



Fostering Partnerships in T&E and Acquisition

Integrated Rapid Testing at DHS

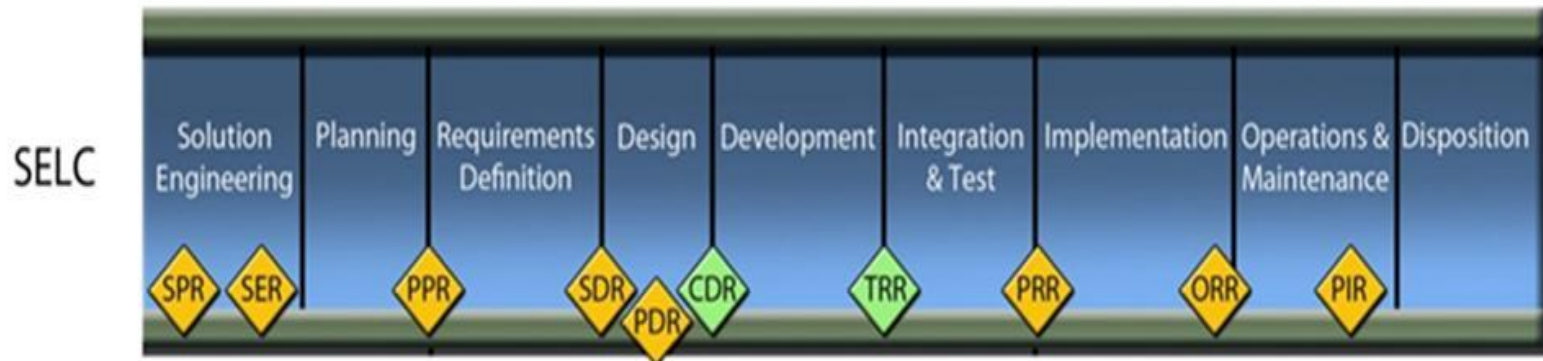
Joshua Seckel, Technical Manager



BLACKSTONE

technology group

Traditional Cycle at DHS



SELC Stage Reviews

SPR: Study Plan Review

SER: Solution Engineering Review

PPR: Project Planning Review

SDR: System Definition Review

PDR: Preliminary Design Review

CDR: Critical Design Review

TRR: Test Readiness Review

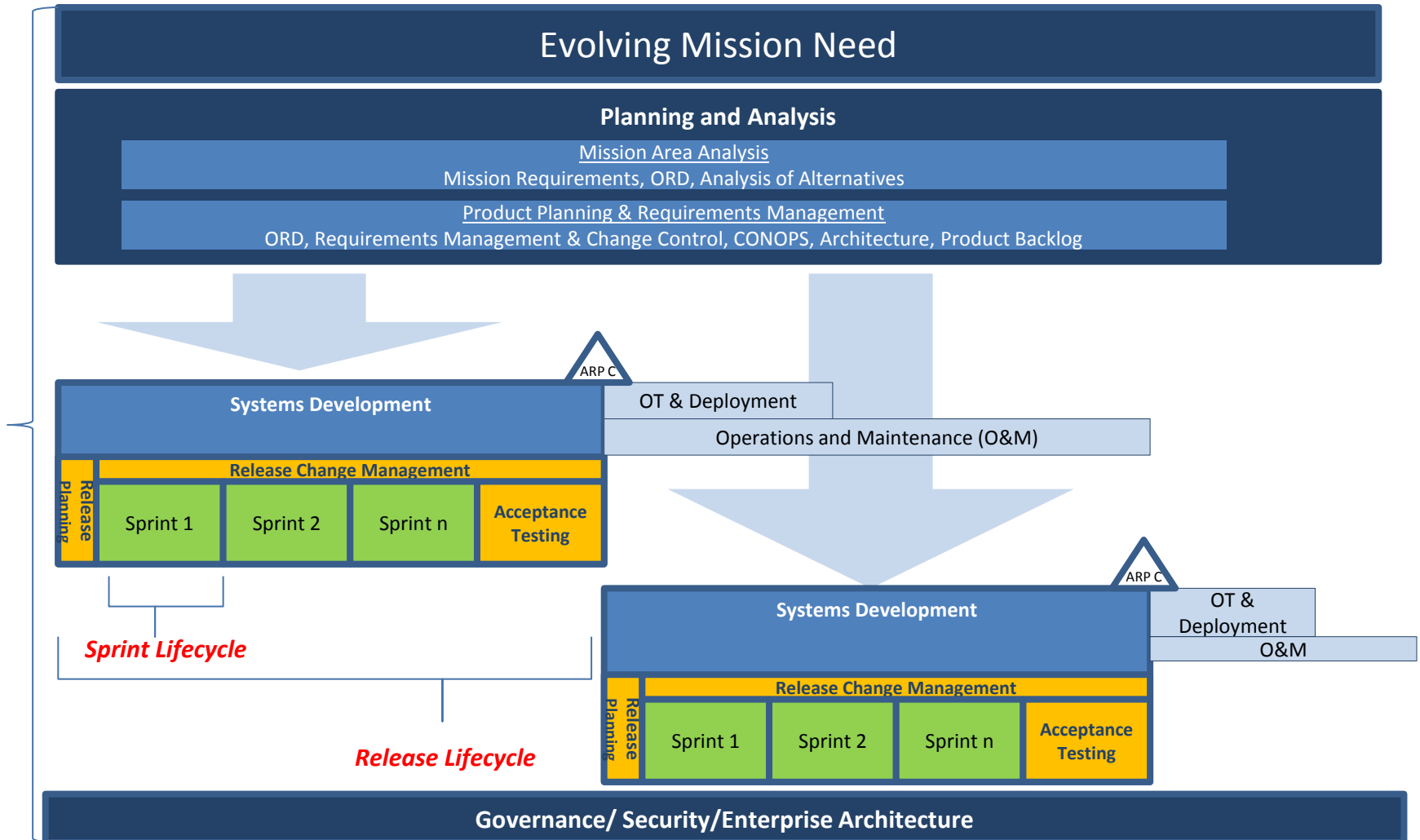
PRR: Production Readiness Review

ORR: Operational Readiness Review

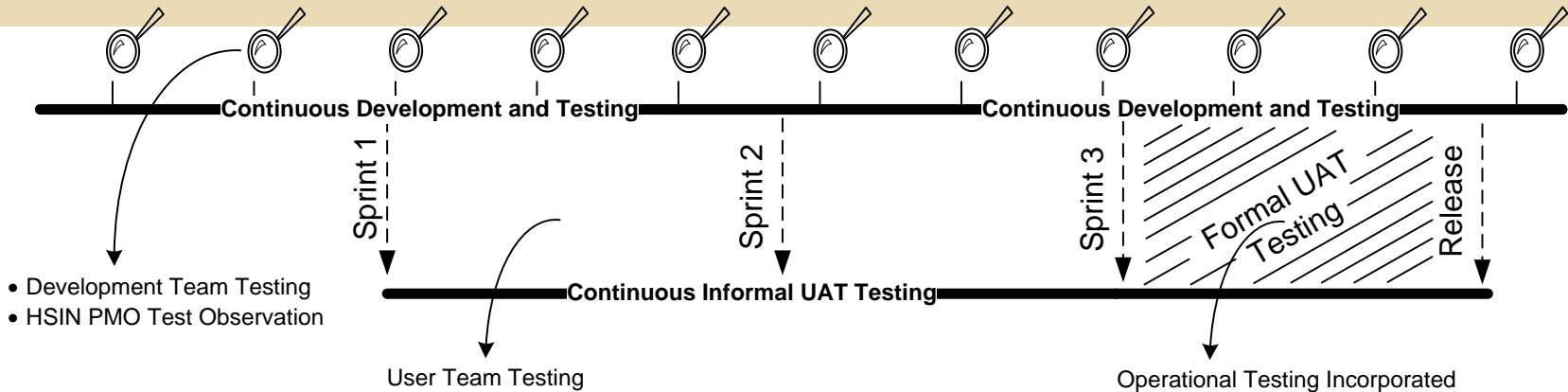
PIR: Post Implementation Review

- Written for system engineering following a primarily waterfall approach
- Development Test cycle follows development with Operational Testing following Developmental Testing

Agile Development Cycle



Testing modifications



- All development testing is performed within each Sprint, observed by the Project team
- Each Sprint has a Demo and Review attended by End Users and governance organizations
- User Acceptance Testing and Operational Testing are run concurrently once per release with shared data
- Security Test and Evaluation is also run once per release and has preliminary runs within Sprints

Testing Artifacts

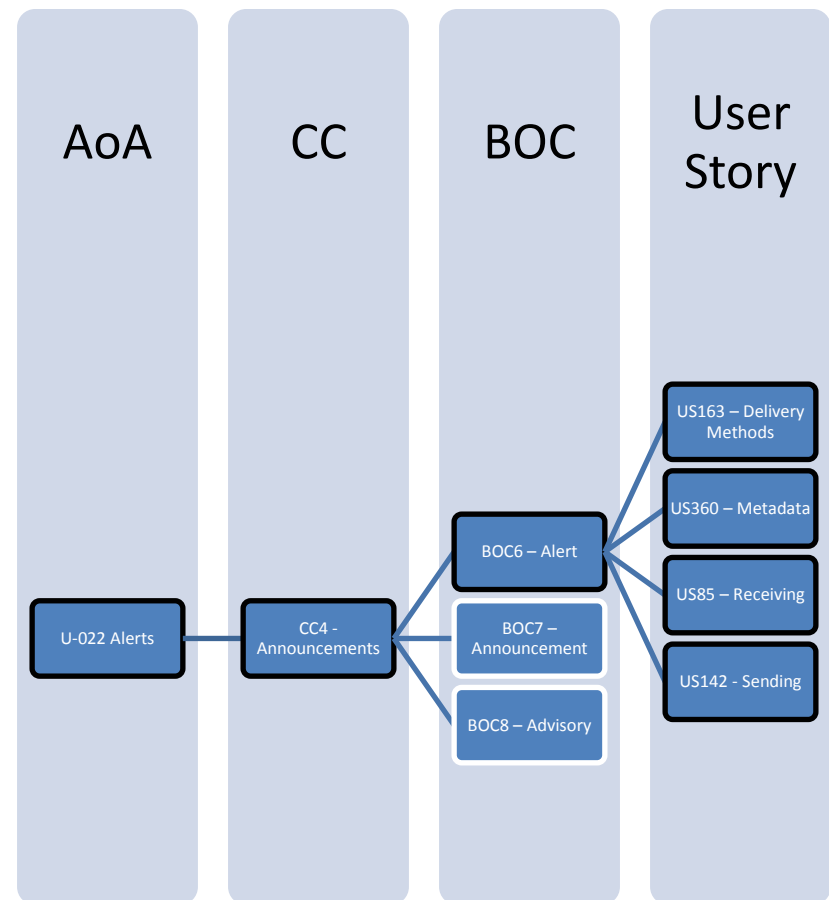
- Test and Evaluation Master Plan
- Development test results at the end of each Sprint
- Release Test Plan and Results produced by combined Operational Test Agent and Program team
- User Stories contain scenarios with test for passing requirement

Requirements Artifacts

- Product Backlog with user stories detailed with tests/scenarios
- Requirements Traceability Matrix
- Operational Requirements Document
- Mission Needs Statement

Requirements Traceability

- For Requirements, strategic capabilities identified in an Analysis of Alternatives
- Those Capabilities were at a very high/epic level and were broken down
 - Core Capabilities as SharePoint Capabilities out of the box
 - Business/Operational Capabilities (BOC) as webparts to deliver to the individual group administrator
 - User Stories as actual user functionality desired out of the webpart
- Delivery tracked at the user story level for each Sprint, completion of BOC defined when all user stories for that BOC complete



Development Traceability

- Traces from user stories through specific automated or manual development tests and to specific User Acceptance and Operational Test scenarios

Release A									
Sprint #									
AOA Capability	CC	BOC	SDD	Gallery	Webpart	Unit Tests	Integration Tests	User Acceptance Tests	Operational Tests
22-Alerts	4-Announcements	6- Alerts	P 24	COI	Alert			UAT 15 UAT 12 UAT 14	OT 12

Use of SharePoint to Deploy Requirements Management Processes & Controls

Requirements Management

HSIN PRODUCT BACKLOG	KM BUSINESS RULES	TASK MANAGEMENT																														
<ul style="list-style-type: none"> Submit a User Story View User Stories by Hierarchy View User Stories by Status View User Stories by Capability Process Diagram 	<ul style="list-style-type: none"> Submit a Business Rule View Rules by Category View Rules by Status Process Diagram (TBD) 	<ul style="list-style-type: none"> Submit a Task View Tasks by Assignee Process Diagram (TBD) 																														
QUESTIONS & ANSWERS	CAPABILITIES	REFERENCE LISTS																														
<ul style="list-style-type: none"> Submit a Question View Q&A by Category View Q&A by Primary Audience 	<ul style="list-style-type: none"> AoA Capabilities Core Capabilities Business or Operational Capabilities Capabilities by Template 	<ul style="list-style-type: none"> HSIN Taxonomy HSIN Attributes HSIN Form Fields HSIN Roles & Permissions HSIN Glossary 																														
Shared Documents	Discovery Requirements Package																															
<table border="1"> <thead> <tr> <th>Type</th> <th>Name</th> <th>Modified</th> </tr> </thead> <tbody> <tr> <td>Folder</td> <td>01 - Requirements Meetings</td> <td>5/2/2011 1:33 PM</td> </tr> <tr> <td>Folder</td> <td>02 - Assessments and Analyses</td> <td>5/11/2011 11:28 AM</td> </tr> <tr> <td>Folder</td> <td>03 - Logical Data Model</td> <td>5/10/2011 10:45 AM</td> </tr> <tr> <td>Folder</td> <td>04 - Requirements Artifacts</td> <td>5/11/2011 11:28 AM</td> </tr> <tr> <td>Folder</td> <td>05 - Presentations, Briefs, and Overviews</td> <td>5/11/2011 11:28 AM</td> </tr> <tr> <td>Folder</td> <td>06 - Process Diagrams</td> <td>5/11/2011 11:28 AM</td> </tr> <tr> <td>Folder</td> <td>07 - Data Calls</td> <td>5/11/2011 11:29 AM</td> </tr> <tr> <td>Folder</td> <td>08 - Working Documents</td> <td>5/17/2011 4:17 PM</td> </tr> <tr> <td>Folder</td> <td>10 - [Archive]</td> <td>5/10/2011 1:19 PM</td> </tr> </tbody> </table> <p>Add new document</p>	Type	Name	Modified	Folder	01 - Requirements Meetings	5/2/2011 1:33 PM	Folder	02 - Assessments and Analyses	5/11/2011 11:28 AM	Folder	03 - Logical Data Model	5/10/2011 10:45 AM	Folder	04 - Requirements Artifacts	5/11/2011 11:28 AM	Folder	05 - Presentations, Briefs, and Overviews	5/11/2011 11:28 AM	Folder	06 - Process Diagrams	5/11/2011 11:28 AM	Folder	07 - Data Calls	5/11/2011 11:29 AM	Folder	08 - Working Documents	5/17/2011 4:17 PM	Folder	10 - [Archive]	5/10/2011 1:19 PM	<ul style="list-style-type: none"> 01) Roles & Permissions: Javan, Pirooz (CTR) 02) LDM: Lacy, Diane (CTR) 03) KM Business Rules: Biala, Jeffrey 04) User Stories: Requirements Team 05) Information Architecture (TBD): Kapoor, Amit (CTR) 06) HSIN Taxonomy: Kapoor, Amit (CTR) 07) Portal Configuration Sheets (TBD): Ramseyer, Joe (CTR) 08) Preliminary Release Plan: Seckel, Josh (CTR) 09) Sandbox Walkthrough/Demo: Cole, Juan (CTR) 10) Capability Matrix: Cole, Juan (CTR) <p>Add new link</p>	
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Requirements Management Tool Homepage

Requirements Analysts Maintain the Product Backlog using SharePoint

This List: HSIN Product Backlog [enter search terms here] [Advanced Search](#)

New Actions 1 - 100 View: **View by Hierarchy**

Attachment(s)	ID	Status	Title	User Story - Assembled Text	Source/Sponsor	Requirement Contact	Estimated Work Days	KM Business Rule
Count = 349								
Parent User Story : (6)								
Count = 6								
	440	00 - None	HSIN Core - Integration	As a(n) , I need to so that				?
	263	00 - None	No Title 165	As a(n) , I need to so that	HSIN NextGen FRD			
	264	00 - None	No Title 166	As a(n) , I need to so that	HSIN NextGen FRD			
	265	00 - None	No Title 167	As a(n) , I need to so that	HSIN NextGen FRD			
	266	00 - None	No Title 168	As a(n) , I need to so that	HSIN NextGen FRD			
	305	01 - New	Product Subscription	As a(n) User, I need to subscribe to products so that I can view the most recently posted products		Requirements Team	2	
Parent User Story : [Epic Stories] (3)								
Parent User Story : HSIN Core (29)								
Parent User Story : HSIN Core - Authentication (9)								
Parent User Story : HSIN Core - Authentication - One-time Passcode (3)								
Parent User Story : HSIN Core - Authentication - Security (2)								
Parent User Story : HSIN Core - Authentication - Single Sign On - Internal (2)								
Parent User Story : HSIN Core - Authentication - Single Sign-On (2)								
Parent User Story : HSIN Core - Business Operational Capability (BOC) Gallery (22)								
Parent User Story : HSIN Core - Business Operational Capability (BOC) Gallery - Advisories (5)								
Parent User Story : HSIN Core - Business Operational Capability (BOC) Gallery - Alerts (1)								

Product Backlog (in development)

Team Uses SharePoint for Requirements Intake, Analysis, Approval and Management (Select Screens)

The image displays two main components of the SharePoint interface:

Business or Operational Capabilities (BOCs) List:

BOC-ID	Title	Description	Core Capability (CC)	Notes
BOC42	Actual ICS Forms	TBD		Change possible design can be able
BOC63	After Action Report (Event)	TBD	InfoPath Form Web Part	
BOC05	After Action Report (Exercise)	A report consisting of summary joint universal lessons learned. It describes a real world operation or training exercise and identifies significant lessons learned.	InfoPath Form Web Part	
BOC64	After Action Report (Incident)	TBD	InfoPath Form Web Part	
BOC59	COI Request Form	TBD	InfoPath Form Web Part	Useful the time
BOC12	Daily Report	A report is generated by an organization, office or task force that summarize the operational events for a single day. It is a summary of activities including significant event	InfoPath Form Web Part	
BOC38	FLO Incident Reports	TBD	Custom List	
BOC37	Fusion Liaison Officer - Weekly/Month Report	TBD	Custom List	High b
BOC31	Gang Related Picture Library	TBD	Picture Library	
BOC54	Geophysical database	TBD		
BOC28	HSIN Tools	A tool containing links to	Search Box	
BOC20	My Communities	TBD	Sites in Category	
BOC23	National Level Reports	TBD		Change
BOC51	Polls (dashboard page)	TBD	Survey	
BOC58	Program Resource Request Form	TBD	InfoPath Form Web Part	
BOC62	Recently Updated Content	TBD	InfoPath Form Web Part	

HSIN Product Backlog - New Item Form:

- Attachment(s):** Type the Web address: (Click here to test) <http://>
- User Story ID:** Please enter the next available user story ID within the parent user story ID prefix. (Example: If "Accessing a work queue item" is captured as the first written child to the "Work Queue" story [ID# 03.62], then the story should take ID# 03.62.1)
- Parent User Story:** Please select the associated parent user story. (note: you must first create and save the parent story for it to appear in the drop down list)
- Title *:**
- User Story - User:** Select your own value: Specify your own value:
- User Story - Action:** Please enter the desired business or operational function for the user story. (e.g. "I need to [business or operational function]")
- User Story - Purpose:** Please enter the business or operational purpose of the user story. (e.g. "so that [business or operational purpose]")
- User Priority:** Please select from the High, Medium, or Low priority levels as determined by the user/source.
- Status:** 01 - New See the Product Backlog home page to view the criteria for each phase.
- Source/Sponsor:**

Manage Business Rules

Analyze Business Operational Capabilities

Intake Requirements (Submit a User Story Form)

Testing Automation

- Automation developed initially by the developer to do unit test and system test
- Incorporation of the automated test suite as part of User Acceptance and smoke test before deployment
- Automated tools available and used by UAT and OT to increase confidence in final released product



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