



Homeland Security

Ongoing Authorization (OA) ISPAB Briefing

June 14, 2013

Office of the Chief Information Security Officer

Outline

- Entrance Requirements
- Control Tailoring
- Audit Trails
- Policy
- Safeguards
- Supporting Tool
- Results



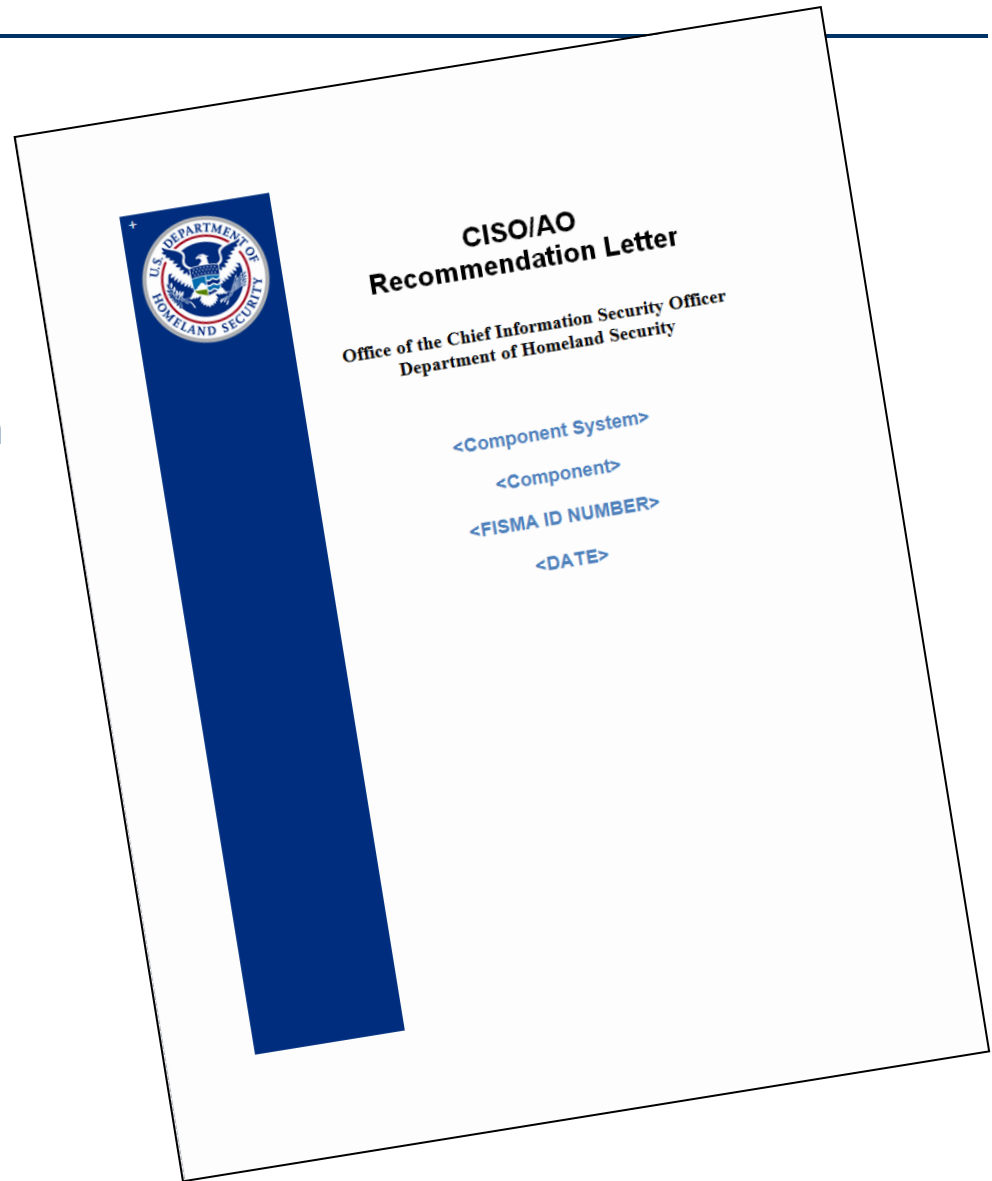
Entrance Requirements

- The following are required to enter the DHS OA program:
 - **Components must have a(n):**
 - Robust Continuous Monitoring program
 - Signed Memorandum of Agreement (MOA)
 - Operational Risk Management Board (ORMB)
 - OA Manager
 - Common Control Catalog
 - **Systems must have a:**
 - Current ATO
 - Control Allocation Table (CAT)



Gateway into OA: CISO/AO Recommendation Letter

- Before entering OA, Components must complete a *Recommendation Letter*
- Serves as the **AO's decision** on whether or not a system should operate under OA
- Additionally, **anytime a trigger exceeds a defined risk threshold**, the letter is again completed



Control Tailoring: Control Allocation Table (CAT)

- The **CAT** allows for risk-based tailoring of controls
 - Outlines assessment **frequency** and **impact**
 - **Updated over time** to meet changing risks
 - This concept evolved with **NIST recommendations**

Control	Enterprise Common Control	Component Common Control	System Specific	CDM	Risk Accepted	POA&M	Frequency	Impact
AC-1	X						6 Months	1 (H)
AC-2	X		X			X	1 Month	2 (M)
AC-2 (1)			X		X		3 Months	3 (L)
AC-3		X		X		X	1 Month	1 (H)
AC-4		X	X				6 Months	2 (M)
AC-5	X			X			1 Year	3 (L)

Identifies controls outside of their direct control

Outlines assessment frequency and impact

Audit Trails: TRigger Accountability Log (TRAL)

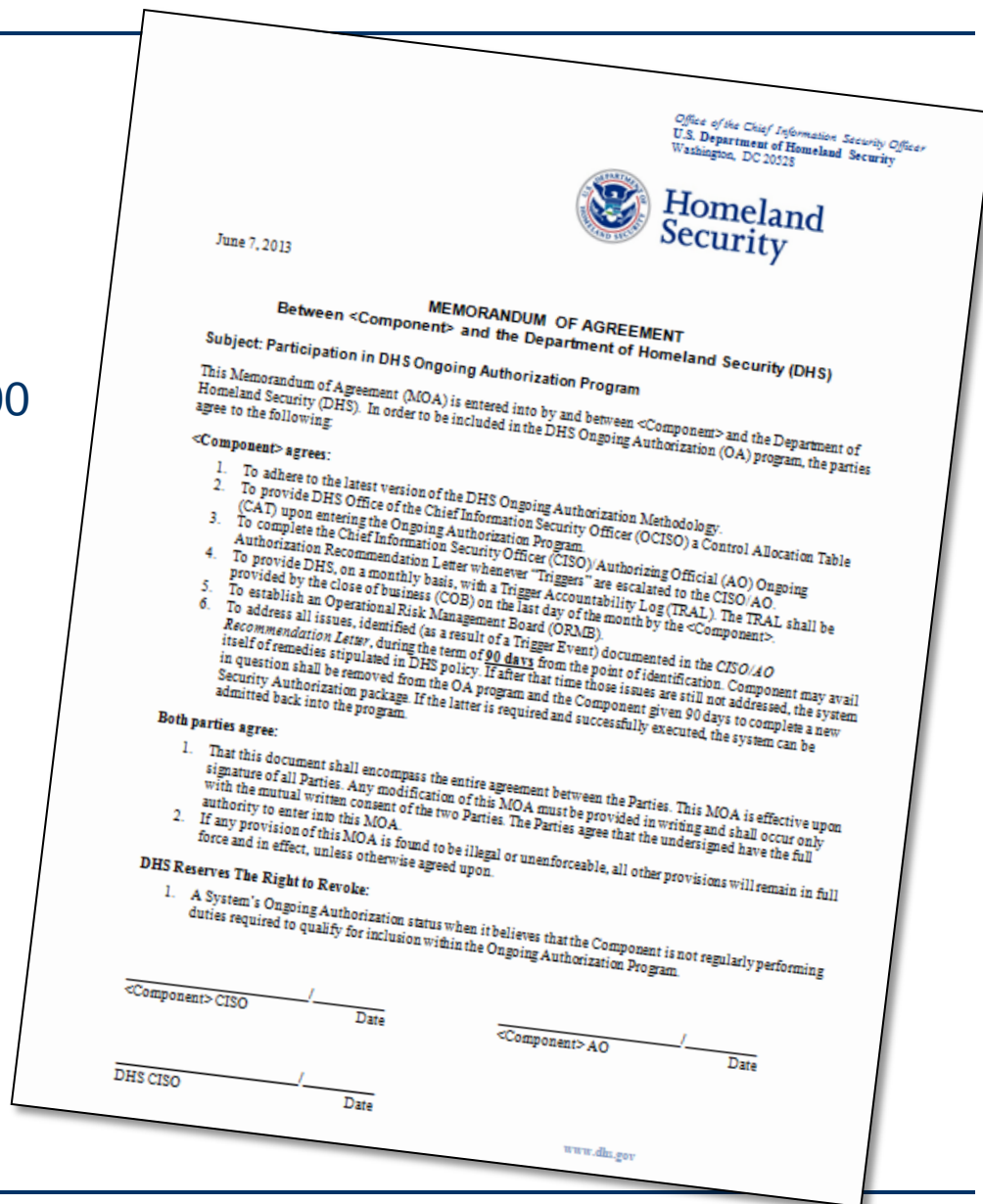
- Components document and **submit trigger events monthly**
 - Serves as an **audit trail**
 - Provides DHS with **visibility** into Component activities
 - Components began submitting TRALs on **5/31**

TRigger Accountability Log (TRAL)						
Risk Threshold	FISMA ID	Description	Category	Severity	Impacted Controls	Risk Response
Moderate	TSA-06714-MAJ-06714	Vulnerability Management: average of 304 high vulnerabilities per asset detected in April Nessus scans.	Technology	2	SI-2, CM-7	No Escalation Needed
Moderate	TSA-06714-MAJ-06714	Hardware and Software Managed Assets: Operating System Data for 2003 servers was not returned in Monthly Nessus scans. SP Inventory reflects 2003 servers.	Technology	3	CM-2, CM-3, CM-4, CM-8, CA-7, SA-10, PL-2, SI-3	No Escalation Needed
Low	TSA-06714-MAJ-06714	Status of Plans Actions and Milestones: There is currently one overdue POA&M, however a waiver was submitted on 4/9/2013. TAF #24, Risk categorization Low, is 25 days overdue. Waiver is in route.	Technology	4	CA-5	No Escalation Needed



Policy: Memorandum of Agreement (MOA)

- The MOA enforces program expectations and policy
- It will eventually be incorporated into the DHS 4300
- It outlines the expectations of Components and DHS
- It is signed by the Component CISO and AO



Safeguards: DHS OA Checklist

- To ensure **accountability**, DHS implemented safeguards
- DHS reviews **CISO/AO Recommendation Letters** for completeness and quality against the **DHS OA Checklist**
 - **90-days** for Components to fix issues, but if not fixed...
 - **90-days** to do a new Security Authorization (successful completion can provide allowance back into OA Program)



Supporting Tool: IACS

- DHS' new compliance tool, IACS, supports OA
 - Focuses on controls and testing their effectiveness
- IACS allows for **Common Controls**
 - Provider results flow down to all consumers automatically
- IACS has “**Risk Elements,**” which supports the trigger concept in 2 ways:
 1. Users can **manually create a risk** from a non-technical trigger
 2. User can **auto-create risk elements** from test case failure

Saved	Title	Location/Subject	Calc Risk	Adj Risk
No	Access Control for Mobile Devices [NIST 800-53 w/ DHS 4300A AC-19]	DC1	High	High
No	Alternate Processing Site [NIST 800-53 w/ DHS 4300A CP-7[1]]	DC1	High	High

Example of Auto-Created Risk Element

Results: Pilot Trigger Events

- **OA is working right now** at DHS HQ, ICE, and TSA
 - As of 6/10, **21 trigger events** have been reported
 - **28% have been resolved** (6 of 21)

Component	High	Moderate	Low	Total
DHS HQ	0	3	0	3
TSA	0	6	7	13
ICE	2	0	3	5
TOTALS	2 (9.5%)	9 (42.9%)	10 (47.6%)	21



BACKUP SLIDES

Ongoing Authorization - Component Level Risk Evaluation Process

Security Authorization Status

Trigger

Response

Decision

Result

Risk Thresholds are determined by Component's CISO and OA Manager. A Risk Threshold Matrix should be utilized to ensure uniform assessment.

OA Manager Evaluation:
Is Risk Threshold Exceeded?

HIGH RISK
MODERATE RISK
LOW RISK

Risk Rating of Trigger

	LOW	MOD	HIGH
LOW			
MOD			
HIGH			

	No escalation needed, Track Mitigation via POA&M
	Escalate to CISO through the ORMB
	Escalate to AO through ORMB and CISO

FIPS 199 Categorization of System

Maintain Ongoing State of Awareness



OA Manager Notified About Event/Trigger

Is Risk Threshold Exceeded?

OA Manager Notifies ORMB To Evaluate System Risk

ORMB Analyzes Risk of Information System

Yes: Revisit Phase of RMF (e.g., ST&E process)

Yes: Maintain Authorization

Yes: Recommend System Shutdown

CISO Recommendation

Select Risk Action

- Accept
- Mitigate – POA&M
- Change
- Transfer
- Reject

Update Control Assessment Frequency

No Escalation (Maintain and track)

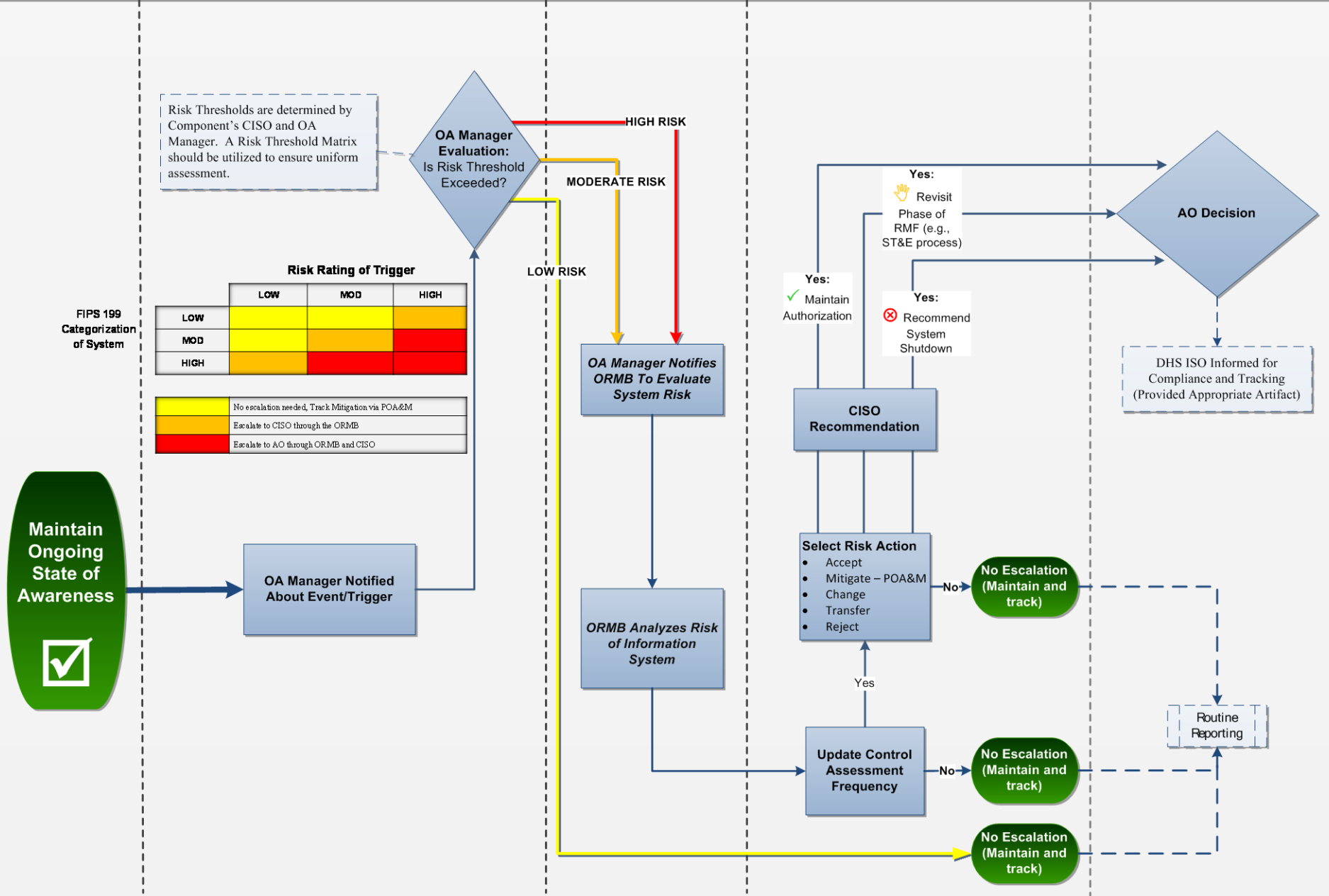
No Escalation (Maintain and track)

No Escalation (Maintain and track)

AO Decision

DHS ISO Informed for Compliance and Tracking (Provided Appropriate Artifact)

Routine Reporting





Homeland Security