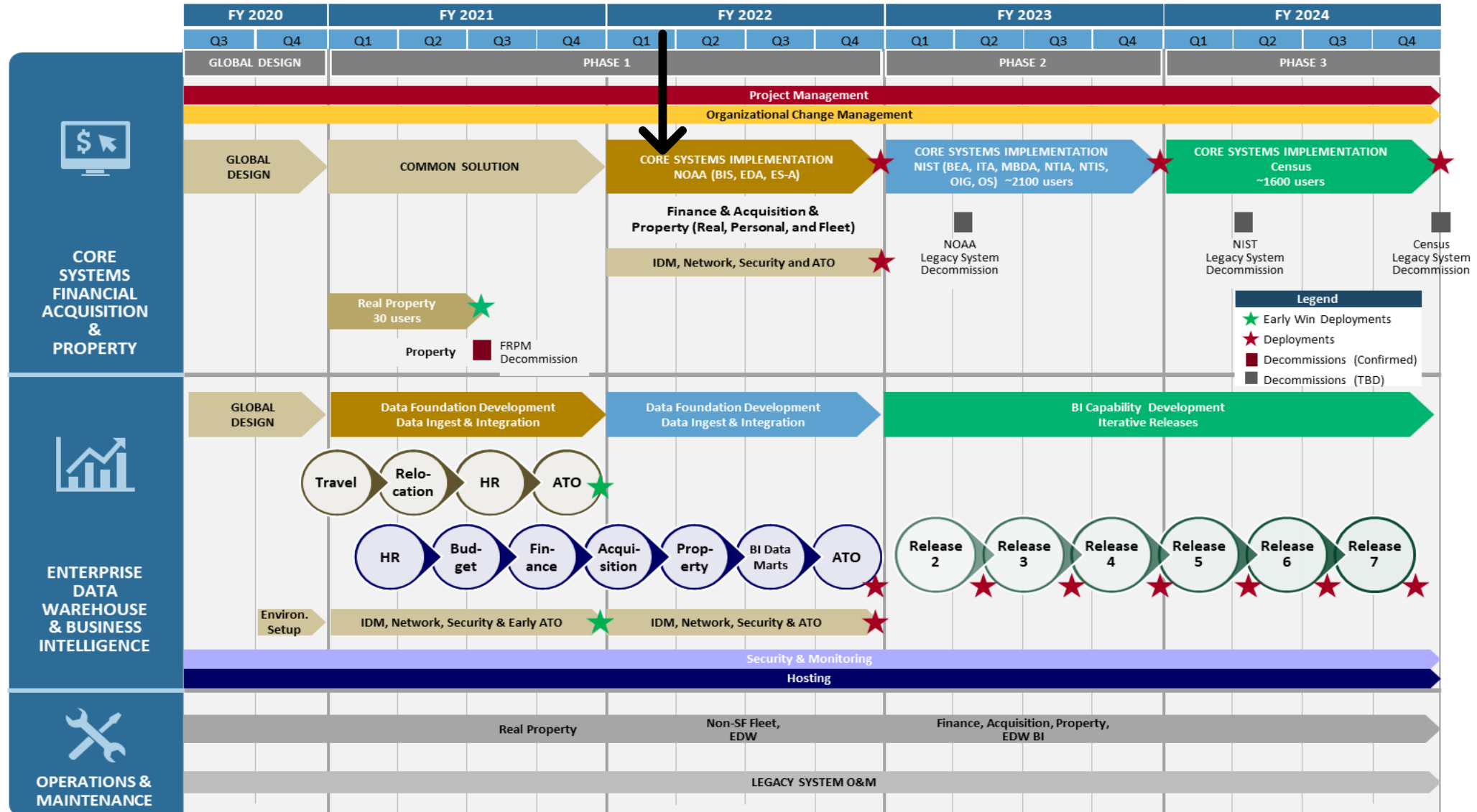
### **BAS Program Goals for Q1 FY 2022**

- 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



# BAS PROGRAM UPDATE

## PROGRAM STATUS – Q4 2021– HIGH LEVEL PROGRAM SCHEDULE





# Functional Update





# **BAS PROGRAM UPDATE – FUNCTIONAL**

## **RESPONSIBILITIES AND GOALS – Q4 2021**



### **RESPONSIBILITIES**



### **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

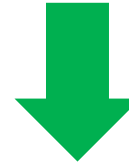
#### Sprint 1 and 2

- 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 July - September

#### Sprint 4

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

ACS - Account Code Structure  
SLA – Subledger Accounting  
SLT – Summary Level Transfer



### Phase 1 NOAA/BIS/EDA/ES-A Implementation Year

#### Phase 1

- 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



# **BAS PROGRAM UPDATE – FUNCTIONAL**

## **PROGRAM IMPACT AND CHALLENGES**



### **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



# BAS PROGRAM UPDATE – EDW

## GOALS, STATUS, AND IMPACT – Q4 FY 2021



GOALS FOR Q4 FY 21		STATUS AND IMPACT / VALUE OF ACCOMPLISHMENTS	
	Support the security assessment for the Early ATO deployment*	✓	Completed support of security assessment activities and received initial Authority To Operate (ATO) for EDW infrastructure and application.
	Continue design and start development of National Finance Center (NFC) HR/workforce data ingestion into the EDW.	✓	Completed initial development of data ingest of the NFC BEAR18 file for HR/workforce data.
	EDW initial data ingestion: <ul style="list-style-type: none"><li>Continue development of E-Business Suite (EBS) data ingestion into the EDW</li><li>Initiate design and start development of PRISM data ingestion into the EDW.</li></ul>	✓ ✓	Continued development of EBS data ingestion into the EDW. Design and development of PRISM data ingestion moved to Q1 FY22 to allow time for completion of analysis of reporting and data calls.



\*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



GOALS FOR Q4 FY 21		STATUS AND IMPACT / VALUE OF ACCOMPLISHMENTS	
	Continue analysis of Acquisitions, Budget, and Finance data call submissions and prepare for Q1 FY 22 reporting outcomes update	✓	Completed analysis of Acquisitions, Budget, and Finance data call submissions and prepared for Q1 FY 22 reporting outcomes update
	Complete Requirements Grooming for Real Property, Personal Property/Fleet BI Marts	✓	Completed requirements grooming and analysis of data calls responses. Results of the analysis will be provided during the Q1 FY 22 reporting outcomes update.





# **BAS PROGRAM UPDATE – EDW**

## **CHALLENGES**



- 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



# BAS PROGRAM UPDATE – EDW

## PLANS & PRIORITIES – Q1 FY 2022



### 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.*



# Technical Update

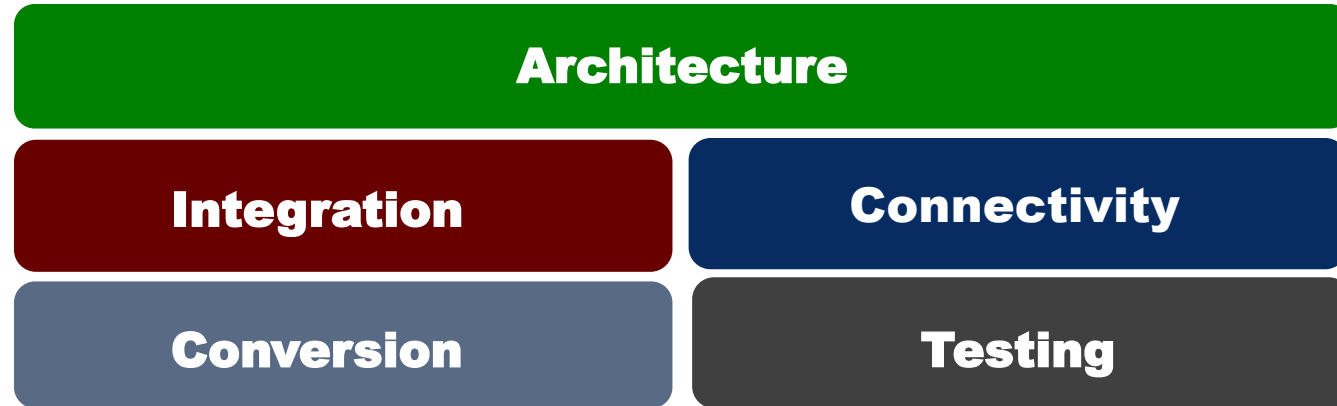


# BAS PROGRAM UPDATE – TECHNICAL

## RESPONSIBILITIES AND GOAL – Q4 2021



### RESPONSIBILITIES



### 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)



# BAS PROGRAM UPDATE – TECHNICAL

## STATUS AND IMPACT – Q4 2021

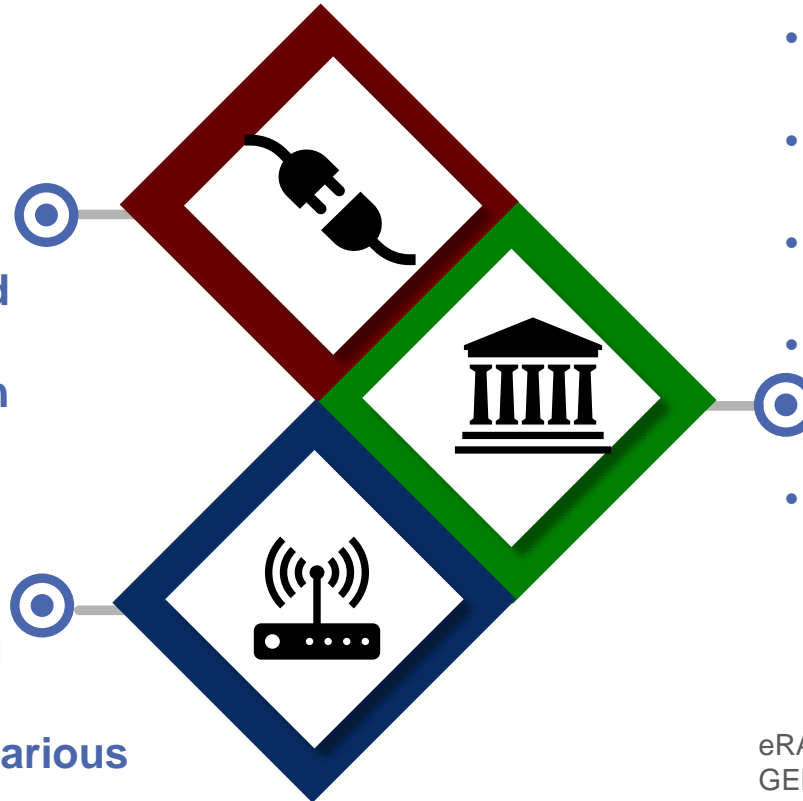


### Integration/Conversion

- 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

- 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



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

### 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
- Baselined OS and application security/functional patching and implemented best practices

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

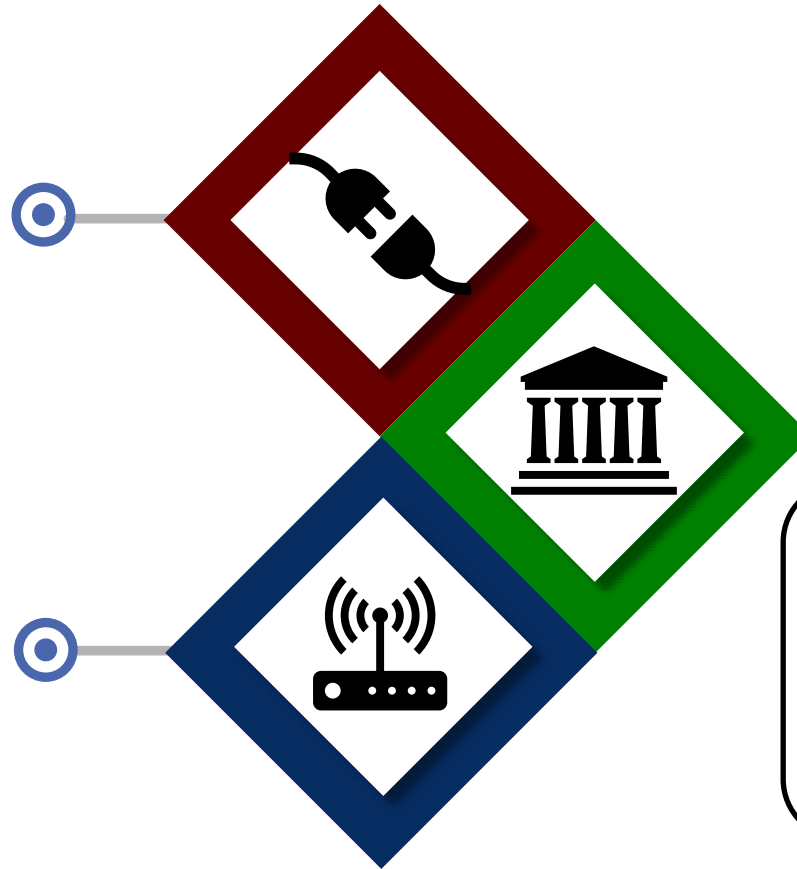


## Integration/Conversion

- 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**



# PROGRAM STATUS UPDATE - OCM

## RESPONSIBILITIES AND GOALS Q4 FY 2021



### RESPONSIBILITIES

**Communications**

**Stakeholder Analysis  
& Management**

**Training**

### 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



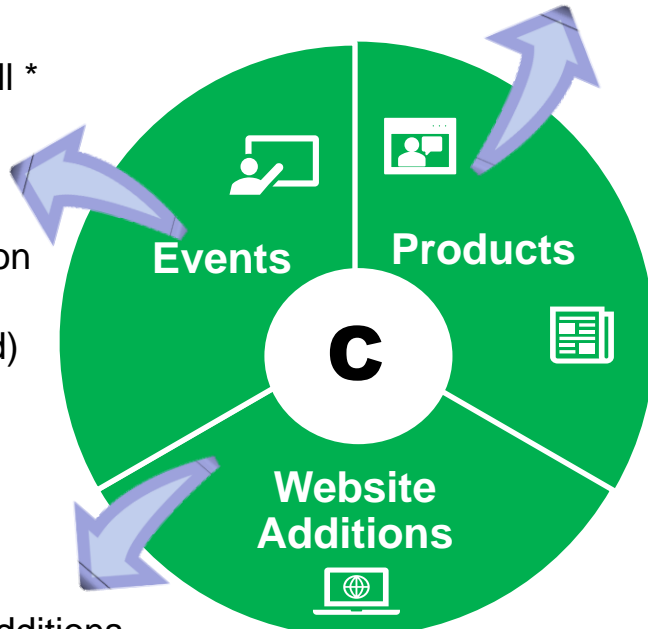
# PROGRAM STATUS UPDATE - OCM

## STATUS AGAINST Q4 PLANS



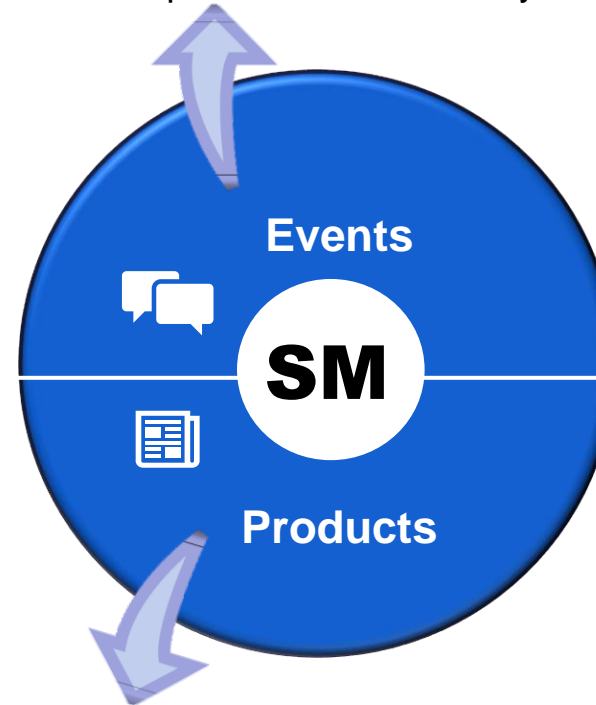
- September Newsletter (Edition #6) \*
- Numerous Q&A updates \*

- July Town Hall \*
- August Q&A Office Hours
- Sept. NOAA Implementation Kickoff (Rescheduled)



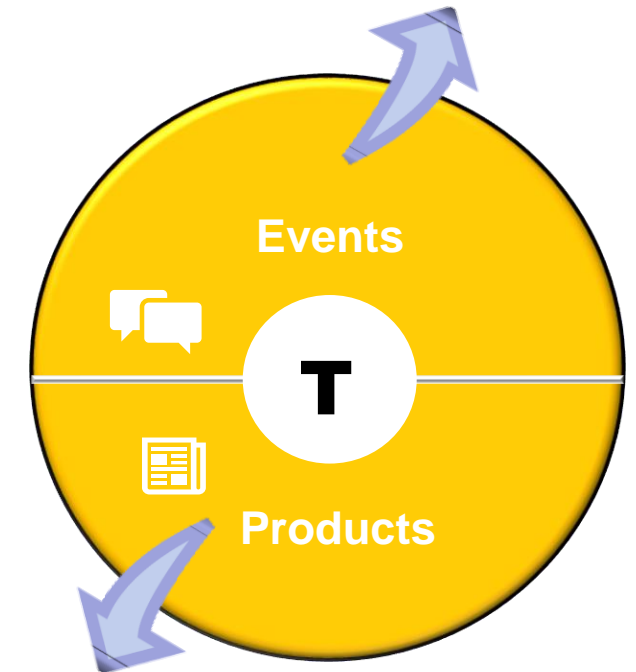
- CSC Portal Additions
  - 20 Sprint 3 Common Solution Outcomes Documents
  - 1 Personal Property and 1 Fleet Common Solution Deep Dive session recordings
  - 6 new RP Job Aids
  - CBS ACCS to BAS ACS Crosswalk
  - NOAA Implementation Year Kickoff Deck

- 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



# 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%)**

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### 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.



# PROGRAM STATUS UPDATE - OCM

## PLANS AND PRIORITIES



### 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**



# **BAS PROGRAM UPDATE – RISK**

## **RESPONSIBILITIES AND GOALS – Q4 FY 2021**



### **RESPONSIBILITIES**

- Lead the Risk Management efforts for BAS
- Assist stakeholders with identifying and monitoring BAS risks to ensure critical milestones are met
- Institutionalize the Risk Management to ensure successful BAS deployment

### **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





# **BAS PROGRAM UPDATE – RISK**

## **STATUS/ACHIEVEMENT – Q4 FY 2021**



### **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



Project Risk 5x5 Matrix		Impact					Total
		Negligible (1)	Minor (2)	Moderate (3)	Serious (4)	Critical (5)	
Likelihood	Extremely Likely (5)	0	0	0	0	0	0
	Likely (4)	0	1	1	4	2	8
	Moderately Likely (3)	0	0	5	10	2	17
	Not Likely (2)	0	1	6	15	1	23
	Extremely Unlikely (1)	0	9	14	6	6	35
Total		0	11	26	35	11	83

Initial Risks	Risks Added (Q4 2021)	Risks Closed (Q4 2021)	Current Risks
92	11	20	83

Initial Issues	Issues Opened/Realized (Q4 2021)	Issues Closed (Q4 2021)	Current Issues
0	0	0	1

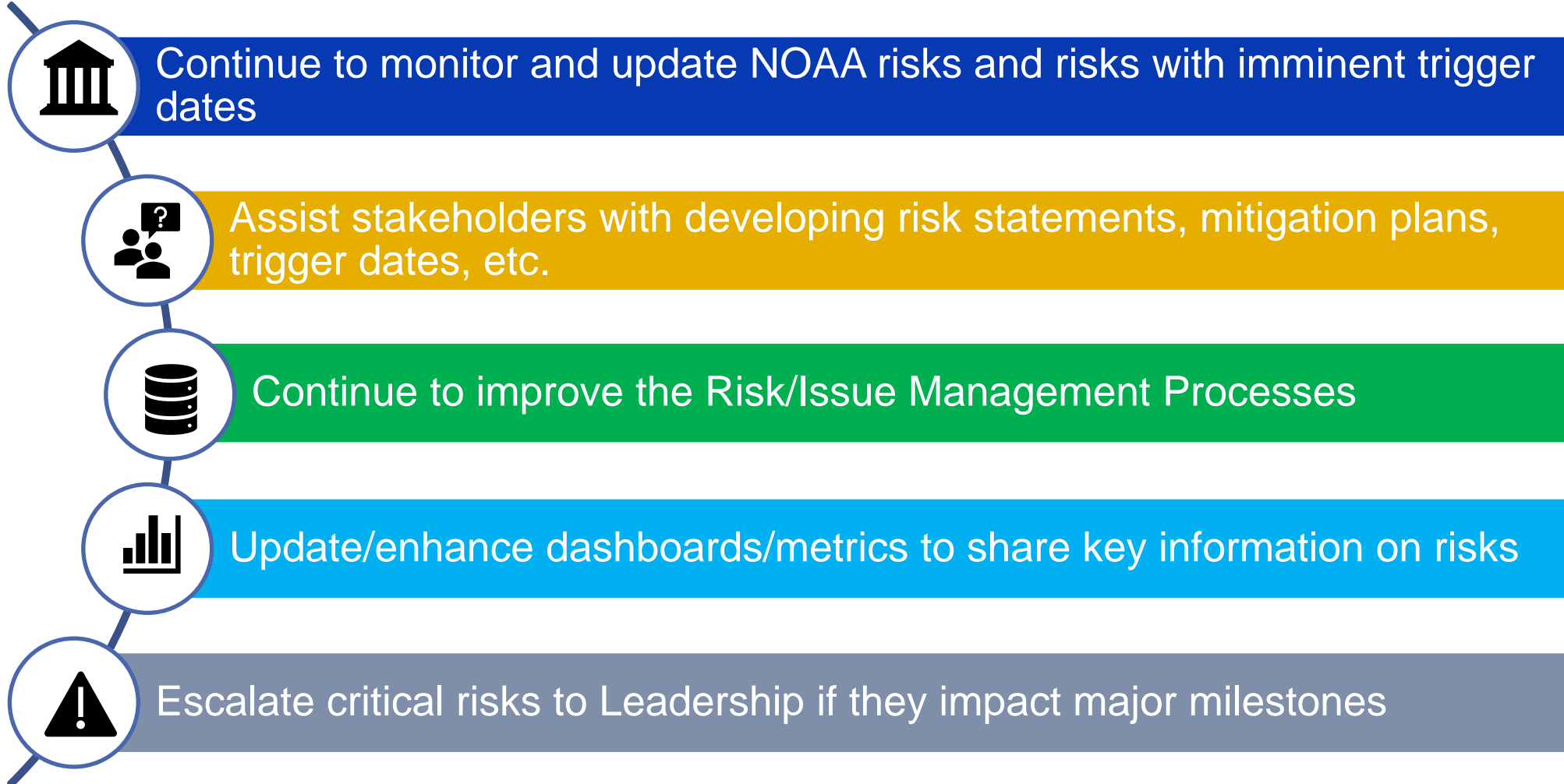


# BAS PROGRAM UPDATE – RISK

## PLANS AND PRIORITIES



### Plans and Priorities for Q1 FY 2022:





# Security Update



# BAS PROGRAM UPDATE – SECURITY

## RESPONSIBILITIES AND GOALS Q4 FY 2021



### RESPONSIBILITIES

Lead the Security effort for BAS

Document Control Implementation

Coordinate Assessment and Authorization (A&A)

Security Monitoring

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

### 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





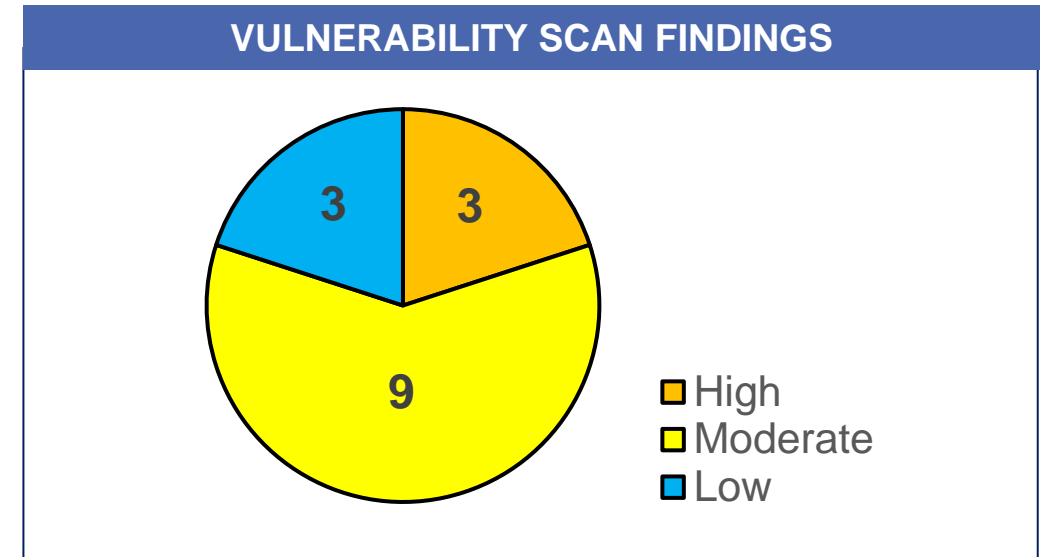
# BAS PROGRAM UPDATE – FUNCTIONAL



## 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







# BAS PROGRAM UPDATE – SECURITY

## PROGRAM IMPACT AND CHALLENGES



### 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

## BAS SECURITY PROGRAM



# **BAS PROGRAM UPDATE - SECURITY**

## **PLANS AND PRIORITIES FOR Q1 FY 2022**



### **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**



# **BAS PROGRAM UPDATE**

**WE NEED YOUR INPUT**



**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](http://www.menti.com) with passcode **3761 6660**

You can also reach the survey directly using

<https://www.menti.com/nnfvzte8y3>

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