



# Business Capability Acquisition Cycle (BCAC)

Process  
Document  
v1.2

August 2017

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BCAC is implemented in response to the Fiscal Year (FY) 2016  
National Defense Authorization Act (NDAA) Section 883.

## Version History

Version	Date	Comments
<b>1.0</b>	April 10, 2017	Initial Version shared with Business Community of Practice
<b>1.1</b>	August 2017	Updates based off of review with Community of Practice members (Content markup available on Community of Practice site: <a href="https://www.milsuite.mil/book/docs/DOC-394365">https://www.milsuite.mil/book/docs/DOC-394365</a> )
<b>1.2</b>	August 2017	Alternate version of 1.1 with pre-table narrative text and other “process considerations” included in each table as appropriate. Also updated ATP tables to follow same construct as activity tables. Published to Community after polling members about best format.

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## 1 Document Overview

This Process Document clarifies DoD Instruction (DoDI) 5000.75 by describing the activities that support the Business Capability Acquisition Cycle (BCAC) and the roles involved in performing them.

## 2 Background

Although the description of the BCAC in the DoDI 5000.75 includes sufficient detail to support policy guidance, it does not provide detailed information on the specific activities involved at the execution level of the BCAC. The additional detail in this document is intended to assist the practitioners who perform the roles described in the BCAC.

This document does not establish or alter DoD policy.

## 3 BCAC Processes

The BCAC process diagrams in this document use Business Process Model and Notation version 2.0.

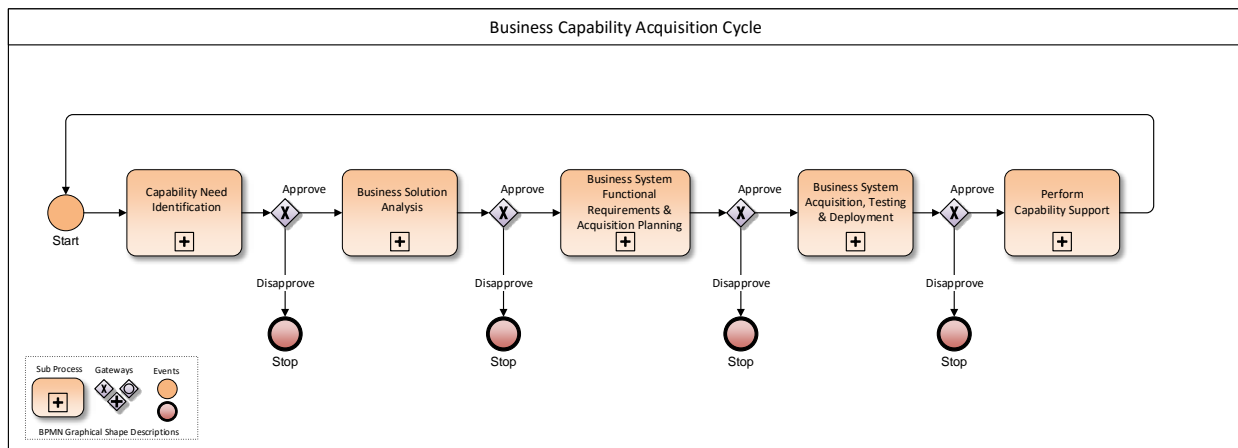


Figure 1: BCAC Phases and Authority to Proceed (ATP) Decision Points

The activities for Acquisition, Testing & Deployment will often happen in an iterative fashion. These activities may be organized by releases of capability to the end user or even in smaller iterations as part of an Agile software acquisition lifecycle.

### 3.1 Capability Need Identification

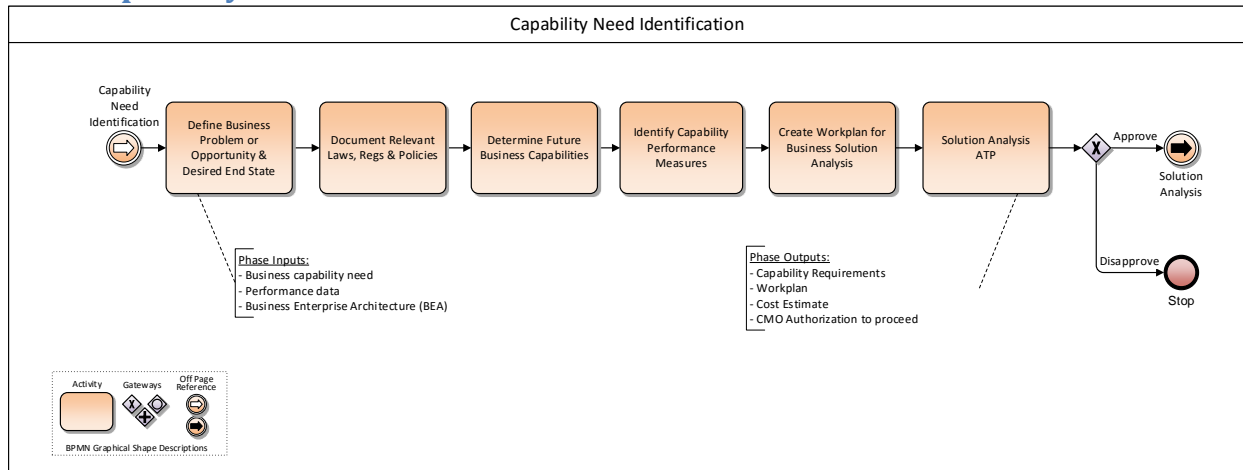


Figure 2: Business Processes for Capability Need Identification

“The functional sponsor leads this phase with guidance and support from the CMO. The objective is to establish a clear understanding of needed business capabilities so that the functional sponsor and MDA can decide to invest time and resources into investigating business solutions” (DoDI 5000.75 para. 4.2.a).

The Functional Sponsor will need to assign a Functional Lead for the activities of Capability Need Identification. OSD and component procedures to execute and approve the work in this phase should be streamlined so that the Functional Sponsor can establish the necessary momentum to secure funding and lead organizational change. Ideally, this phase should take 1-4 weeks.

#### 3.1.1 Define Business Problem or Opportunity & Desired End State

Define Business Problem or Opportunity & Desired End State <sup>1</sup>	
Led by	Functional Lead
Instructions	Develop a concise statement of the business problem and desired end state.  Define the critical situation being faced by the affected community in a way that does not constrain the solution.
Inputs	Business capability need Performance data (that led to identification of a problem) BEA

<sup>1</sup> “Problem or opportunity” will generally be referred to as “problem” for the remainder of this document.

<b>Define Business Problem or Opportunity &amp; Desired End State<sup>1</sup></b>	
Outputs	<p>Problem portion of Capability Requirements, including:</p> <ul style="list-style-type: none"> <li>• <u>Statement of the business problem</u>: operational difficulties caused (qualitatively and quantitatively) by the problem in the specific business domain, expressed in business terms. IT systems are generally not problems, but can be symptoms of problems articulated in the capability requirements.</li> <li>• <u>Impact of the business problem</u>: what will happen operationally if the problem is not addressed, expressed in business terms.</li> </ul>
Process Considerations	Addressing the problem should be aligned with the Functional Strategies found in the Business Enterprise Architecture (BEA) and should include analysis of other organizations with similar capability needs

### 3.1.2 Document Relevant Laws, Regulations & Policies

<b>Document Relevant Laws, Regulations &amp; Policies</b>	
Led by	Functional Lead
Instructions	Document laws, regulations, and policies (LRPs), or other enablers and constraints that may affect possible solutions to the business problem.
Inputs	Problem portion of Capability Requirements BEA
Outputs	LRPs portion of Capability Requirements

### 3.1.3 Determine Future Business Capabilities

<b>Determine Future Business Capabilities</b>	
Led by	Functional Lead
Instructions	Identify and prioritize new business capabilities – to include changes to or leveraging of existing capability – that will resolve the problem. Include sufficient detail to address the entire Doctrine, Organization, Training, Materiel, Leadership and Education, Personnel, Facilities and Policy (DOTMLPF-P) spectrum.
Inputs	LRPs portion of Capability Requirements BEA
Outputs	Future Capabilities portion of Capability Requirements
Process Considerations	A business capability is the core ability the organization needs to deliver requisite products and services and provide value (DoDI 5000.75 glossary).

### 3.1.4 Identify Capability Performance Measures

<b>Identify Capability Performance Measures</b>	
Led by	Functional Lead
Instructions	For each capability, define capability performance measures and determine their current values.

<b>Identify Capability Performance Measures</b>	
Inputs	Future Capabilities portion of Capability Requirements
Outputs	Performance Measures portion of Capability Requirements
Process Considerations	<p>Capability performance measures are indicators of how well the capabilities resolve the problem (once implemented).</p> <p>Capability performance measures must include quantitative information and must be expressed in terms of objective and threshold values. Target and threshold values establish a trade space between what the capability should support to deliver business value and what the capability must support in order to be minimally acceptable.</p>

### 3.1.5 Create Workplan for Business Solution Analysis

<b>Create Workplan for Business Solution Analysis</b>	
Led by	Functional Lead
Instructions	<p>Develop a resource-loaded workplan for solution analysis until the next ATP.</p> <p>Estimate whether the potential investment in a business system would be a priority business system.</p>
Inputs	Capability Requirements
Outputs	<p>Workplan</p> <p>Cost estimate (very low fidelity – priority business system or not)</p>
Process Considerations	A priority defense business system is expected to have a total amount of budget authority over the period of the current Future Years Defense Program (FYDP) in excess of \$250,000,000 (DoDI 5000.75, Table 1).

### 3.1.6 Solution Analysis ATP

<b>Solution Analysis ATP</b>	
Led by	CMO
Forum	Defense Business Council (DBC) or component equivalent
Instructions	<p>Approve the capability requirements.</p> <p>Approve the work planned for Business Solution Analysis.</p> <p>Verify the potential business capability is aligned with the BEA as well as organizational strategy and IT portfolio management goals.</p>
Inputs	<p>Capability Requirements</p> <p>Work plan for Solution Analysis</p> <p>Cost Estimate</p>
Outputs	<p>Authority to proceed with workplan for Business Solution Analysis</p> <p>Approved Capability Requirements</p>



### 3.2 Business Solution Analysis

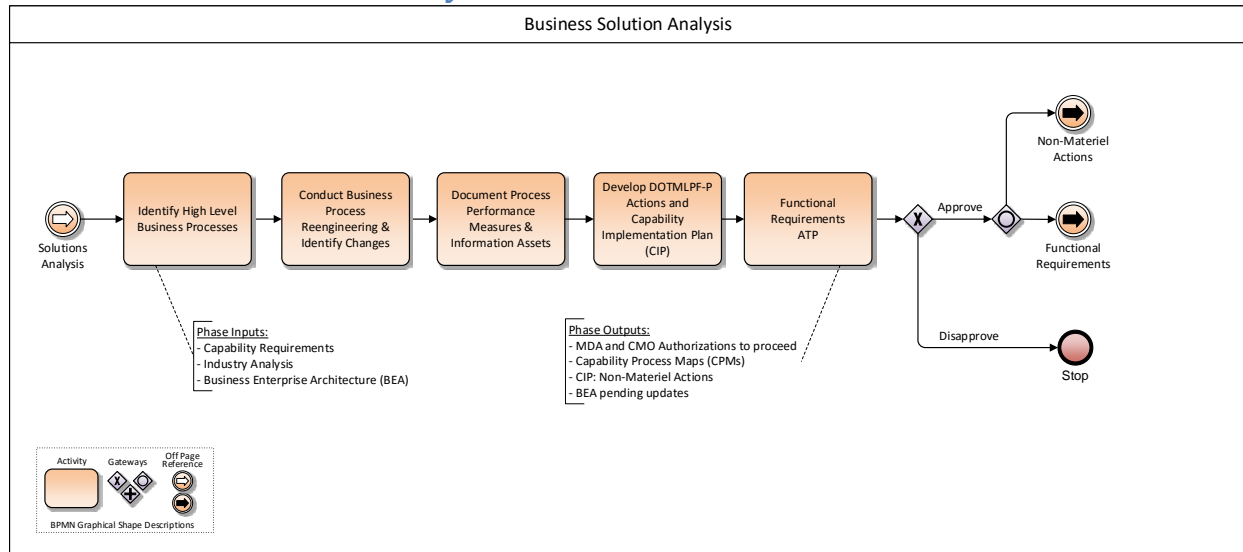


Figure 3: Business Processes for Business Solution Analysis

“The functional sponsor leads this phase with guidance from the CMO and support from the CMO and CAE or designee. The objective of this phase is to determine the high-level business processes supporting the future capabilities so that the functional sponsor and CAE or designee can maximize use of existing business solutions and minimize creation of requirements that can only be satisfied by a business system” (DoDI 5000.75 para. 4.2.b).

The Milestone Decision Authority (MDA) will need to identify a Program Manager (or Acquisition Lead, if preferred) to support the activities in this phase. This phase is targeted to take 3-4 months although there is no one-size-fits-all approach to ensuring that high-level business processes are adequately defined and that and that sufficient business process re-engineering (BPR) is completed.

### 3.2.1 Identify High-Level Business Processes

<b>Identify High-Level Business Processes</b>	
Led by	Functional Lead
Instructions	<p>Identify the high-level business processes that need to be improved to deliver the end-state capabilities required to address the business problem.</p> <p>Develop a high-level summary process map to be included in the Capability Process Maps (CPMs).</p> <p>While not IT-focused, conduct a domain analysis<sup>2</sup> that considers industry state of the art, how other entities are structured, and how they use processes and IT to deliver similar capabilities.</p>
Inputs	<p>Capability Requirements</p> <p>Industry analysis</p> <p>BEA</p>
Outputs	High-level process list portion of Business Processes
Process Considerations	<p>High-level processes should be focused on the work to be conducted and on the information used. Process models should not focus on the supporting systems or IT itself.</p> <p>Not all processes will need re-engineering. Some existing processes may already be best practices. In any case, provide sufficient information on all processes included in the implementation of the business capabilities to inform ATP decisions.</p>

### 3.2.2 Conduct BPR & Identify Changes

<b>Conduct BPR &amp; Identify Changes</b>	
Led by	Functional Lead
Instructions	<p>For each identified high-level business process, develop the CPM showing the activities and tasks within the process. Identify activities and tasks in terms of the work that needs to be performed, information inputs and outputs (information assets).</p> <p>Identify any major changes from the current state of the process to the reengineered future state.</p> <p>If needed, conduct prototyping to support process reengineering and redesign of the future state.</p>
Inputs	<p>Capability Requirements</p> <p>High-level process list portion of Business Processes</p>

<sup>2</sup> Whereas the DoDI 5000.75 refers to market research of other organizations, this document refers to it as “domain analysis” to de-conflict the term with market research about vendor capabilities.

<b>Conduct BPR &amp; Identify Changes</b>	
Outputs	CPMs portion of Business Processes
Process Considerations	<p>This activity will entail a mixture of newly engineered processes and reengineered existing processes.</p> <p>While some existing processes may require little or no revision, others may benefit from rethinking and transformational redesign to achieve dramatic improvements in measures of performance.</p> <p>Place emphasis on going directly to the future state for the process, with less emphasis on analysis of the current state.</p>

### 3.2.3 Document Process Performance Measures & Information Assets

<b>Document Process Performance Measures &amp; Information Assets</b>	
Led by	Functional Lead
Instructions	<p>Establish business process performance measures that will indicate when the process is being executed as intended.</p> <p>Add detail to the information assets to describe how information is used, moved, and transformed throughout the process.</p>
Inputs	CPMs portion of Business Processes
Outputs	<p>Performance measures portion of Business Processes</p> <p>Information Assets portion of Business Processes</p>

### 3.2.4 Develop DOTMLPF-P Actions and Capability Implementation Plan

<b>Develop DOTMLPF-P Actions and Capability Implementation Plan</b>	
Led by	Functional Lead
Instructions	<p>Identify and prioritize DOTMLPF-P actions required to move the current process to the future state process. Include DOTMLPF-P actions in the Capability Implementation Plan (CIP).</p> <ul style="list-style-type: none"> <li>• Develop a rough order of magnitude (ROM) cost estimate that addresses all required DOTMLPF-P changes, not just the materiel portion. The precision of the ROM cost will reflect the level of knowledge of DOT_LPF-P actions<sup>3</sup> and potential materiel solutions.</li> <li>• Conduct a cost benefit analysis to determine net benefits and return on investment (ROI).</li> <li>• Establish affordability targets for the cost of a potential materiel solution.</li> </ul> <p>Create initial work breakdown structure (WBS) and capability integrated master schedule (IMS) with resource-loaded activities through the next ATP and ROM estimates after that.</p>
Inputs	<p>Capability Requirements Business Processes</p>
Outputs	<p>CIP (including ROM cost estimate and ROI, WBS and Capability IMS) BPR-driven updates to capability requirements and business processes</p>

### 3.2.5 Functional Requirements ATP

<b>Functional Requirements ATP</b>	
Led by	CMO, MDA
Forum	Defense Business Council (DBC) or component equivalent
Instructions	<p>CMO validates that sufficient BPR has been conducted and a business system is required.</p> <p>MDA authorizes proceeding with CIP.</p> <p>MDA ensures that the business system can be developed incrementally and that the CIP drives to a Full Deployment ATP within 5 years of the Functional Requirements ATP.</p>
Inputs	<p>Capability Requirements Business Processes Full funding for associated non-materiel actions<sup>4</sup> CIP</p>

<sup>3</sup> DOT\_LPF-P actions will generally be referred to as “non-materiel” actions for the remainder of this document.

<sup>4</sup> DoDI 5000.75 uses the term “business process changes” to refer collectively to non-materiel actions in the Capability Implementation Plan.

Functional Requirements ATP	
Outputs	Validated requirements Authority to proceed with business system
Process Considerations	Resources must be available to support work planned up to the next ATP.  If no business system is required because all implementation actions are non-materiel actions, then no MDA decision is required. The ATP authorizes only non-materiel activities.  In the event that there are DOTMLPF-P actions that involve materiel but not a business system—those materiel actions fall under DoDI 5000.02.

### 3.3 Business System Functional Requirements & Acquisition Planning

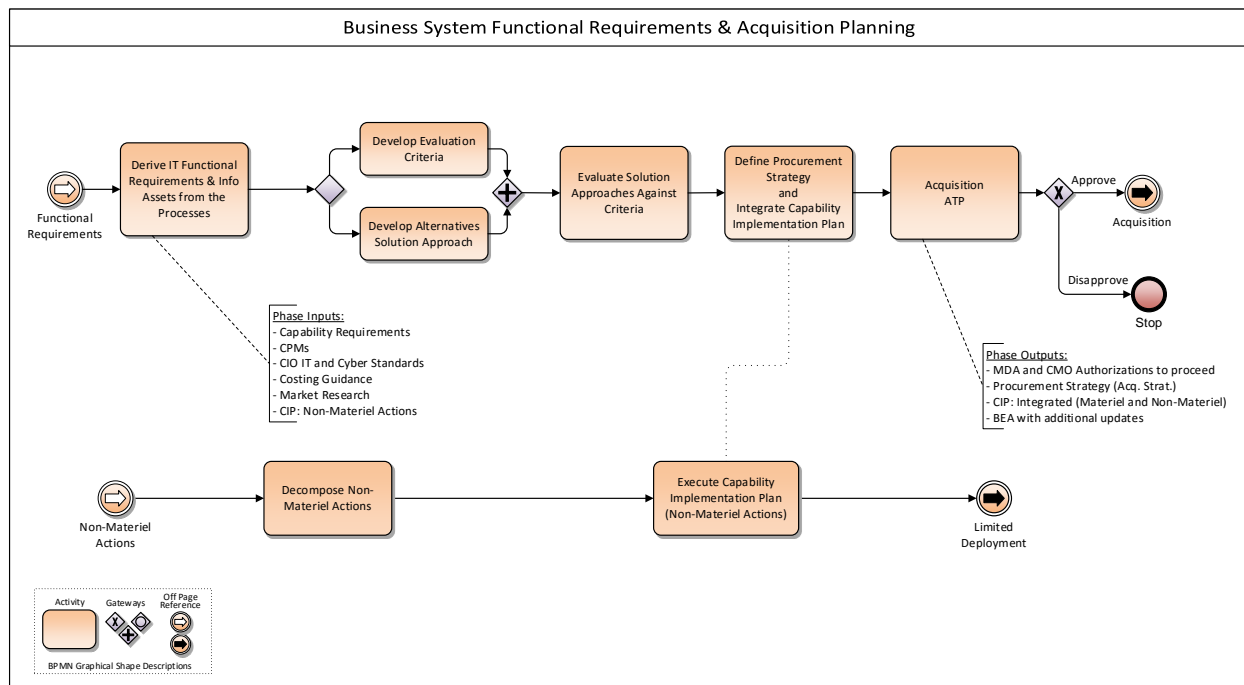


Figure 4: Business Processes for Functional Requirements & Acquisition Planning

“During this phase, the functional sponsor leads execution of business process actions in the implementation plan, definition of IT functional requirements (ITFRs), and determination of overall solution approach (e.g., COTS, GOTS, legacy modernization, or new development). Meanwhile, the MDA oversees development of the acquisition strategy. An objective of this phase is to establish the acquisition strategy that will support functional requirements” (DoDI 5000.75 para. 4.2.c).

Functional prioritization of requirements is critical during ITFR and information asset definition as an element of ongoing risk reduction and in order to inform evaluation criteria. The

Functional Sponsor should lead a prioritization review of ITFRs to ensure that cost and schedule trades can be made within scope.

To align with best practices for IT acquisition and for baseline management, programs should plan to start development of at least one baselined release within 24 months<sup>5</sup> of the original Solution Analysis ATP; however, many programs will be able to start development much sooner.

### 3.3.1 Derive IT Functional Requirements & Information Assets

Derive IT Functional Requirements & Information Assets	
Led by	Functional Lead (Program Manager co-lead)
Instructions	<p>Derive ITFRs from the activities and tasks included in the re-engineered business processes and prioritize the ITFRs.</p> <ul style="list-style-type: none"> <li>• For each activity within each business process where IT is needed to reach the future state, derive functions that are required from the business system in order to support the completion of the work process.</li> <li>• For each ITFR, identify the outputs produced by executing the ITFR, as well as those inputs used during the execution of the ITFR. Use the information assets that were represented on the business process maps as a starting point for inputs and outputs, and add any information assets that may have been missed.</li> </ul> <p>Update business processes as needed to reflect changes made during the identification of the ITFRs and information assets.</p> <p>Define high-level technical requirements: infrastructure, open architecture, data standards, data management, hosting and security, and lifecycle support requirements. Lifecycle support requirements include: availability, scalability, maintainability, supportability, and other requirements as appropriate.</p>
Inputs	<p>Capability Requirements</p> <p>Business Processes</p>
Outputs	<p>ITRFs + Technical Requirements<sup>6</sup></p> <p>Information Assets</p>

<sup>5</sup> The 24-month timeframe is intended to satisfy the intent behind Section 883(e)(1) of the FY 2016 NDAA, which requires DoD guidance to ensure “that an acquisition program baseline has been established within two years after program initiation.”

<sup>6</sup> “ITFRs + Technical Requirements” will generally be referred to as “ITFRs” for the remainder of this document.

<b>Derive IT Functional Requirements &amp; Information Assets</b>	
Process Considerations	<p>The objective for this activity is to describe the functions that the business system will perform in support of the future state business processes, in sufficient detail to support analysis of potential solution approaches for the business system.</p> <p>Information assets are the inputs and outputs for each of the activities in the business processes.</p> <p>ITFRS:</p> <ul style="list-style-type: none"> <li>• Define what the business system must provide in support of the business processes identified in Business Solution Analysis. ITFRs are described either as high-level actions that the business system must perform or as information managed by the business system.</li> <li>• Are used to support market research, definition and evaluation of solution approaches, solution selection, requirements modeling, Work Breakdown Structure (WBS) development, and test planning.</li> <li>• Will not prescribe specific business systems or detailed technical specifications. Avoid over-specifying requirements in a way that precludes possible solutions.</li> </ul> <p>Business rules associated with the ITFRs and information assets may be captured at this time for later use during requirements modeling. Some business rules may have been identified earlier during the business process reengineering.</p>

### 3.3.2 Develop Evaluation Criteria

<b>Develop Evaluation Criteria</b>	
Led by	Functional Lead
Instructions	<p>Establish criteria for evaluating solution approaches, with input from the appropriate cost agency and CIO. Evaluation criteria must include:</p> <ul style="list-style-type: none"> <li>• Economic analysis (cost and benefit),</li> <li>• Satisfaction of ITFRs and information assets,</li> <li>• Satisfaction of technical requirements and lifecycle support requirements, and</li> <li>• Overall risk.</li> </ul> <p>Other criteria may also include:</p> <ul style="list-style-type: none"> <li>• Delivery schedule,</li> <li>• Evaluation of trade space for ITFRs, and</li> <li>• Enterprise impacts (focused on other initiatives or programs that may be affected by the solution approach, the nature of the impact, the severity of the impact, and the likelihood of the impact occurring.)</li> </ul>
Inputs	<p>Business Processes ITFRs Information Assets Costing Guidance</p>
Outputs	Evaluation Criteria
Process Considerations	<p>Cost and benefit information supporting the economic analysis should consider key cost drivers, including an understanding of the relative complexity of changes to COTS functionality, permission sets, and data models.</p>



### 3.3.3 Develop Alternative Solution Approaches

<b>Develop Alternative Solution Approaches</b>	
Led by	Functional Lead (Program Manager co-lead)
Instructions	<p>With support from appropriate cost agency, explore alternatives that could be used to implement the ITFRs of the business system. This will require market research (e.g., requests for information and demonstrations) on available COTS products and services as well as existing GOTS solutions via the BEA and other sources of expertise.</p> <p>For each alternative, consider the technology readiness, supportability, and risks for each alternative considered.</p> <p>Identify solution approaches:</p> <ul style="list-style-type: none"> <li>• For each solution approach, identify a potential trade space of opportunities to minimize customization to achieve ITFRs.</li> <li>• In addition, identify and consider alternative approaches for potential ITFRs that may be expensive and/or high risk to achieve across all potential approaches.</li> </ul>
Inputs	Business Processes ITFRs Information Assets Market Research BEA
Outputs	Solution Approaches
Process Considerations	<p>A solution approach describes how the business system can be realized through commercial off-the-shelf (COTS), government off-the-shelf (GOTS), legacy modernization, or new development.</p> <p>The selected solution (which will conform to the solution approach) will be acquired through components that deliver the ITFRs. Generally, solution selection will be completed as a separate process in the next phase of the BCAC. If possible—when compliant with statutory requirements for competition in contracting—program tailoring may streamline decision-making to consider solution approach and solution selection concurrently.</p>

### 3.3.4 Evaluate Solution Approaches

<b>Evaluate Solution Approaches</b>	
Led by	Functional Lead (Program Manager co-lead)
Instructions	<p>With support from appropriate cost agency, conduct risk analysis and score the solution approaches against the evaluation criteria.</p> <p>Identify a recommended solution approach for implementation of the business system.</p>

Evaluate Solution Approaches	
Inputs	ITFRs Information Assets Solution Approaches Evaluation Criteria
Outputs	Recommended Solution Approach

### 3.3.5 Define Procurement Strategy<sup>7</sup> and Integrate CIP

Define Procurement Strategy and Integrate CIP	
Led by	Program Manager
Instructions	<p>Build the procurement strategy to acquire the business system based on the recommended solution approach and integrate the associated detail into the CIP for how the IT solution will progress. The IT solution information should align with the non-materiel actions and resource-loaded schedule already in the CIP.</p> <p>Consider the following best practices while building the procurement strategy and integrating the CIP:</p> <ul style="list-style-type: none"> <li>• As part of risk management, consider risk loading when updating the capability IMS</li> <li>• Include lifecycle sustainment considerations that will eventually drive the capability support plan developed in later phases</li> <li>• Front-load test planning and activities.</li> </ul> <p>If planning to release an RFP immediately after the Acquisition ATP, obtain up-front MDA guidance on the procurement strategy, especially critical sections of the RFP (i.e., contract type, instructions to offerers, and how offers will be evaluated). Then prepare the draft RFP.</p> <p>Some situations may allow for product selection without an RFP, when appropriate and subject to requirements of the Competition in Contracting Act. Obtain up-front guidance from both the MDA and general counsel when considering an acquisition strategy that includes GOTS reuse or justification and approval for a specific COTS product.</p>
Inputs	Recommended Solution Approach CIP
Outputs	Procurement Strategy Draft RFP for contract actions that will immediately follow the Acquisition ATP CIP: Integrated (Materiel and Non-Materiel Actions)

<sup>7</sup> Procurement strategy in this document refers to the “acquisition content” of the “tailored business system acquisition strategy”

### 3.3.6 Decompose Non-Materiel Actions

<b>Decompose Non-Materiel Actions</b>	
Led by	Functional Lead
Instructions	Add detail to the WBS and Capability IMS for the DOT-LPF-P actions to support overall project management and tracking actual progress against the plan.  Verify that the IMS appropriately reflects any dependencies that the business system has on non-materiel actions.
Inputs	CIP: Non-Materiel Actions
Outputs	CIP: Non-Materiel Actions (greater level of detail)

### 3.3.7 Execute Capability Implementation Plan (Non-Materiel Actions)

<b>Capability Implementation Plan (non-materiel actions)</b>	
Led by	Functional Lead
Instructions	Complete planned action and track progress against the plan.  Coordinate with the Program Manager to address dependencies in the Capability IMS.
Inputs	CIP: Non-Materiel Actions
Outputs	CIP (progress vs. plan)

### 3.3.8 Acquisition ATP

<b>Acquisition ATP</b>	
Led by	MDA
Forum	Defense Acquisition Board (DAB) or component equivalent
Instructions	MDA authorizes acquisition of the business system and approves continued execution of the updated implementation plan.  CMO approves initial CMO certification based on the chosen solution approach.
Inputs	Procurement Strategy Updated BEA Full funding for all acquisition activities until the next ATP
Outputs	Initial investment certification Authority to proceed in accordance with the procurement strategy
Process Considerations	The business decision to proceed with acquiring a business system requires corporate commitment to the procurement strategy, including available funding to execute it.

### 3.4 Business System Acquisition, Testing & Deployment

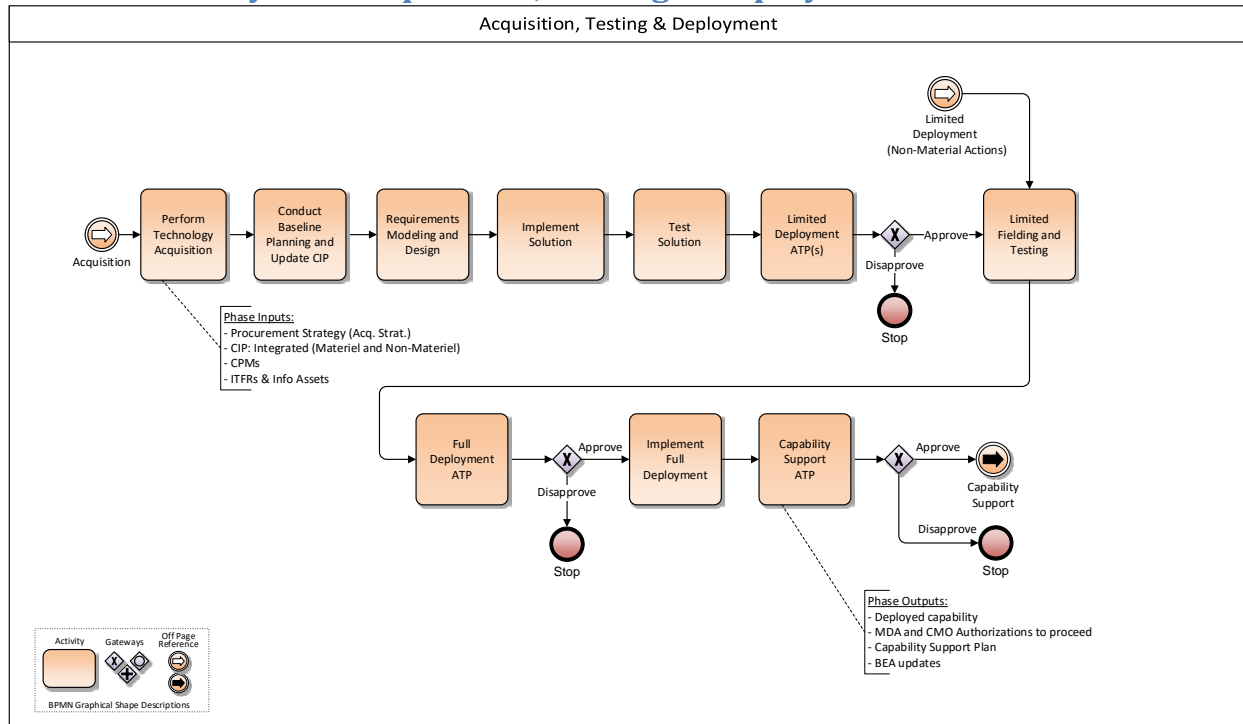


Figure 5: Business Processes for Acquisition, Testing & Deployment

“During this phase, the CAE or designee leads execution of contract award, supplier management, establishment of baselines, delivery of the business system, and risk management. Meanwhile, the functional sponsor leads training and deployment. The objective of this phase is to achieve organizational change through business process changes and delivery of the supporting business system, with minimal customization” (DoDI 5000.75 para 4.2.d).

For simplicity of presentation, Figure 5 does not show detailed business process flows for frequent iteration. In Agile approaches, requirements modeling, design, implementation and test would be repeated across many iterations, and baseline planning would often occur prior to the start of a group of iterations that are organized around a particular release or feature set. The development, testing, and deployment activities repeat for each release and corresponding limited deployment according to the CIP.

#### 3.4.1 Perform Technology Acquisition

Perform Technology Acquisition	
Led by	Program Manager
Instructions	Execute the procurement strategy, including RFPs for implementation. Select the product(s) that provide the best fit for the business system. The selection will often be based on competitive factors described in an RFP.
Inputs	Draft RFP (for contract actions that immediately follow the Acquisition ATP) Procurement Strategy
Outputs	Selected Product

### 3.4.2 Conduct Baseline Planning and Update CIP

<b>Conduct Baseline Planning and Update CIP</b>	
Led by	Program Manager
Instructions	<p>Update the CIP based on the selected solution. Consider the following:</p> <ul style="list-style-type: none"> <li>• Risk management and risk loading the capability IMS,</li> <li>• Lifecycle sustainment considerations, and</li> <li>• Front-load test planning and activities.</li> </ul> <p>Establish draft baselines for delivery of releases based on cost, schedule, and performance agreements (by contract, or by other agreement).</p>
Inputs	<p>Business Processes</p> <p>ITFRs</p> <p>CIP</p>
Outputs	Cost/schedule/performance baseline for each release

### 3.4.3 Requirements Modeling and Design

<b>Requirements Modeling</b>	
Led by	Program Manager
Instructions	<p>Conduct a government-led refinement of requirements that make effective use of the existing capabilities of the selected solution without excessive customization.</p> <ul style="list-style-type: none"> <li>• Model the functions and the data that the IT must provide to support the business processes.</li> <li>• Conduct detailed fit-gap analysis of how end users may be able to complete tasks using existing capabilities.</li> <li>• Place the information content of the information assets in an information model that contains both a description of the information assets and a mapping to the individual data elements and their parent information assets using a standard, formal modeling representation (e.g., ontology, semantic model, entity-relationship diagram, Unified Modeling Language model, or other similar modeling technique).</li> <li>• Leverage capabilities within the COTS / GOTS software from the selected solution to develop design use cases<sup>8</sup> that refine the ITFRs. <ul style="list-style-type: none"> <li>○ Decompose each information asset associated with a design use case down to the individual data element level in an identified authoritative data source</li> <li>○ Leveraging the COTS / GOTS from the selected solution, identify roles and permissions for information assets.</li> </ul> </li> </ul>

<sup>8</sup> The term “design use cases” in this document is intended to cover a variety of software requirements specification methodologies in a general context.

<b>Requirements Modeling</b>	
	<ul style="list-style-type: none"> <li>○ Document end user access, editing privileges and the circumstances under which those editing privileges apply. Cost benefit analysis may be required to address deviations in information access that force customization or interfaces to accomplish the requirement.</li> <li>○ Include information assets in the information model, including a description of the information assets and a mapping to the individual data elements and their parent information assets using Business Process and Modeling Notation 2.0.</li> <li>○ Design use cases should include success criteria that describe operational expectations.</li> <li>● Identify fits and gaps in the way the selected COTS / GOTS components satisfy the ITFRs.</li> <li>● Update the CIP to reflect any changes to the business system or non-materiel actions as a result of IT requirements modeling.</li> <li>● Update the business process to implement unique features and capabilities of the selected solution</li> </ul>
Inputs	Capability Requirements Business Process ITFRs Information Assets Selected Product: out-of-the-box functionality
Outputs	IT Design Specifications Adjustments to Business Processes

<b>Requirements Modeling</b>	
Process Considerations	<p>The purpose of requirements modeling is to establish relationships among the requirements so that they can be traced to capabilities.</p> <p>The requirements architectural models represent the details necessary to commence design and development of the business system. The major categories of requirements are: ITFRs, information assets and the authoritative data sources that provide or receive them, and technical and lifecycle support requirements. The requirements model establishes relationships among the requirements so that they can be traced to capabilities.</p> <p>Proactive governance will be critical to ensure maximum effective use of out-of-the-box capabilities. Governance should consider the business value for any changes, such as Interfaces, Conversions, Enhancements, Forms and Workflows (RICEFW) objects in the implementation—and render timely decisions. Minimizing customization requires change control governance to manage and prioritize requirements, establishing a trade space that supports risk management. A governance structure should review and approve changes beyond the existing capabilities of the COTS / GOTS software.</p>

### 3.4.4 Implement Solution

<b>Implement Solution</b>	
Led by	Program Manager
Instructions	<p>Create development and deployment plans in terms of releases and deployments and incorporate the plans into the CIP. Establish baseline cost, schedule and performance parameters for each release when it is ready to proceed into development.</p> <p>Design and build portions of the business system in accordance with the releases planned in the CIP. This includes configuration as well as design, development and integration of software to fill gaps in selected solution functionality through creation of objects for RICEFW.</p> <p>Update lifecycle sustainment considerations in CIP/capability support plan and ensure both address support for the needs of any capability.</p>
Inputs	<p>CIP IT Design Specifications</p>
Outputs	Delivered solution ready for testing

<b>Implement Solution</b>	
Process Considerations	<p>Each release must deliver useful capability without being dependent upon subsequent releases.</p> <p>Baselines and monitoring are intended to be used as a best practice to support early identification of detrimental trends. Inability to establish a baseline can also be a sign of poor program health.</p> <p>Releases should proceed into development once there is high confidence in the feature set that will be released.</p> <p>Programs should establish program- or increment-level baselines to manage cost, schedule and performance when needed for managing budget or tripwires for intervention.</p>

### 3.4.5 Test Solution

<b>Test Solution</b>	
Led by	Program Manager
Instructions	Verify releases in test environments to inform Limited Deployment ATPs.
Inputs	Delivered solution ready for testing IT Design Specifications Business Processes Information Assets Training materials
Outputs	Test results and data Delivered solution ready for use
Process Considerations	<p>Verification ensures that the delivered software meets detailed IT requirements, including measures of performance, which trace to the ITFRs in support of the business capability.</p> <p>Verification testing will identify defects essential to remediate prior to deployment based on business impact.</p> <p>Verification will employ actual users to the extent practicable (mission-oriented developmental testing).</p>

### 3.4.6 Limited Deployment ATP

<b>Limited Deployment ATP</b>	
Led by	MDA
Forum	Defense Acquisition Board (DAB) or component equivalent
Instructions	In conjunction with Functional Sponsor, MDA approves deployment of the release to limited portions of the end user community



<b>Limited Deployment ATP</b>	
Inputs	CIP Test results and test data Updated BEA
Outputs	Authority to proceed to testing the business system in the operating environment.

### 3.4.7 Limited Fielding & Testing

<b>Limited Fielding &amp; Testing</b>	
Led by	Program Manager
Instructions	<p>Deploy the release(s) to the production environment.</p> <ul style="list-style-type: none"> <li>• Perform system acceptance tests to ensure proper configuration and interface operation.</li> <li>• Train selected personnel and verify completion of DOT_LPF-P actions.</li> <li>• Transition business operations to the new processes and systems.</li> </ul> <p>Test the deployed solution in an operational environment to validate that that it supports the achievement of the business capability in concert with associated DOT_LPF-P actions.</p> <ul style="list-style-type: none"> <li>• Assess the scalability of the capability to operate under full load.</li> <li>• Identify and correct deficiencies as needed prior to the Full Deployment ATP.</li> </ul> <p>Update lifecycle sustainment considerations in CIP/capability support plan and ensure both continue to address support for the needs of any capability.</p>
Inputs	Test Results and test data
Outputs	Deployed software, with operational test engagement on findings
Process Considerations	<p>Once deployed and operational, the ongoing operations and incremental improvement of the solution will be subject to the business capability support strategy for changes in requirements or functionality resulting from end user feedback on the utility of the overall solution.</p> <p>The CIP may include a risk reduction activity such as beta testing in the operational environment to validate that the deployed release supports the achievement of the associated business capability in concert with associated non-materiel actions.</p>

### 3.4.8 Full Deployment ATP

Full Deployment ATP	
Led by	MDA
Forum	Defense Acquisition Board (DAB) or component equivalent
Instructions	With the support of the CMO and Functional Sponsor, MDA considers the results of operational testing and approves deployment to entire user community.
Inputs	CIP Operational Testing Results
Outputs	Authority to proceed into full deployment

### 3.4.9 Full Deployment

Implement Full Deployment	
Led by	Program Manager
Instructions	<p>Deploy full functionality to users in accordance with deployments in the CIP. Measure the performance of the deployed capability and, as needed, build and verify additional portions of the business system in accordance with the releases planned in the CIP or the business capability support strategy.</p> <p>Complete non-materiel actions where necessary and conduct training and deployment to affected user base of any new functionality. Training must include both training in new processes and other non-materiel actions as well as the IT training on the business system.</p> <p>Begin transitioning the business system into support according to the lifecycle sustainment considerations in CIP and capability support plan and make updates to each as needed</p>
Inputs	CIP: Deployment Actions Capability Support Plan
Outputs	Deployed capability with trained user base

### 3.4.10 Capability Support ATP

Capability Support ATP	
Led by	Functional Sponsor
Forum	Defense Business Council (DBC) or component equivalent
Instructions	Accept full deployment of system and approve transition to capability support
Inputs	CIP Capability Support Plan Performance of deployed capability

Capability Support ATP	
Outputs	Authority to proceed into capability support

### 3.5 Capability Support

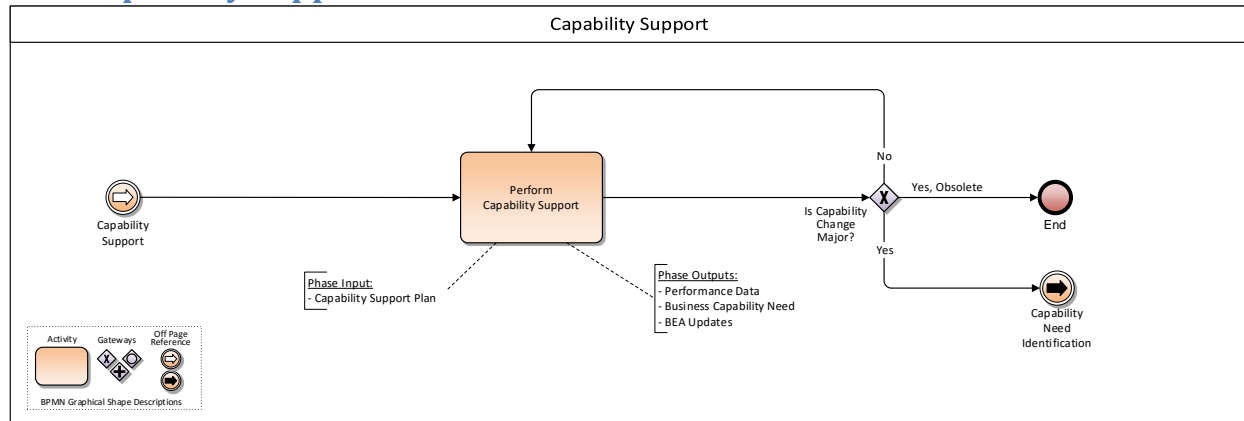


Figure 6: Business Processes for Capability Support

“The functional sponsor leads this phase with support from the CAE or designee. The objective of this phase is to provide enduring support for the capability established by the business system. This includes active engagement in both functional and technical opportunities for continuous process improvement to maintain the relevance of the capability, the supporting technology, and the hosting solution” (DoDI 5000.75 para 4.2.e).

The underlying processes in all phases of the BCAC apply to the changes that take place during capability support. Business decisions to move forward through the BCAC processes should be made by the governance structure at tailored decision points (not formal ATPs).

BCAC initiatives for needed business capabilities should not be system-specific. Once the recommendation is to use an existing solution, the Acquisition ATP for that BCAC initiative may lead to a change to an existing system that is currently in Capability Support. The Capability Support Plan provides context for taking in new implementation requirements for the system.

New BCAC initiatives generally do not emerge from specific systems unless the only problem or opportunity in scope to consider is technical in nature, such as a minor version upgrade.

### 3.5.1 Capability Support

<b>Capability Support</b>	
Led by	Functional Lead
Instructions	<p>Conduct Post Implementation Review in accordance with the PIR plan.</p> <p>Develop tailored capability implementation plans for changes to the capability.</p> <p>Decompose, refine and implement the non-materiel portions of the CIP as necessary, synchronizing with business system actions in the CIP.</p> <p>Develop training in accordance with non-materiel actions in the CIP. This training focuses primarily on the process training, adapting the process training developed for the releases to accommodate any final changes to the processes resulting from performance feedback from the releases themselves.</p> <p>Train process operators in accordance with non-materiel actions in the CIP. Execute non-materiel actions, synchronizing with business system actions in the CIP.</p>
Inputs	<p>Operational capability</p> <p>Capability Support Plan</p>
Output	<p>Updates to the CIP, CSP, BEA, cybersecurity information</p> <p>Design (if any changes made)</p> <p>Test cases as business data or code changes</p> <p>Requirements</p> <p>Updated Operational test results</p> <p>Configuration management information</p>