



Post Merger Process Syndrome: Integrating and Refining Organizational Processes

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For

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- ▼ Intro to SPAWAR
- ▼ SPAWAR's CMMI® History
- ▼ Merger and Org Change
- ▼ Integration/Merger Process Team
- ▼ Redefining Standard Organizational Processes
- ▼ Short term progress
- ▼ Phase 2 & 3
- ▼ Lessons Learned

Common issue faced by an organizational merger or by the expansion of a process improvement/CMMI® initiative to a larger organizational unit.

Examples:

Division "X" + Division "Y"
Site ML3 → Regional ML3

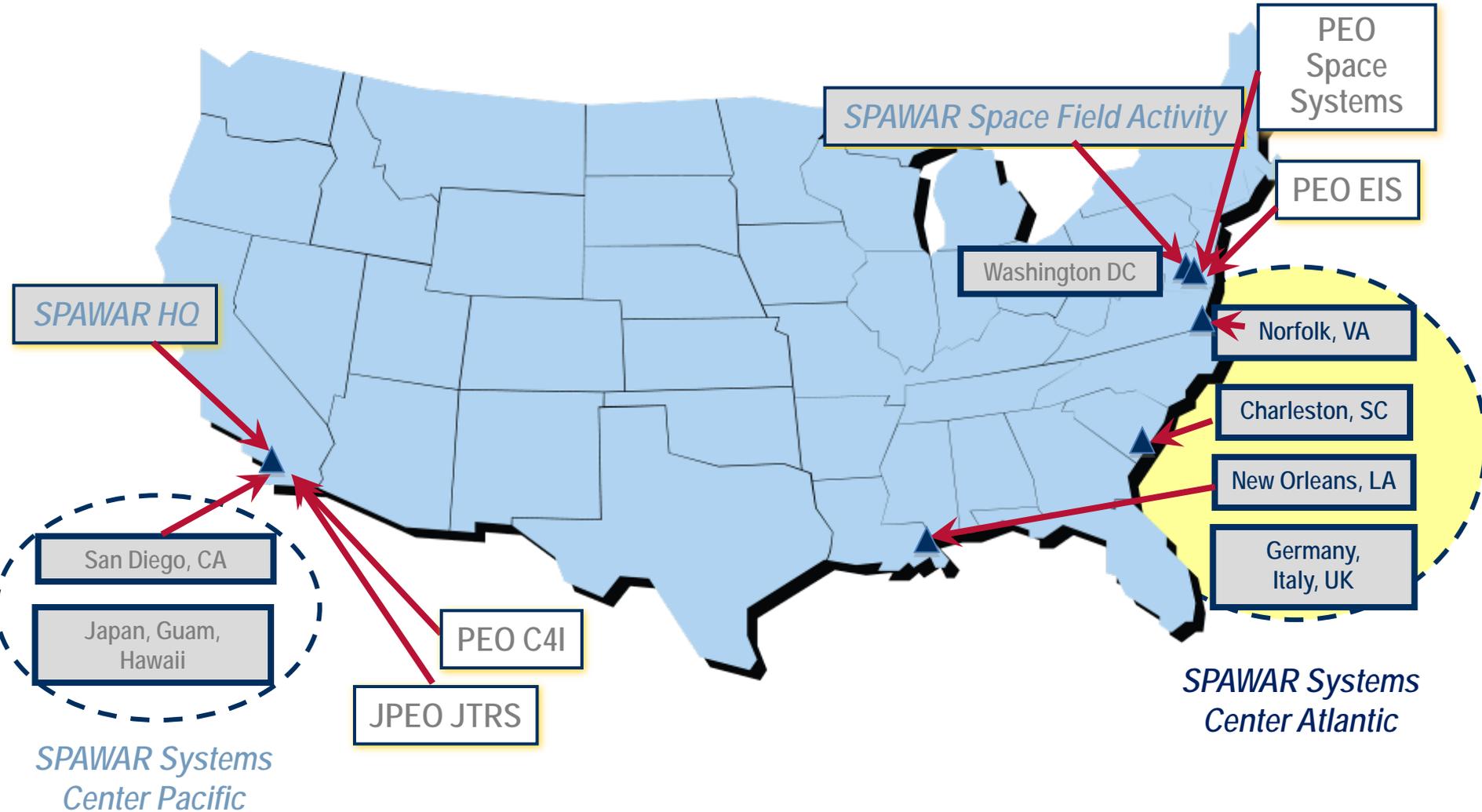
Space and Naval Warfare Systems Command Intro to SPAWAR – Who We Are

- ▼ Navy's Technical Authority and acquisition command for C4ISR*, business IT, and space systems
- ▼ Provide quality full-service systems engineering and acquisition to rapidly deploy capabilities to the Warfighter
- ▼ More than 12,000 employees and contractors deployed globally and near the fleet
- ▼ \$9.869B Organization

*Command, Control, Communications, Computers, Intelligence, Surveillance & Reconnaissance



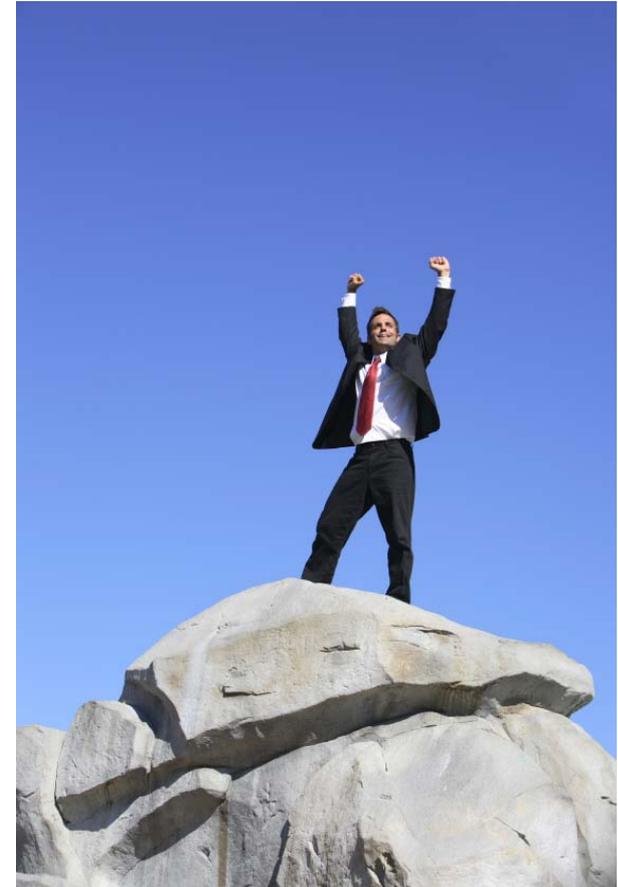
Intro to SPAWAR – Where We Are



SPAWARSYSCEN Atlantic CMMI® History: Timeline of Success

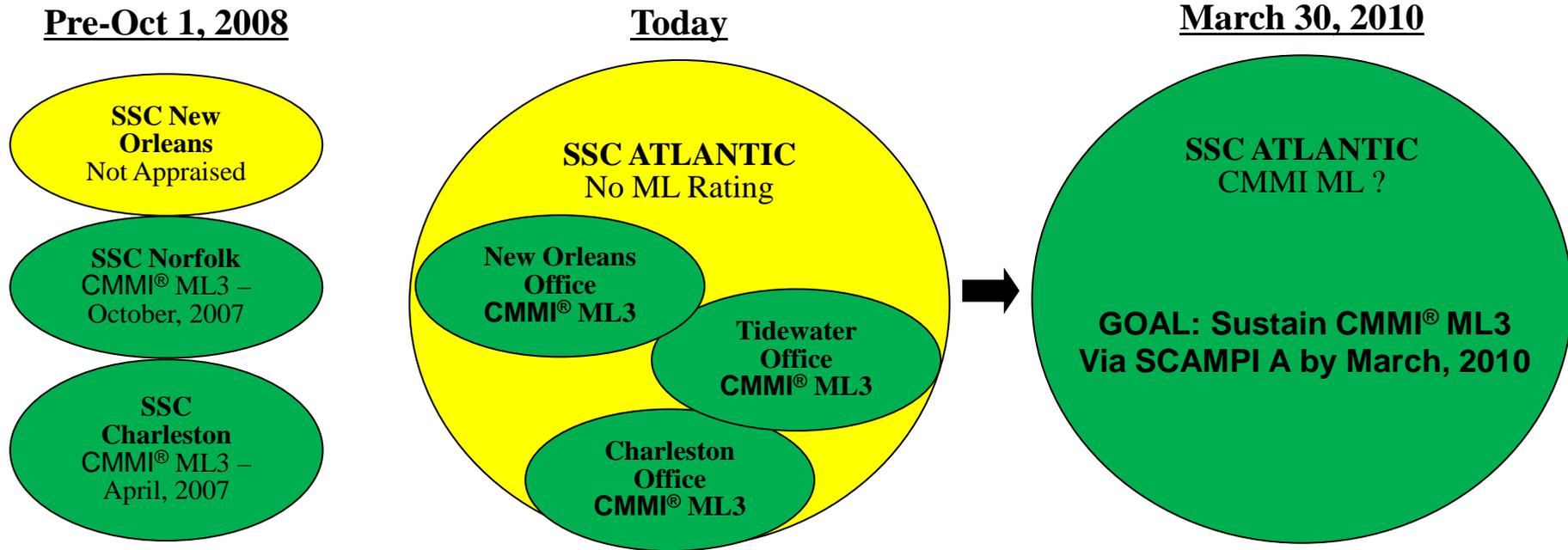
▼ Process Improvement Timeline

- 2001-2003 – Figuring it all out
 - Pilot projects; Initial CMMI® training
 - 20-30 projects working on Level 2 processes
 - Trained over 800 employees
- 2004/2005 – Shift to SE focus (not CMMI®)
 - Project level benchmark SCAMPI A appraisals
 - Heavy Training continued – SE, PM, CMMI®
 - Integrated Process Team (IPT) infrastructure established for process ownership and sharing
 - Successful **ML2 SCAMPI A (Charleston)**
- 2006/2007 – Similar 2-year approach for ML3
 - “Focus” and “non-focus” projects
 - Successful **ML3 SCAMPI A (Charleston, Tidewater)**
- 2008 – **Command Consolidation (Charleston, Tidewater, New Orleans)**
- 2009 – Successful **ML3 SCAMPI A (New Orleans)**



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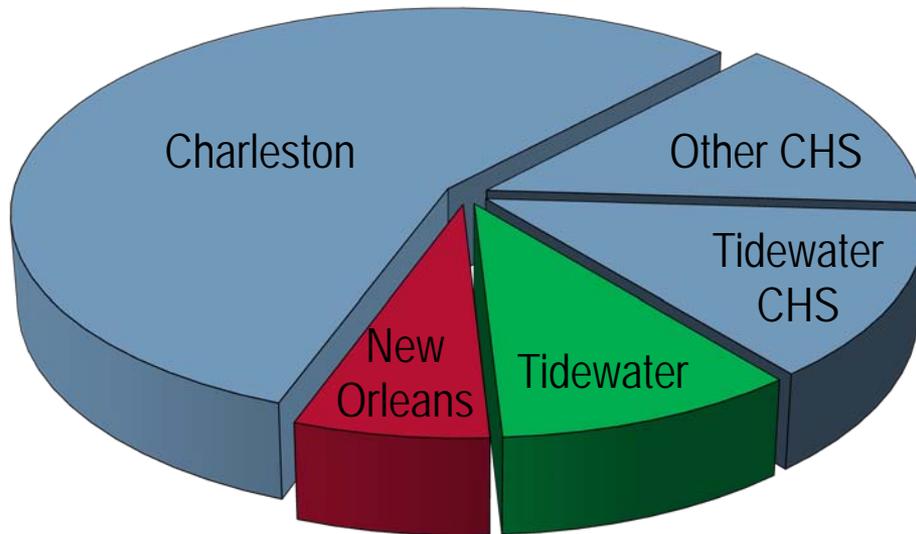
SSC Atlantic CMMI® Maturity Level Perspective



- ▼ SPAWAR goal for Systems Centers to achieve and sustain CMMI® Maturity Level 3 (min.)
- ▼ TEAM SPAWAR – Strategy Board embraced CMMI® framework in 2009
- ▼ Individual Atlantic site ratings begin to expire in 2010
- ▼ Continue to leverage existing process improvement culture within SSC Atlantic

Merger of Charleston, New Orleans, Tidewater

Over 3,000 Employees



Core Competencies

Charleston

- ▼ C4ISR Engineering
- ▼ Rapid Prototyping
- ▼ Leveraging Technology

Tidewater

- ▼ Software Engineering
- ▼ Implementation
- ▼ Help Desk Support

New Orleans

- ▼ Software Maintenance
- ▼ Application Hosting
- ▼ Help Desk/Customer Support

Atlantic Integration: Observed Strengths

- ▼ Three sites with tremendous process assets, strong understanding of best practices, and involved/passionate projects
 - Procedures, Documentation, Process flows, Checklists, Templates, Examples
 - Resources for Oversight and Coaching
- ▼ CMMI[®] and Lean Six Sigma providing common language, framework, and toolset
- ▼ Successful Systems Engineering and Software Engineering experience
- ▼ Management commitment (funding) for process improvement/process management resources

Key Issue: How to leverage three sites' process improvement success, resources, and assets to more quickly operate as a single, integrated organization and prepare for an ML3 appraisal.

Atlantic Integration: Critical Differences

- ▼ Primary focus / growth areas
 - Systems/Hardware
 - Software Development and Software Maintenance
 - Shared Service/Data Center/Help Desk
- ▼ Size – 1 Big, 2 Small
- ▼ Project Homogeneity
 - Charleston – projects diverse in size, scope, and technology
 - Tidewater – similar software engineering projects
 - New Orleans – primarily software maintenance/support projects plus Help Desk/Data Center tasks
- ▼ Organizational ownership of CMMI®
 - Business vs Engineering
- ▼ Organizational Standard Processes

Previous Standard Processes Framework

MGMT

MANAGE ENTERPRISE (ME)					
Manage Strategy		Manage Corporate Governance		Manage Operations	
MANAGE FINANCE (MF)					
Plan Funding	Program Funding	Formulate Budget	Execute Budget	Manage the DBT Process / BMMP	Answer Data / Reclama Calls
MANAGE RESOURCES (MR)					
Manpower	Human Resources	Physical Resources	Technical Resources	Security of Resources	
MANAGE PROCESSES (PM)					
Manage Process Infrastructure	Manage Organizational Standard Processes	Manage Process Improvement Programs and Initiatives		Manage Process Changes	
MANAGE CUSTOMER RELATIONSHIPS (CR)					
Develop Business		Manage Customer Accounts		Service Customers	
MANAGE PROJECTS (MP)					
Initiate Project	Plan Project	Execute Project	Monitor & Control Project	Close Project	

CORE

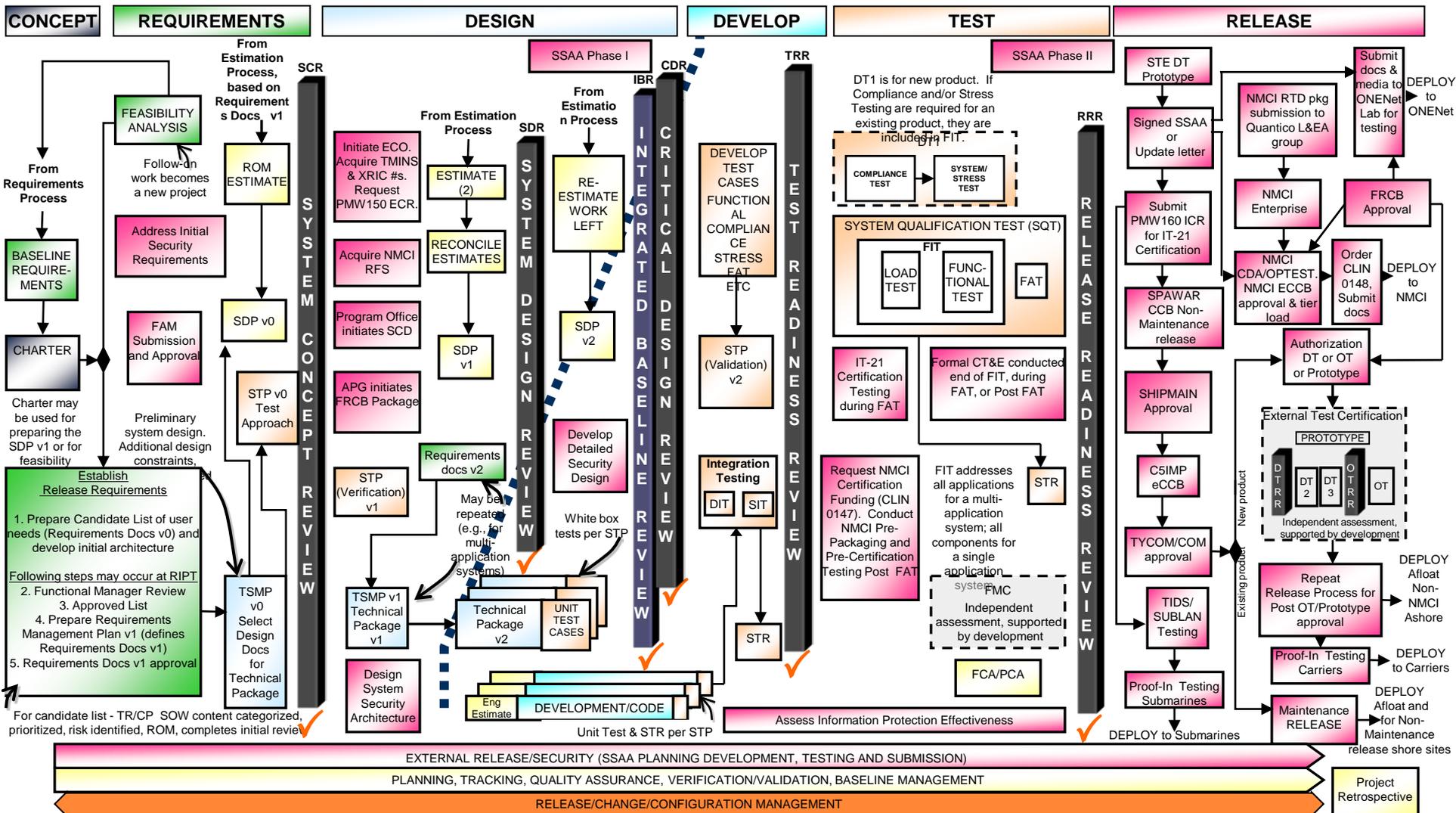
ENGINEER SYSTEMS (ES)					
Model Business	Develop Requirements	Analyze/Design	Implement Solution	Test	Deploy Release
MAINTAIN SYSTEMS (MS)					
Capture Requirements	Perform Analysis	Build/Modify Components	Perform Tests	Deliver System/Components	
OPERATE SYSTEMS (OS)					
Plan Operations Environment		Deploy and Install IT Infrastructure		Operate IT Infrastructure	

SUPPORT

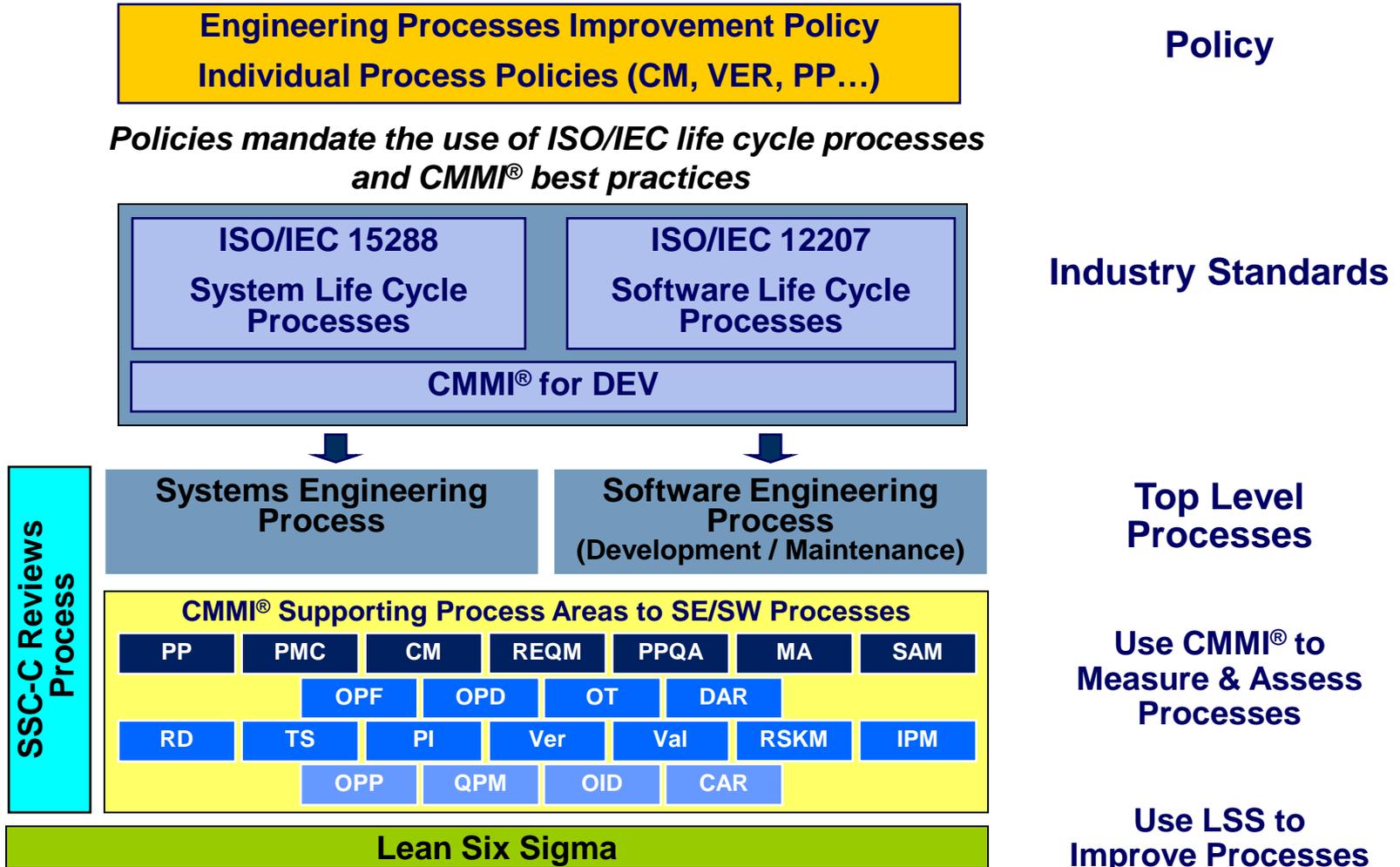
MANAGE CONTRACTS AND PROCUREMENTS (CP)					
Plan Contracts	Process Contracts	Issue Task Orders	Monitor Contracts	Manage Disputes	Close Contracts
MANAGE RISK (RM)					
Plan for Risk Management		Implement Continuous Risk Management		Close Continuous Risk Management	
MANAGE CONFIGURATIONS (MC)					
Plan Configuration and Change Control		Create Project CM Environment	Change and Deliver Configuration Items		
Manage Baselines and Releases		Monitor and Report Configuration Status		Manage Change Requests	
MANAGE QUALITY (MQ)					
Conduct Internal Audit	Conduct External Evaluation	Conduct IV&V	Conduct Peer Review		
DEVELOP DOCUMENTATION (DD)					
Define Document	Develop Document	Review Document	Finalize Document		
MANAGE TRAINING (MT)					
Plan Training		Process Requests for Training		Execute Training	
MANAGE KNOWLEDGE ASSETS (KM)					
Manage Knowledge Infrastructure	Acquire Knowledge Asset	Organize Knowledge Asset	Publish Knowledge Asset	Determine Knowledge Asset Disposition	

Tidewater Office – Software Engr. Life Cycle

Previous Standard Processes Framework



Previous Standard Processes Framework



Atlantic Integration Team – AIT P4I Approach

- ▼ P4I Working Group – Policy, Process, Procedures, Practices, and Instructions (P4I)
- ▼ All sites equal – Merger, not Hostile Takeover
 - Full participation from sites' Process Office personnel
- ▼ Introductory Process Workshops – Show me yours, I'll show you mine
 - Lots of good, but different looking process assets
 - No way to quickly evaluate and agree on best of breed
 - Inventoried and aligned assets
- ▼ Weekly Teleconferences with 2-day workshops every other month
- ▼ PMP with Milestones
 - Evolved into 3 Phase Plan

Objective

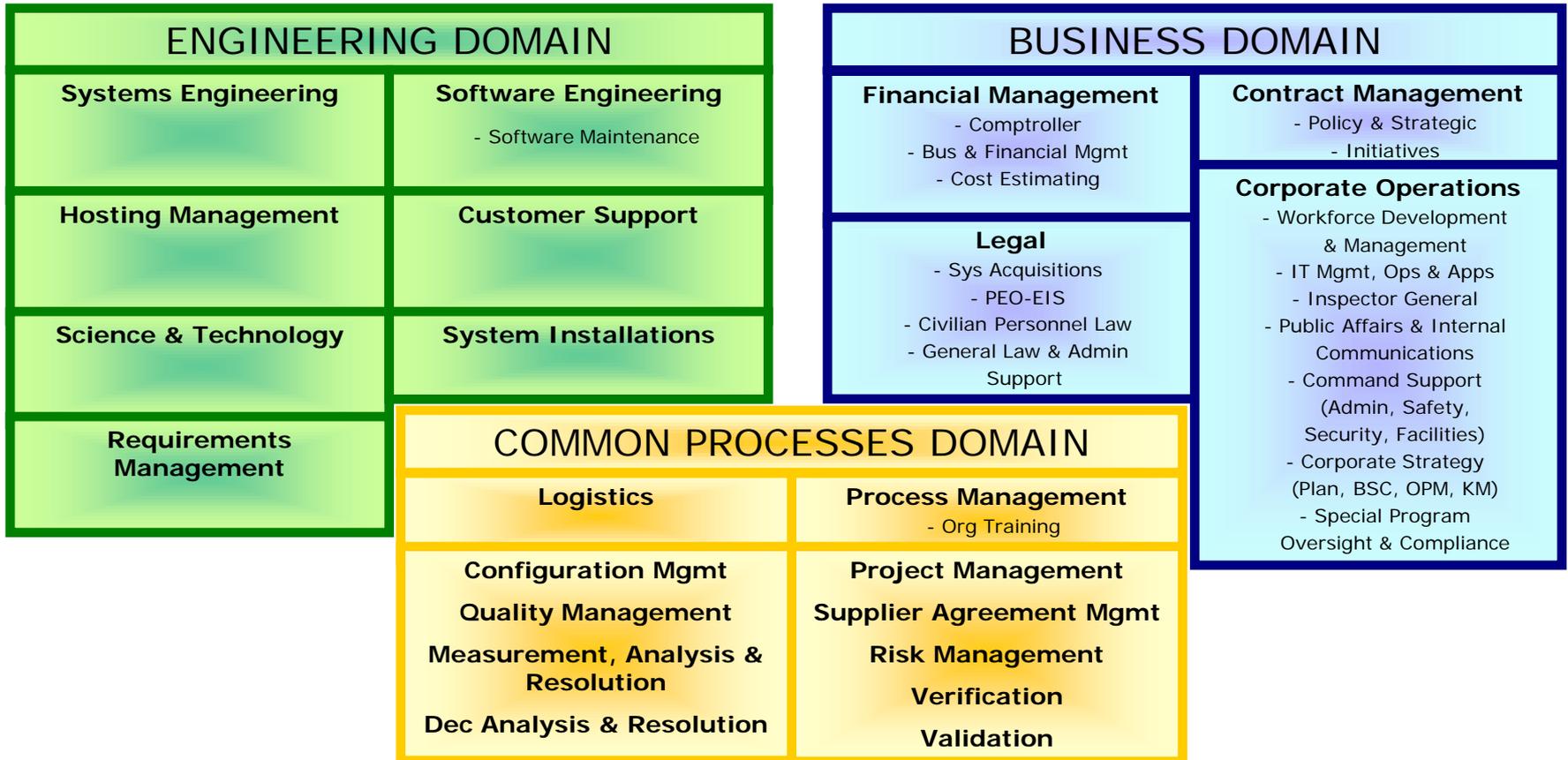
- ▼ Establish a Set of Atlantic OSPs
 - Publish Atlantic Assets
 - Map/Align to existing site assets
 - Minimize impact to projects
- ▼ March, 2010 Organizational ML3 SCAMPI prep
- ▼ Establish Atlantic Process Infrastructure

Tasks

- ▼ Created 20+ high level standard processes
 - New CPI Instruction signed
 - Map to “local” processes and CMMI®
- ▼ Conduct Class C / Sustainment assessments on focus projects
- ▼ AIT P4I → Atlantic OPM
 - Process Management Procedures
 - Develop Atlantic Tailoring

Atlantic Process Domains and Organizational Standard Processes

SSC Atlantic High-Level Organizational Standard Processes



High Level Organizational Standard Processes

- ▶ Domains – General framework was in place from Business side
 - Engineering – 7 processes
 - Common – 11 processes
 - Business – 4 major process areas
- ▶ OSPs do not directly correspond with CMMI[®] Process Areas
 - 22 OSPs ≠ 22 CMMI-DEV Process Areas
 - Some OSPs = Specific Process Areas
- ▶ Each High Level OSP is described in SIPOC table format
 - SIPOC = Supplier, Input, Process, Output, Customer
 - SIPOC provides 1-2 page process summary
 - OSPs are then further supported by and aligned to previous site-specific standard processes
 - Oracle Tutor tool used for more detailed documentation of Atlantic processes and procedures

(Supplier, Input, Process, Output, Customer)

Example with close mapping to CMMI® practices

 SSC Atlantic High Level Process Configuration Management					
Reference: SPAWARSYSCENLANTINST 5224.1 Continuous Process Improvement Instruction All SPAWARSYSCEN Atlantic CM procedures and practices shall comply with the intent of this high level organizational process. Process Owner: CM IPT					
Domain: Common	Lower Level Processes: Charleston: <i>Configuration Management (CM) Process</i> New Orleans: <i>Manage Configurations (MC) - MC1 - MC6</i> Norfolk: <i>Software Configuration Management (SCM) Process</i>				
Supplier	Input	Process	Output	Customer	CMMI Map
Project Manager CM Manager	Configuration Management Plan/Procedures Template; Project Plan (e.g., Work Breakdown Structure (WBS))	Develop and document a configuration management strategy/system	Approved project-specific Configuration Management Plan/Procedures; Updated Project Plan tasks (e.g., WBS); Defined Configuration Change Board (CCB); Established repository for project configuration items; Defined baseline promotion procedures; Selected method/mechanism/ revision control system for maintaining configuration control	Project Manager CM Manager	SP 1.2
Project Manager Project Team CM Manager	Project documentation Project CM Plan/Procedures	Identify Configuration Items	List of configuration items with unique identifiers assigned	Project Manager Project Team CM Manager	SP 1.1
Project Manager Project build manager CM Manager	Initial baseline Change Requests	Establish configuration baselines (manage & release baselines)	Identifiable baselined configuration items; Build log	Project Manager CM Manager	SP 1.3
Project team	Proposed Change Requests to the configuration baseline Configuration Baseline	Control changes to items under configuration management	Approved Change Requests; Updated documentation to reflect approved Changes Requests	Project stakeholders (e.g., sponsors, functional managers, internal senior management, project team, CCB members)	SP 2.1 SP 2.2

Truncated; not complete process

Draft HTML Version of PM OSP for PAL with Hyperlinks

 <h3 style="text-align: center;">SSC Atlantic OSP Project Management</h3>					
Reference: SPAWARSYSCENLANTINST 5224.1 Continuous Process Improvement Instruction					
All SPAWARSYSCEN Atlantic project management procedures and practices shall comply with the intent of this high level organizational process					
Process Owner: PM-IPT					
Domain: Common	Lower Level Processes: Charleston: Project Planning (PP) , Project Monitoring and Control (PMC) , Integrated Project Management (IPM) New Orleans: Manage Projects (MP) - MP1 - MP5 Norfolk: Project Charter Process , ROM Cost Estimation Review Process , Software Development Estimate (SDE) Process , Software Development Planning Process , Project Retrospective Process , Functional Area Manager (FAM) Checklist Process				
Supplier	Input	Process	Output	Customer	CMMI Map
Customer Competencies Comptroller	Requirements Resource Availability Funding Availability & Decision	Initiate Project	Initial Planning & Estimation Documents Work Breakdown Structure (WBS) High Level Project Schedule Customer Acceptance of Initial Requirements (SOW) Initial Risk Assessment Project Approval Assign Project Manager	Management Customer	REQM SP1.1 PP SP1.1 PP SP2.1 RD SP1.2 IPM SP1.3 RSKM SP1.1
Management Project Manager Customer	Initial Planning & Estimation Documents WBS Project Schedule Initial Requirements Project Approval Existing contracts	Plan Project	Detailed Funding and contractual documents Detailed Project Schedule Project Plans and Commitment Assigned resources IPT's	Management Customer Project Team	REQM SP1.2 PP SP1.2-1.4 PP SP2.2-2.7 PP SP3.1-3.3 RD SP3.1 SAM SP1.1 MA SP1.1 DAR SP1.1-1.6 CM SP1.1 PI SP1.2-1.3 VER SP1.3 VER SP2.1 IPM SP1.1-1.2 IPM SP1.4 RSKM SP1.1-1.3
		Execute Project			IPM SP1.5 PI

Truncated; not complete process

Linkage from OSPs to Existing Site PALs

- ▼ OSP Portal Page with Atlantic OSPs, SIPOCs, Tutor Process Docs
 - More detailed process assets and variants reside in 3 existing site Process Asset Libraries (PALs)
 - All three PALs available to all employees
 - Links established between OSP Portal Page and underlying PALs
- ▼ Project Tailoring
 - Select the Atlantic OSPs
 - Select the more detailed variants for each OSP
 - Identify deviations/tailoring with justification
- ▼ Method shows the alignment, but allows projects to use current processes

Draft Tailoring Form: Project OSP Selection Section - Engineering

Organizational Standard Processes Used:					
Engineering Processes	Use Yes/No	Standard Process Assets (Variants) To Be Used			Tailored ?
		Charleston PAL	New Orleans PAL	Norfolk PAL	
Requirements Management	YES	<input type="checkbox"/> Requirements Mgmt	<input type="checkbox"/> Engineer System – ES1 or <input type="checkbox"/> Maintain System – MS1	<input type="checkbox"/> Requirements Engineering	<input type="checkbox"/>
<i>(Must select at least 1 from below)</i>					
Systems Engineering	<input type="checkbox"/>	<input type="checkbox"/> Systems Engineering Process with <input type="checkbox"/> Requirement Dev. <input type="checkbox"/> Technical Solutions <input type="checkbox"/> Product Integration			<input type="checkbox"/>
System Installations	<input type="checkbox"/>	<input type="checkbox"/> Shore Installation Handbook		<input type="checkbox"/> Non-POR FRCB; NTCSS Optimized Installation	<input type="checkbox"/>
Software Engineering	<input type="checkbox"/>	<input type="checkbox"/> Software Development with <input type="checkbox"/> Requirement Dev. <input type="checkbox"/> Technical Solutions <input type="checkbox"/> Product Integration	<input type="checkbox"/> Engineer System – ES1-6	<input type="checkbox"/> Technical Solutions; Requirements Engineering; Product Integration; Legacy Design	<input type="checkbox"/>
Software Maintenance	<input type="checkbox"/>	<input type="checkbox"/> Software Maintenance with <input type="checkbox"/> Requirement Dev. <input type="checkbox"/> Technical Solutions <input type="checkbox"/> Product Integration	<input type="checkbox"/> Maintain System – MS1-5	<input type="checkbox"/> Technical Solutions; Requirements Engineering; Product Integration; Legacy Design	<input type="checkbox"/>
Hosting Management	<input type="checkbox"/>		<input type="checkbox"/> Operate System – OS1-2		<input type="checkbox"/>
Customer Support	<input type="checkbox"/>				<input type="checkbox"/>
Science & Technology	<input type="checkbox"/>				<input type="checkbox"/>

Engineering OSP Rule: Requirements Management is a mandatory OSP. At least one (could be multiple) of the other “core” processes is required.

Draft Tailoring Form: Project OSP Selection Section - Common

Common Processes (* = Optional)	Use Yes/No	Standard Process Assets (Variants) To Be Used			Tailored ?
		Charleston PAL	New Orleans PAL	Norfolk PAL	
Risk Management	<input type="checkbox"/>	<input type="checkbox"/> Risk Management	<input type="checkbox"/> Manage Risk - RM1-4	<input type="checkbox"/> Project Risk Management	<input type="checkbox"/>
Configuration Management	<input type="checkbox"/>	<input type="checkbox"/> Configuration Management	<input type="checkbox"/> Manage Configurations - MC1-6	<input type="checkbox"/> Software Configuration Management (SCM)	<input type="checkbox"/>
Quality Management	<input type="checkbox"/>	<input type="checkbox"/> PPQA	<input type="checkbox"/> Manage Quality - MQ1-4	<input type="checkbox"/> Quality Assurance (QA)	<input type="checkbox"/>
Measurement, Analysis & Resolution	<input type="checkbox"/>	<input type="checkbox"/> Measurement & Analysis <input type="checkbox"/> Causal Analysis & Resolution	<input type="checkbox"/> Manage Projects - MP4	<input type="checkbox"/> Project Tracking and Oversight (PTO)	<input type="checkbox"/>
Decision Analysis & Resolution	<input type="checkbox"/>	<input type="checkbox"/> Dec Analysis & Resolution	<input type="checkbox"/> Manage Projects - MP2	<input type="checkbox"/> Decision Analysis and Resolution	<input type="checkbox"/>
Process Management*	<input type="checkbox"/>	<input type="checkbox"/> Org Process Definition <input type="checkbox"/> Org Process Focus	<input type="checkbox"/> Manage Processes - PM1-4		<input type="checkbox"/>
Org Training*	<input type="checkbox"/>	<input type="checkbox"/> Organizational Training	<input type="checkbox"/> Manage Training - MT1-3	<input type="checkbox"/> Organizational Training Plan <input type="checkbox"/> Training Process <input type="checkbox"/> Command Training Coord. (CTC) Perspective <input type="checkbox"/> Employee Perspective <input type="checkbox"/> Supervisor Perspective <input type="checkbox"/> Training Waiver	<input type="checkbox"/>
Logistics*	<input type="checkbox"/>	<input type="checkbox"/> Product Integration	<input type="checkbox"/> Manage Resources - MR3		<input type="checkbox"/>
Project Management	<input type="checkbox"/>	<input type="checkbox"/> Project Planning <input type="checkbox"/> Project Monitoring & Control <input type="checkbox"/> Integrated Project Management	<input type="checkbox"/> Manage Projects - MP1-5	<input type="checkbox"/> Project Charter <input type="checkbox"/> ROM Estimation <input type="checkbox"/> ROM Cost Estimation Review	<input type="checkbox"/>

▼ Phase 2 – Consolidate multiple processes (2010/2011)

- Evaluate multiple processes and determine “Best of Breed” for common adoption by Atlantic
 - Ex: Risk Management – don’t need multiple variants of Risk ID worksheet
 - Ex: DAR – likely can agree on common evaluation worksheet
- Some areas may continue to have multiple variants due to legacy investment, customers, or conversion cost

▼ Phase 3 – Single Atlantic PAL (2011/2012)

- Consolidate and manage all process assets within single repository

- ▼ Atlantic Institutionalization – Young organization still developing - may have some weaknesses in institutionalization and alignment
 - Mitigation – AIT P4I artifacts illustrate integration efforts
 - Mitigation – AIT P4I phased plan for further consolidation
- ▼ Consolidation and Integration of Organizational Measurement Repository
 - Mitigation – Adopted Charleston-based OMR for now; Force Fit NOLA/Norfolk data
 - Mitigation – Document Navy ERP as future cost and schedule repository
- ▼ CMMI[®] Ownership – Confusion with new “Competency Aligned” organization as to who “owns” CMMI[®]. This impacts Organizational Process Focus’ process improvement strategy and infrastructure
 - Mitigation – CPI Instruction (5224.1) finally signed in September
 - Mitigation – Communication rollout of Instruction and Atlantic OSPs (AIT P4I)

- ▼ Plan time for Forming, Storming, Norming, Performing
 - Team members need to build trust
 - Even “Change Agents” have trouble with Change
- ▼ A forced, top-down mandate or hostile takeover will have serious “buy-in” issues
- ▼ Incremental Agreements and Progress
 - Don’t try for Nirvana immediately
 - Phased integration
- ▼ Be considerate of impact to Projects
 - Need time for transition
 - They won’t see a need to integrate/change
- ▼ Simplified process definitions (SIPOC) easier to generate
 - Will be used to establish Atlantic’s Services OSPs (CMMI-SVC)



Thank You !

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