



U.S. DEPARTMENT OF DEFENSE • SEPTEMBER 28, 2007

2007 Enterprise Transition Plan

ETP

Advancing Defense Business Transformation
Extract from the Enterprise Transition Plan



Foreword

The Department of Defense is engaged in a massive business transformation effort to modernize its processes, systems, and information flows to support 21st Century national security requirements. The Enterprise Transition Plan is designed to help guide and track DoD's business transformation by:

- Describing what DoD is trying to achieve and how we will know when we get there;
- Capturing milestones and metrics to guide improvements in business capabilities;
- Identifying tangible benefits for each investment in business transformation; and
- Documenting a baseline against which to measure progress.

Every twelve months, the Department reports progress against the plan to the Congress, as required by the 2005 NDAA, officially known as 10 U.S.C. 2222, as amended by section 332 of the Ronald W. Reagan National Defense Authorization Act for Fiscal Year 2005 (Public Law 108-375). This Act requires a transition plan to implement the Department of Defense's Business Enterprise Architecture (BEA). The Department's Enterprise Transition Plan responds to this requirement and provides:

- 1) An acquisition strategy for all new systems;
- 2) A listing of legacy systems with either a remediation strategy or a termination date; and
- 3) Milestones, metrics and resource needs for these new systems and legacy systems.

This booklet is an extract from the September 2007 Enterprise Transition Plan, which was delivered to Congress on September 28, 2007.

Visit www.defenselink.mil/dbt/products/2007_BEA_ETP/etp/ETP.html for the complete September 2007 DoD Enterprise Transition Plan and the March 2007 Annual Report to the Congressional Defense Committees.



Table of Contents

Forewordi

Business Transformation: Overview and Perspective 1

Strategy.....2

Culture6

Case in Point: Joint Contingency Contracting System.....10

Process.....11

Information15

Technology.....17

Case in Point: Data Standards Enable Strategic Management Decisions18

Integrated Transformation Example: DLA BSM.....21

The Way Ahead26



Business Transformation: Overview and Perspective

The Department of Defense (DoD) is perhaps the largest and most complex organization in the world. It manages a budget more than twice that of the world's largest corporation, employs more people than the population of a third of the world's countries, provides medical care for as many patients as the largest health management organization, and carries 500 times the number of inventory items as the world's largest commercial retail operation. That being said, DoD's mission, and the changing nature of the threats to which the Department must respond, requires that it become as nimble, adaptive, flexible, and accountable as any organization in the world.

The DoD is engaged in a massive business transformation effort to become that nimble, adaptive organization as it modernizes its processes, systems, and information flows to support 21st Century national security requirements. To help guide this undertaking, the Department released its first integrated Enterprise Transition Plan (ETP) on September 30, 2005. For the first time, the Department provided its internal and external stakeholders a comprehensive view of the systems and initiatives that will transform the largest business entity in the world. Over these past two years the Department has made significant progress, not only in the business capabilities that have been improved, but also in the fundamental ways in which it thinks about business operations and the methods to achieve transformation. These changes manifest themselves in the daily lives of civilian and military personnel throughout the Department, and have set the stage for enabling ongoing business transformation at both the Enterprise and Component levels of the Department.

Business transformation requires a multi-faceted set of activities, especially in a large, complex, hierarchical organization like DoD. Among the core elements necessary to achieve transformation are strategy, culture, process, information, and technology, as depicted in Figure 1 below.

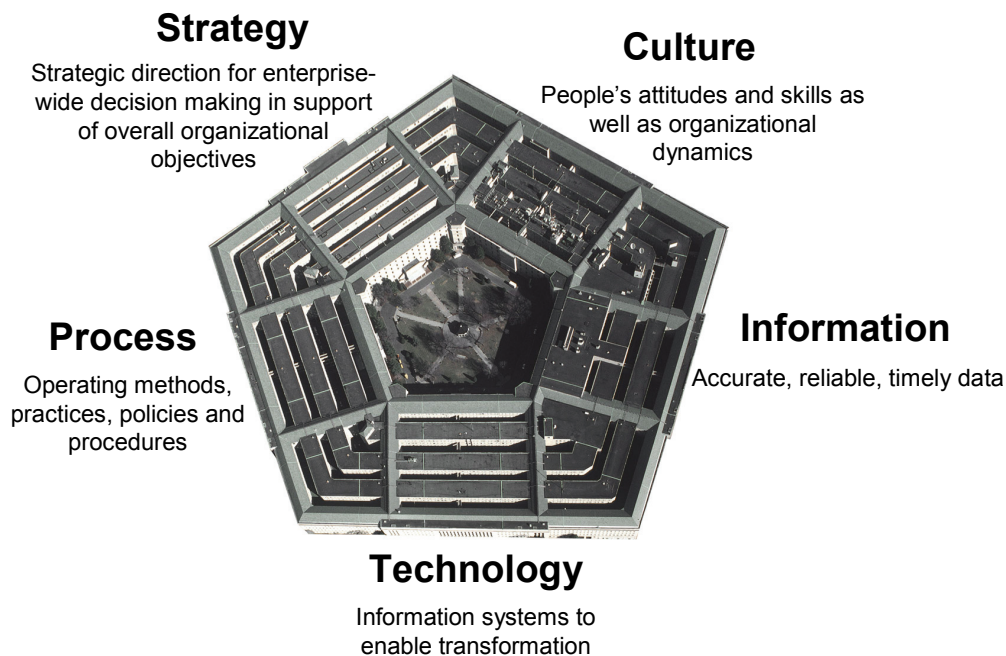


Figure 1: Core Business Transformation Elements



The Department recognizes the importance of each of these elements of transformation not only for its individual contribution to the desired outcome, but also for the necessity to achieve alignment in capabilities across all five areas. For example, it will be virtually impossible to achieve business transformation in an organization that may have a highly formed, forward-looking strategy, but has yet to evolve the organizational culture to support this new way of doing business. Investing in the latest and greatest in the area of Information Technology (IT) can be a key enabler for business transformation. However, if the organization has not sufficiently evolved its process and information capabilities, the technology implementation alone will likely fall short in terms of achieving the desired outcomes. Organizations need to be able to mature in each of these areas to effectively drive business transformation, and these changes need to be infused across organizational boundaries in order to produce optimal results.

The Department is well aware that business transformation is a marathon, not a sprint. Following this course, the Department has made steady, significant progress in each of the five areas mentioned above, achieving tangible results that are truly yielding positive returns in its business operations.

Strategy

The strategy area provides an understanding of the role, positioning, and focus for enterprise-wide decision making in support of overall organizational objectives. Defense business transformation is driven by four strategic objectives that shape priorities and serve as checkpoints to assess the efficacy of the Department's transformation efforts. The publication of the ETP every six months for the past two years has provided the Department the means to describe its strategy for achieving its Enterprise and Component priorities. The ETP also provides detailed milestones, metrics, and resource needs for each of the DoD's transformational programs that support the Department's four business transformation strategic objectives (Figure 2):



Figure 2: Business Transformation Strategic Objectives

Strategy starts at the top, and that is where significant change in the Department's approach to business transformation began to occur a little more than two years ago, just prior to the publication of the first ETP. In April 2005, the Department held the first meeting of the Defense Business Systems Management Committee (DBSMC), the governing body that was chartered to oversee all aspects of business transformation across the Department. Every month since that first

meeting, the Deputy Secretary of Defense has personally led a collection of senior leaders that includes the Service Secretaries, the Principal Staff Assistants, the Joint Staff, Agency Directors, and other leaders from across the Office of the Secretary of Defense (OSD) in a combination of briefings, discussions, and strategic decisions that span the breadth of DoD business transformation. These monthly sessions culminate in members tasked to resolve specific issues, and have resulted in top-down strategic guidance that shapes actions throughout the Department, including:

- Establishing six Business Enterprise Priorities (BEPs) to focus the Department's business transformation efforts, which now guide DoD investment decisions (described in detail in this ETP)
- Providing strategic oversight for key enterprise-wide programs, such as the Defense Integrated Military Human Resources System (DIMHRS)
- Conducting strategic business policy reviews; for example, travel policies that impact solutions such as the Defense Travel System (DTS)
- Performing reviews of the Component-wide strategies, performance, and risks for Enterprise Resource Planning (ERP) systems
- Approving business system investment certifications from across the Department

The outcome of these sessions yields strategic direction for the entire DoD business community. For example, the establishment of the six BEPs has guided investments in both enterprise architecture and business systems development for the last two years. These priorities, which are focused extensively on the management and visibility of information, are appropriately centered on the needs of the *Enterprise* level of the organization. This focus recognizes that the Enterprise layer of the Department requires more in the area of enterprise-wide data standards and business rules (to enable information visibility for its stakeholders) than in the area of hands-on operational business execution, which falls more in the hands of the Components. Finding the right balance between the priorities of the Enterprise and the priorities of its Components is a challenge in any large, complex organization. The DBSMC, in its role of providing strategic oversight for business transformation across the Department, has led the way for the DoD to strike that balance under a concept called *tiered accountability*.

Tiered accountability, depicted below in Figure 3, is a strategic concept that requires each tier in the DoD organizational hierarchy to focus on those requirements that are relevant for that specific tier, and leave the responsibility and accountability for other elements of business management and execution to other tiers in the organization. Tiered accountability in the

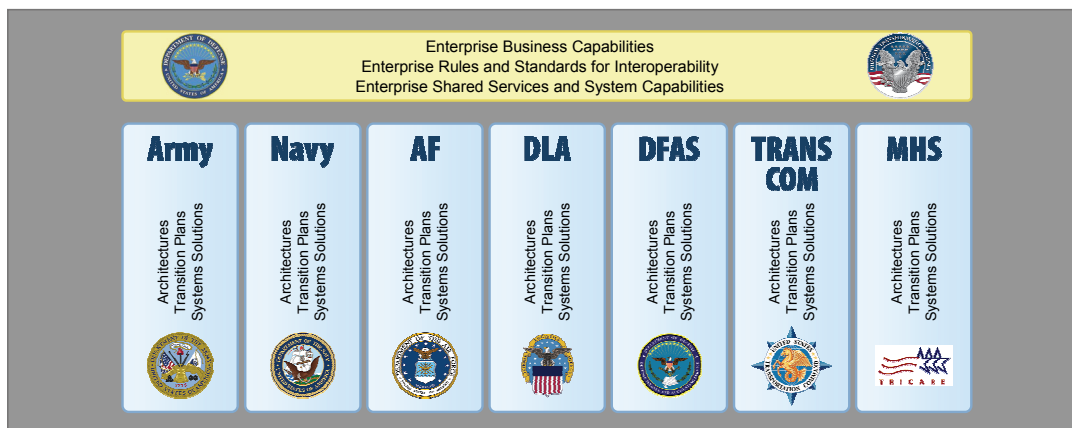


Figure 3: Tiered Accountability

Department of Defense encompasses the broad area of policy setting; the detailed establishment of process and data standards; as well as the ultimate execution of business operations. One example of tiered accountability can be found in the way in which the Department now defines and documents business requirements through its Business Enterprise Architecture (BEA). Previously, those efforts went much deeper than just the needs of the Enterprise layer, and incorporated many of the detailed requirements for operational activities that are only performed at the Component level. The strategy up to that point was primarily focused on a top-down effort to drive highly detailed requirements into a comprehensive enterprise architecture. Unfortunately, this approach often delved into the most granular elements of business requirements, resulting in a high degree of resistance from the operations-focused Components, and ultimately failing to yield actionable results. In many cases, the Department has eliminated incorporating prescriptive requirements in the BEA for functions that are neither performed at the Enterprise level of the organization, nor required for interoperability. For example, since DoD's supply chain operates at the Component level, few supply chain execution requirements are depicted in the BEA. This approach allows those closest to the operations to drive the definition and instantiation of those business requirements.

BEA development now focuses on those process, data, and system elements truly required to enable *Enterprise-wide* information aggregation and system interoperability. By focusing the BEA on those elements specifically needed for Enterprise-level transformation, the Department has improved the likelihood that that layer of requirements will be implemented, while at the same time providing flexibility to the Components to implement improvements to their own processes and data standards as needed to satisfy their unique missions.

Another strategic action taken by the Deputy Secretary and the DBSMC came from the recognition that in order to effectively drive change at the Enterprise level of the organization, there needed to be a permanent piece of the institution staffed by resources with the requisite skills who could be held accountable for specific elements of the overall transformation effort. To that end, it was two years ago that the Department established the 17th and newest agency in the DoD: the Business Transformation Agency (BTA).

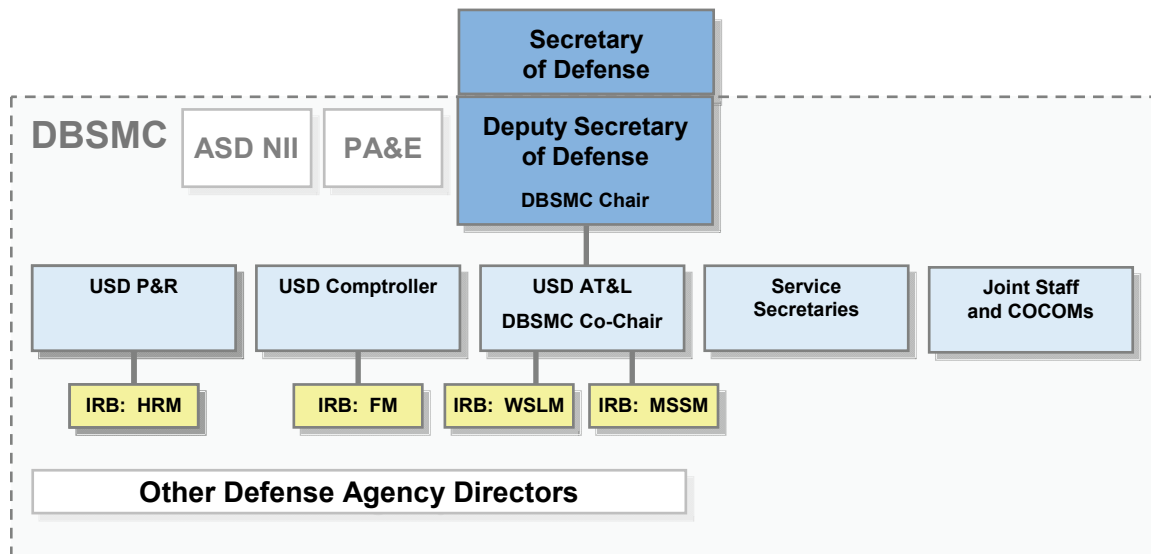


Figure 4: Enterprise-Level Transformation Governance

Under the guidance of the DBSMC (shown in Figure 4), the BTA has focused primarily on those requirements that have broad impact across the DoD enterprise—the Enterprise tier—working



with the functional leaders within the OSD to gather prioritized business requirements that can be depicted in the BEA and ultimately get implemented in business systems across the Department. In addition, the BTA facilitates the standardized investment review process on behalf of the newly established Investment Review Boards (IRBs), and supports the DBSMC on specific tasks resulting from its monthly meetings. Further, the BTA has been assigned 27 IT programs for acquisition, development, and deployment, each of which is specifically focused on delivering a capability that has impact across the DoD enterprise. Prior to the standup of the BTA, these kinds of programs were owned and managed in a variety of organizations across OSD and in some of the Components, leaving no single point of accountability for these enterprise solutions. The BTA now provides senior leadership of the Department a point of accountability for the acquisition and execution of these programs. Finally, the BTA maintains an office specifically focused on the current and future business needs of the warfighting community, to ensure that the needs of the most important customers of the Department's business operations are being properly addressed.



As mentioned, the BTA plays a key role in facilitating the Department's investment review and system certification process. However, in another example of the Department's adoption of the concept of tiered accountability, the Components also play a significant role in partnering with the BTA and the IRBs in the execution of the new end-to-end process. Previously, system certification was driven entirely at the OSD level. That process entailed a detailed compliance review of documents across seven functional domain organizations, each of which carefully assessed the program's compliance in every area of solution design. The problem was that this approach was neither efficient nor effective. Because the process took several months and was very paper intensive, the process was extremely expensive and time consuming for the programs, and resulted in many programs not even bothering to go through the effort. In the four years from FY02 – FY05, only 75 financial systems investments received certification.

Now, under the concept of tiered accountability, each program has become responsible for ensuring compliance with the DoD BEA for each business system investment greater than \$1 million. The Components are charged as pre-certification authorities, to perform the necessary due diligence to ensure compliance is indeed being achieved, and to certify to that effect during the annual investment review process and at appropriate milestone decision points within the acquisition process. The OSD tier of the review process focuses on those areas that are critical to Enterprise-wide transformation. This OSD focus is enabled by the accountable due diligence performed by the Component tier – with program managers, program executive officers, and pre-certification authorities executing the detailed analysis and assertion elements associated with the review process. This strategic shift in the approach to system certifications has properly empowered those closest to the programs to review the systems being placed forward; has enabled the reviewers at OSD to focus on those elements most critical to achieving Enterprise-wide



transformation; and has enabled efficient throughput by way of the streamlined nature of the standardized review process. Reviews that had previously taken more than six months are now processed in an average of six weeks. As a result, over the last two years a total of 303 systems at both the Component and OSD levels have been certified as compliant to the BEA or been granted conditional certifications based on specific plans to achieve compliance during the implementation lifecycle.

The strategic use of the concept of tiered accountability has enabled both a more efficient and more effective means for the Department to oversee its vast array of business system investments. In fact, this ETP reflects this tiered accountability, providing distinct plans for each Business Enterprise Priority and the seven Components with the most impact on business transformation. Moreover, the adoption of the concept of tiered accountability represents a strategic shift in the culture of management within the DoD.

Culture

Strategy provides guidance and direction for transformation, but unless an organization’s culture embraces that strategy, few benefits will be realized. Because of the breadth and depth of the Department, the DoD has many cultures. That being said, a number of changes across DoD over the last two years have been instrumental in the area of business transformation.

The engagement of top Department leadership in business transformation by way of the DBSMC represents a cultural shift in governance that has been critical to enabling progress. Tiered accountability focuses on the vertical aspects of the DoD organization, with an eye toward ensuring that the right people at the right level of the broad DoD organization structure assume the appropriate level of responsibility for the relevant tasks associated with business transformation. Moreover, combining that vertical perspective on accountability with a horizontal perspective on business execution has become central to a cultural shift in how to view and achieve transformative results for the DoD.

Two years ago, the Department introduced the concept of five Core Business Missions (CBMs) within the Business Mission Area, as depicted in Figure 5.



Figure 5: Core Business Missions



The vertical silos in the graphic represent just some of the individual business functions that have traditionally been the focal point for organization, execution, modernization, and accountability in the Department. Like many large organizations, the DoD business environment is structured largely around such specific functions. However, large organizations know that successful businesses execute along the lines of end-to-end business processes, not within disconnected or loosely connected individual functions.

An example of horizontal focus in the Materiel Supply and Service Management (MSSM) CBM is that the United States Transportation Command (USTRANSCOM) has been named as the Distribution Process Owner (DPO). As DPO, USTRANSCOM has responsibility that extends across the entire distribution process (not just transportation of people and materiel), based on a horizontal view of the entire supply chain—and very importantly, on providing direct support to the Combatant Commands (COCOMs), as shown in Figure 6.

The DPO works to better serve the warfighter by moving beyond the notion that the Air Force only does air missions, the Navy only does maritime missions, and the Army only does ground missions. Additionally, the DPO takes a more integrated view and looks at the supply chain not as stovepiped acquisition or movement or warehousing functions, but as steps

in a more integrated process. Prior to establishing a DPO, DoD lacked a cross-Service capability to open and operate airports (and seaports) expeditiously, and the MSSM CBM lacked a cross-functional solution for this portion of the end-to-end process. For example, in the past each Service's actions to open an airfield lacked integration, and USTRANSCOM's role in opening ports was primarily for noncombat operations. During combat operations, the Air Force would typically arrive first and take actions to enable the arrival and departure of aircraft. The Army would generally follow a few days after the first planes landed and establish the capability to dispatch equipment to ground force destinations. Recognizing this disjointedness, USTRANSCOM and its sub-commands developed a Joint Task Force – Port Opening (JTF-PO) capability under its DPO authority to establish ports of debarkation and distribution networks.

The JTF-PO now has the authority and means to perform this mission. USTRANSCOM successfully demonstrated its JTF-PO capability last May during the NORTHCOM-sponsored Ardent Sentry 07 Exercise and more recently during the Bright Star Exercise. A major outcome of this joint task force is the capability for the Army to get into the fight at the same time as the Air Force, not afterwards, and for supplies to arrive within hours rather than days.

During one exercise the force deployed and redeployed 1505 passengers and 356 short tons of cargo in two days of operations—an unprecedented timeline. JTF-PO aerial port of debarkation forces are currently fully operational to support contingency operations worldwide.

USTRANSCOM is in the process of developing a similar capability to rapidly open a seaport of

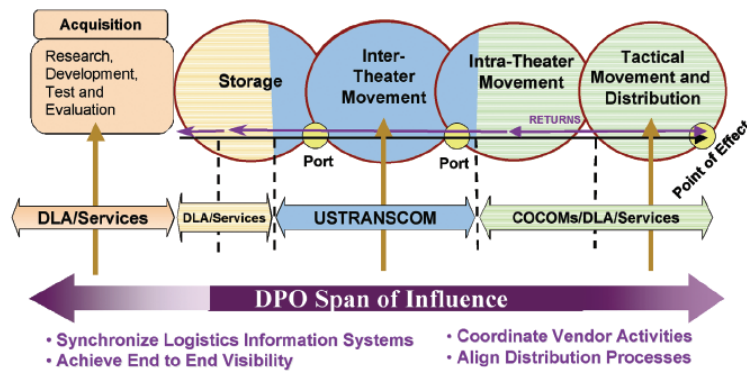


Figure 6: USTRANSCOM as DPO



debarcation with a planned Initial Operational Capability in early 2008. These and other similar efforts are creating a more integrated Defense supply chain, facilitating more efficient, effective operations, and better quality decision making for the joint warfighter.

The horizontal perspective to business that unites individual functions has become manifest in a number of other transformational efforts in the DoD. First, since 2005, the BEA is being developed as a fully-integrated architecture, built by way of cross-functional domain workshops that enforce contribution and alignment from each functional element into an end-to-end set of business standards. These standards cover not only end-to-end process definitions and models, but also data standards and business rules.

An example of this cross-functional approach is shown in the composition of the governance board for the Standard Financial Information Structure (SFIS), the Department's newly defined common financial language. This governance board consists of members from a number of the functional (vertical) organizations from across DoD because the financial results that ultimately get recorded are often based on transactions that initiate in the procurement, logistics, asset management, or force management business areas. Furthermore, the cross-functional development of standards and architecture products results in SFIS compliance requirements not only on finance and accounting systems, but also on those business feeder systems that are fundamental to effective process execution. Prior to this kind of discussion, the Department was filled with instances where feeder systems would provide non-standard data to the accounting systems, with very little collaboration between these communities. The results were a process and information environment where it was nearly impossible to reconcile data as it went from one system to the next. An integrated architecture, with cross-functional requirements developed from a horizontal perspective, has been a catalyst to changing the dialogue around business execution and modernization to a broader focus on end-to-end execution.

The investment review process has likewise become an embedded part of Department culture. The IRBs are organized around the five CBMs, providing an appropriate portfolio of solutions for executive-level governance and review. However, the IRBs recognize that the ramifications of the issues discussed and the decisions made within a particular IRB may ripple beyond their core mission. When a system comes through one IRB with some capabilities or activities primarily owned by another IRB, that other IRB has the opportunity to cross-coordinate on the submission. This means (among other things) that the other IRB can levy conditions necessary for the system's fulfillment of end-to-end requirements for certification. Even with this high degree of coordination, the process runs very efficiently. The IRBs have established a process ensuring all appropriate stakeholders review certification packages within agreed-upon timelines. The efficiency stems in part by the fact that all the IRBs operate under the same Concept of Operations (CONOPS) and are all benchmarking requirements against the single, integrated DoD Business Enterprise Architecture.

This past year, the IRBs took an additional step toward supporting the horizontal perspective of business transformation by combining their meetings once per quarter into a single body that focuses on the large-scale Enterprise Resource Planning (ERP) system implementations underway across the Department. ERP systems are cross-functional by nature, and the IRB chairs recognized the value in having stakeholders from across the various functional communities together in one room as the optimal way to ensure effective adoption of—and compliance with—the architectural standards that have been defined at the Enterprise level of the organization. The ERP IRB looks not only at the compliance requirements for individual ERPs, but also on how these large systems are tied together to form truly end-to-end business solutions.



As a result of such approaches to business investment oversight, collaboration across functional domains has matured significantly over the last two years. DoD culture now recognizes that to achieve truly transformational results, business systems must be viewed in an end-to-end perspective. That view must further be supported by specific constructs, such as the layout of the Business Enterprise Architecture and the make-up of the IRBs and their associated processes, in order to achieve the desired results. The Department is evolving this approach, taking a lead at the Enterprise level of the organization. The DBSMC is helping to drive the strategic importance of these perspectives into the approaches to business transformation at the Component level as well.

Focus on the Warfighter

An additional cultural shift has occurred in the focus of business transformation efforts, and one that may be surprising in terms of its need. Traditionally, business improvements in the Department focused on how the organization operates in peace time, where infrastructure can be designed for the posts, camps, and stations that dominate much of the work environment for DoD personnel. Similar to the past, the current conflict in the Middle East initially required soldiers in the field to establish business capabilities largely from scratch, using the limited tools that were available to them in theater. Over the last two years, the Department has dedicated efforts to meeting the needs of soldiers in the field with real and lasting capabilities designed for the theater of operation, along with the traditional focus on peacetime garrison operation.

Just over a year ago, the Deputy Secretary established the Task Force to Support Improved DoD Contracting and Stability Operations in Iraq. In the area of contingency contracting, the Task Force has focused on two primary objectives: (1) increasing the number of opportunities available and awarded to Iraqi/Afghan firms by identifying capable firms while minimizing barriers to compete for U.S. reconstruction efforts, and (2) consolidating and creating visibility into Iraq/Afghan reconstruction contract data. In an illustration of the bias toward rapid implementation, which represents another noteworthy cultural change from the past, the Task Force worked collaboratively with the Joint Contracting Command – Iraq/Afghanistan (JCC-I/A) to develop and deploy a tool in less than six months – the Joint Contingency Contracting System (JCCS).

Using JCCS, contract opportunities are posted in both English (full contract) and Arabic (summarized version). JCCS also stores critical information about all registered and approved host nation vendors who may bid on opportunities. In addition to providing a standardized and streamlined process for capturing the contract requirements, solicitation, and award data, the information generated by the tool has been invaluable to the effective management of the Department's mission. JCCS provides the contracting community real-time information on what the command is spending, with whom it is spending, where the funds are being spent, on what they are being spent, and so on. (See the related "Case in Point" on JCCS for more information about the solution and the benefits achieved to date.)



Case in Point: Joint Contingency Contracting System

The Joint Contingency Contracting System (JCCS) follows the “Keep it Simple” philosophy to enabling information technology, which in and of itself represents a cultural shift in the approach to IT development in the DoD. While very powerful in terms of the capability it provides, the simplicity of JCCS enables rapid deployment and streamlined adoption in theater—an especially powerful combination where the customer is deployed in a war zone. Along with posting contract opportunities in English (full contract) and Arabic (summarized version), and providing information about all the registered and approved host nation vendors, the JCCS captures vendor proposals, and documents contract awards. Once an award is made, specific data associated with the contract award is entered into JCCS, which then provides the key to the information visibility needs of the command. The tool even provides visibility to receipt of goods, payment to vendors, and ultimately the close-out of the contract, completing the end-to-end business process.

The analysis of JCCS information provides the Commander of JCC-I/A, Major General Darryl Scott, the information he and his staff need on what parts of the organization are in fact effectively driving business to host nation vendors. This access to information from across the Area of Responsibility (AOR), previously unavailable, is now at the fingertips of the Commander and his staff in real-time. MG Scott uses JCCS on a daily basis, managing and allocating his resources based on the solid data enabled by the tool. According to MG Scott:

“JCCS has proven to be a tremendous information asset and management tool for the Joint Contracting Command Iraq/Afghanistan (JCC-I/A). JCCS’ capabilities have allowed our contracting officers and enterprise management leaders a complete look at the contracting process from receipt of a purchase request to the final contract payment and close out actions. These system capabilities have dramatically reduced required contract planning times, allowing for a level of customer support and service never previously realized in a contingency contracting environment.

On a strategic level, JCCS has had a direct impact on JCC-I/A’s ability to identify strategic source commodities and has enabled the implementation of our efforts to build and bolster the local economy through the Iraqi First program. In short, JCC-I/A could not have achieved its demonstrated level of organizational success without the management benefits provided in JCCS.”

JCCS is now deployed at 19 (14 Iraq, 5 Afghanistan) Regional Contracting Centers throughout the AOR and the Reconstruction offices at JCC I/A headquarters in Baghdad. Since its inception, less than a year ago, JCCS has:

- Captured 23,014 contracting actions in the centralized contract repository valued at \$2.95B
- Registered 7732 total vendors (3,597 Iraqi vendors and 1,301 Afghanistan vendors)
- Posted 377 solicitations by DoD Contracting Officers
- Received 1,239 proposals in response to posted solicitations
- Provided Department leadership with accurate and timely contract visibility on host nation and non-host nation vendor activity

Figure 7 depicts the dramatic growth in the usage of this tool in the relatively short-time since it was first deployed.

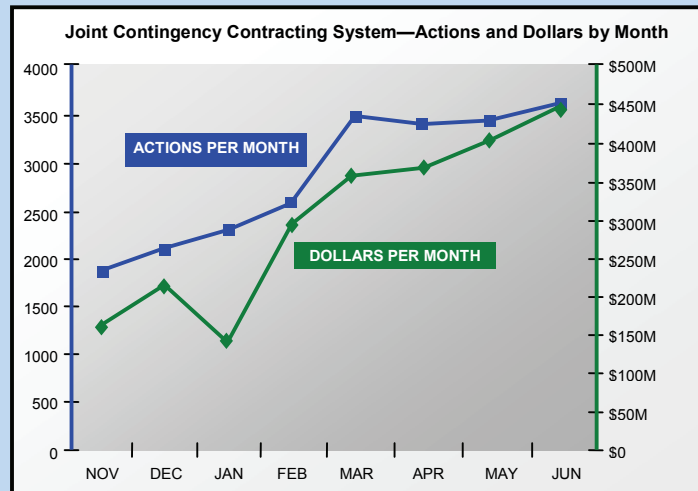


Figure 7: JCCS Actions and Dollars by Month

The long-term intent for JCCS is to transfer it to future contingency operations. The BTA provides that central point of accountability to ensure that the business lessons learned, and some of the systems that have been deployed in response to this and other contingency-related needs, survive to support future operations.

As noted above, the JCCS example reflects another aspect of cultural change that has occurred within the Department in the area of business transformation: the shift to a bias toward implementing capability as rapidly as possible. For many of the large scale business transformation efforts across the Department, the time required to deploy solutions has been a significant challenge. In part, the time required is due to the size and scale of the business



operations being addressed. However, the cumbersome acquisition process for business systems has also been an impediment to rapid fielding of capability. Accordingly, the Deputy Secretary has made it clear that the Department must resist the desire to create all-in-one, big bang solutions, because many are simply never completed, and those that are completed can take so long that they may no longer address the original problem that initiated the modernization effort in the first place. A fundamental element of decision making with regard to business system modernization investments must be a cultural bias toward rapid deployment.

In fact, DBSMC engagement in the new acquisition oversight processes being developed for business systems—the Business Capability Lifecycle (BCL) to be implemented starting in FY08—has solidified a tenet for future business cases that systems must include the delivery of tangible capability within 12-18 months. If this timeframe is not met, the business case will likely be rejected. Because some of the Department’s current large-scale transformation efforts don’t conform to this tenet, the DBSMC is looking at some of those programs to see if there are practical approaches to accelerating deployment of capability. All future investment opportunities, however, are expected to comply with this top-down mandate for the rapid approach to capability delivery.

Process

As mentioned, over the last two years the Department has embraced a cultural shift away from just focusing on enhancing the capabilities of individual stovepiped functions toward a view to optimizing end-to-end business processes. Processes are the lifeblood of business execution and as such, process improvements in themselves can bring about substantial transformation. Process improvement involves a continuous disciplined effort to decrease operational cost and cycle times, and reduce unnecessary work and rework, particularly by eliminating steps that add little or no value.

The process improvements that the Department is trying to achieve are first and foremost those that support the warfighter—such as those that provide capability improvements more rapidly and by returning equipment to use in less time—and those that save money. A focal point for the Department’s approach to process improvement has been in the area of Lean Six Sigma (LSS) methodology and how successes through LSS in the Military Services have led to the establishment of an OSD Continuous Process Improvement (CPI)/LSS Office and a broadening of the effort.

The industry standard principles of LSS are an integral part of the Department’s CPI effort. LSS has been endorsed by DoD leadership as the means by which the Department will become more efficient in its operations and more effective in its support of the warfighter. By focusing on becoming a “lean” organization, DoD can address resource constraints and other barriers to improving business performance by eliminating waste and defects that hinder operational excellence. To date, the Military Services have been particularly proactive in their application of CPI/LSS and are already realizing significant benefits through its use. The Services’ proactive approach can serve as a model for the Department as a whole.

For example, Naval Air Systems Command recognized the need to improve the closeout process for large Naval Warfare Center contracts. In the past, a lack of standardized processes and ineffective communication between the Naval Warfare Center, the Defense Finance & Accounting Service (DFAS), and the Defense Contracting Management Agency (DCMA—the DoD Component that administers certain types of contracts for the Center) contributed to a number of contracts overdue for closeout. This caused significant rework, multiple unnecessary reviews, and a loss of funds that expired before being used. By using CPI/LSS to analyze,



According to the Deputy Secretary, “...when we improve our processes, we improve everything we do every day so that we can better invest the resources that the taxpayers provide us for our national defense and our security.”



consolidate, and improve processes, the Naval Warfare Center was able to save money, reduce unnecessary rework, and create processes that can be replicated throughout the Navy. It is expected that the new contract close-out process will save the Navy more than \$1 million in 2007, with the potential for even greater savings in the future as the new process is adopted by other organizations.

Maintenance is another area where the Military Services have been able to save time and money through the use of CPI/LSS. The Army Materiel Command, at the Fort Knox Unit Maintenance Activity, recognized its inability to meet the requirement to service ten M1 Main Battle Tanks per week. Under the existing inspection process, the Unit Maintenance Activity was only able to service an average of six tanks per week. As a result, the service backlog grew every week, even with additional inspection hours. Using Lean Six Sigma tools, the team found that maintenance providers were not given enough information on tanks' operational status prior to entering scheduled service. Some tanks that the Unit Maintenance Activity received were non-mission-capable and had to be removed from the service process when that status was discovered, resulting in wasted activity. By identifying the root cause of the problem, the team created an inspection process that quickly prevented non-mission-capable tanks from entering the maintenance queue. With the increased throughput that this solution allowed, the team was able to reduce the tank servicing backlog from 85 tanks to zero over a six-month period.



The Air Force has also realized decreased costs and improved cycle times in maintenance activities using CPI/LSS. The 58th Maintenance Squadron reduced the time required for its inspections of the MH-53J Pave Low helicopter by 43%. By conducting a value stream analysis and taking a critical look at the current state of operations, the Squadron identified 86 potential non-value added steps in its 107-step helicopter inspection. The Squadron was then able to eliminate 41 non-value added steps and combine or modify the other 45. This reduction in cycle time saved



money by reducing the number of man hours needed to complete an inspection, increased the Squadron's capacity, and improved team morale.

As a result of such demonstrated successes in process improvement by the Military Services, the Deputy Secretary of Defense, on April 30, 2007, instructed the Office of the Deputy Under Secretary of Defense for Business Transformation to create a DoD CPI/LSS Program Office that would leverage the existing CPI Senior Steering Committee to drive DoD-wide CPI/LSS activities and build on the types of successes mentioned above. The Deputy Secretary recognized that CPI/LSS is an important part of DoD's ongoing culture change, and that "Aggressive implementation of CPI/LSS within all levels of DoD will go a long way to support our overall business transformation efforts."



Commitment to LSS involves dedicating the proper resources to both participate in training and lead improvement efforts. The Deputy Secretary directed all parts of DoD to provide their full support to the new Program Office through actions such as assigning a focal point to coordinate with the office; establishing 12-18 month training objectives (1% LSS Black belt trained and 5% Green belt trained personnel); including CPI/LSS in individual employee performance objectives; providing support to the DoD CPI/LSS Program Office in DoD-wide process improvement initiatives; and reporting progress on CPI/LSS projects and activities monthly.

Currently, the Program Office is collecting and consolidating baseline CPI/LSS information from all DoD organizations; developing a standardized metrics reporting system; coordinating LSS training for OSD and Service personnel; and working with appropriate organizations to incorporate CPI/LSS into individual employee performance objectives.

The Program Office has begun coordinating work on a number of Department-wide process improvement initiatives. These include:

- Achieving a reform of the end-to-end security clearance process in order to deliver high-assurance clearances efficiently and at the lowest reasonable cost.
- Identifying and filling gaps in the processes for delivering care to wounded warfighters across the continuum of care within DoD and to the Veterans Administration. These improvements will enhance care to ensure that service is timely, proactive, and coordinated to meet individual and family needs.
- Reviewing the four primary DoD Technology Transfer and Disclosure processes, to enable these processes to start sooner, work together more effectively/efficiently, be used more proactively and with more flexible criteria, and make cognizant officials more knowledgeable through education and training.
- Reviewing and improving the efficiency and effectiveness of the flow of correspondence within organizations and across DoD.



CPI/LSS is rapidly becoming embedded in the DoD culture, as it is a critical component to efficient use of taxpayer dollars and support to the warfighter. In fact, Deputy Secretary England notes that "... frankly, we have an obligation, particularly those of us in the civilian side of this business, and the military people who are not on the front lines, we owe it to the people who are in the fight to make the maximum use of the money we have available so we can continuously improve our war fighting." The Department is embracing CPI/LSS as a key tool in transforming process execution across the organization, and is investing heavily in training its population to enable it to take advantage of this proven set of transformational techniques.

Continuous process improvement efforts are also manifest in the DoD across a number of processes that specifically support the management efforts associated with business transformation itself. Many of these processes have been under review with a strategic perspective targeting improvement. One such example revolves around the acquisition process in OSD for all Major Acquisition Information Systems (MAIS) programs. Historically, this paper-intensive process included multiple layers of review that required these large-scale transformation efforts to delay progress for weeks as documents were briefed, reviewed, and ultimately approved. This process was not only inefficient in time and resources, but also largely ineffective in getting to the heart of the challenges inherent in these kinds of complex programs. In the last two years, the DBSMC has been championing an effort to instantiate a new set of processes to review business systems with a focus on identifying and mitigating risk. Under this Enterprise Risk Assessment Methodology (ERAM), a team of business system experts from within the BTA is paired with



functional and policy staff from across OSD to work directly with large-scale IT programs, not only reviewing documents, but also engaging in detailed interviews with key stakeholders. The documented risks that result from these assessments get embedded in the risk mitigation plans of the programs, and get briefed to the Milestone Decision Authority for further action as appropriate. Figure 8 shows the risk assessment areas covered by ERAM.

ERAM Risk Assessment Areas	
<input checked="" type="checkbox"/>	People
<input checked="" type="checkbox"/>	Strategy
<input checked="" type="checkbox"/>	Scope
<input checked="" type="checkbox"/>	Technical
<input checked="" type="checkbox"/>	External
<input checked="" type="checkbox"/>	Process
<input checked="" type="checkbox"/>	Contract

Figure 8: ERAM Risk Assessment Areas

ERAM was piloted with the Army's General Fund Enterprise Business System (GFEBS) and the joint Defense Logistics Agency (DLA)/USTRANSCOM program Integrated Data Environment/Global Transportation Network (IDE/GTN). These assessments resulted in identification of specific risks that may inhibit these programs from achieving their objectives. The ERAM assessment of GFEBS, for example, noted that the Army lacked a strategy for integrating GFEBS with the Army's two other ERP programs (GCSS-Army and LMP). This lack of an overarching architecture and concept of operations was identified as a key risk to successfully achieving the Army's overall objectives, and Army leadership in the Business Mission Area is now working with the Program Executive Office to clarify at a detailed level exactly how these solutions will ultimately fit together. Based on the results of these pilots, all business system MAIS programs have now been officially moved under the ERAM model, with the Under Secretary of Acquisition, Technology and Logistics (AT&L) serving as the Milestone Decision Authority.

ERAM is just one element of the process transformation underway in the area of business system acquisition and oversight. As described earlier, the last two years have witnessed the introduction of an entirely new model for investment review for business systems in the Department. To further the process transformation in this area, the DBSMC is now driving the coordination of a set of policy changes—under the moniker Business Capability Lifecycle (BCL)—that will combine these new investment review processes along with the business system acquisition oversight processes into a single point of accountability for MAIS level business system implementations.

By using BCL, the DBSMC and the IRBs will now have the opportunity to engage in the oversight of business system investments from the initial concept creation throughout ultimate deployment, serving the dual roles of investment review and acquisition oversight. The tiered accountability-based investment review process will continue as described above, but the ERAM results will now feed into the same review boards for recommendations to the Milestone Decision Authority on the health of the program and appropriate mitigation actions. This is yet another cultural shift within the business systems community, providing an integrated focus to both investment review and acquisition oversight. Combining those previously distinct sets of processes into a single, lifecycle-based set of reviews is expected to prove more efficient and effective for both the programs and the Milestone Decision Authority. The formal coordination related to the detailed policy implications of BCL is currently underway across the Department with a target completion for this fall.



Information

While process transformation is focused on how business is conducted within the Department, information transformation relates to the DoD's ability to leverage the results of those processes to make optimal decisions. Providing decision makers access to timely, reliable, and accurate information is a fundamental capability in support of effective management. DoD's limitations in this regard are well known—with labor-intensive manual data calls for the most basic information. These data calls have historically produced outdated, inaccurate, and inconsistent data, with extensive efforts focused on data collection rather than information analysis. The Department has long recognized the need to improve data aggregation, yet has lacked the tools and standards to enable this kind of capability. Over the last two years, this particular area of transformation has taken center stage – with several of the DBSMC's Business Enterprise Priorities focused on information visibility. Results are now starting to be realized in this area, with a series of specific enhancements already in place and more are on the way.

The DoD financial management community has long suffered from its inability to automate the aggregation of data, largely due to a lack of enterprise data standards. In October 2005, the Department took its first step to alleviating this problem by the publication of Phase I of the DoD's Standard Financial Information Structure (SFIS). This set of 59 data elements was specifically focused on those elements necessary for the generation of mandated financial statements. These elements span the functional areas of appropriation account, budget program, organizational, transactional, trading partner, and cost accounting information, as shown in Figure 9. These SFIS data definitions were based on a number of Federal standards, as well as new standards resulting from the collaborative efforts of representatives from across the OSD and Component functional communities, spanning a number of business functional areas. While SFIS is focused on financial statement generation, many of the elements included in Phase I that are necessary to generate those statements span functional areas, which required this cross-functional collaboration.

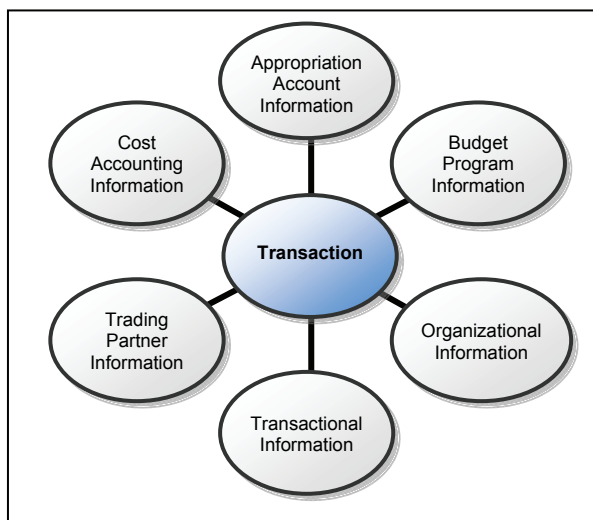


Figure 9: Types of SFIS Standards

As with any set of data standards, SFIS is not static. In fact, the cross-functional SFIS governance board, under the direction of OUSD(Comptroller), has released two more phases of SFIS definitions and associated business rules in the last two years. These releases have extended further into the area of managerial cost accounting. The data standards have all been articulated in the BEA, and the authoritative list of SFIS values is now available in a single repository within the Business Enterprise Information Services (BEIS) application.

Information transformation may begin with data definitions and business rules, but true transformation cannot be realized until those data standards become embedded in the processes and supporting systems in use throughout DoD. To this end, the Department has adopted a two-phased approach to implement the SFIS standards. First, the Department is embedding the SFIS standards into every new target financial system. Second, with the recognition that many of the current accounting systems will be replaced in the near term, it did not make economic sense



to invest heavily in embedding the SFIS standards in these systems. Rather, the Department has leveraged the BEIS solution to capture data feeds from these legacy accounting systems and cross-walked them to the SFIS standards in the corporate repository.

FY07 has seen tremendous progress in the implementation of this short-term strategy with the following entities now yielding crosswalk-enabled SFIS-compliant data within BEIS:

- Air Force General Fund
- Air Force Working Capital Fund
- Marine Corps General Fund
- Marine Corps Working Capital Fund
- Navy Working Capital Fund

Beginning in June 2007, the Department began issuing financial statements for many of those entities using SFIS-compliant data. It is expected that all legacy accounting system data will be cross-walked for SFIS compliance within BEIS by the second quarter of FY08.

Information transformation by way of standards-based cross-walks remains an interim solution to providing timely, accurate, and reliable financial information to decision-makers. As mentioned, the long term strategy is to embed the SFIS standards in every target accounting system. Each DoD Component is currently involved in some phase of systems transformation encompassing finance and accounting. As part of the investment review process, each of these target systems is required to certify compliance to the SFIS standards. By implementing these data elements and their associated business rules within these systems themselves, the enterprise cross walks can eventually be eliminated in the data collection process. No matter how precise cross walks may be, there will always be room for error. Embedding the SFIS requirements at the transaction sources eliminates this potential source of error. Moreover, the SFIS requirements are not limited to finance and accounting systems. Transactions using the SFIS elements are often initiated in other business systems, which is why SFIS compliance conditions are also placed on these systems. As the SFIS standards become embedded in transactions throughout their lifecycle, the more effective will be the result on information transformation. This ETP provides a consolidated view of the SFIS implementation milestones for the 233 system investments that have received SFIS conditions through the investment review process in the last two years.

Standards-based financial statement generation is only one of the benefits of the information transformation that has resulted from the adoption of the SFIS standards. The standards-based data is now beginning to provide a business intelligence capability that spans the DoD enterprise. This capability allows senior management to compare budget availability to actual execution data at Appropriation and Component levels for decision making, including a budget metrics forecasting capability for OSD. This same dashboard is available not only at the OSD level, but also to the Component finance organizations, so that all stakeholders (based on security constraints) are looking at the same set of aggregated data in real-time. As the Department gains more confidence in the underlying data sources, manual data calls will subside significantly, enabling leadership to focus on analyzing the data for decision making, rather than focusing on the traditional laborious process of data collection.

This implementation approach to SFIS standards in Component target systems highlights another area of cultural change within the Department – using IT implementation experts to support policy development and implementation. In years past, as new requirements were published as policy or documented in the BEA, the Components were largely left on their own to study the documentation and formulate an implementation approach. This was challenging, since many of these requirements were formulated without anticipating systems implementation



issues. The result was often standardized data elements implemented in a non-standardized way. For the last year, the BTA has been alleviating implementation problems -- first, by assigning technical resources to participate in the data standard design; and second by deploying BTA ERP experts (cross-trained as functional SFIS experts) to support the Component ERP programs in understanding the definitions, as well as to provide practical, hands-on implementation guidance.

This approach to SFIS implementation has already shown its value both in clearing up confusion on the elements (which helped some programs avoid costly customization approaches to implementing SFIS) and in helping each ERP program move toward a common interpretation of the standards. As the Enterprise defines data standards that are required for system implementations, the Enterprise also has a responsibility to assist in the implementation of those standards. Effective implementation is essential in order to achieve the desired outcome in the area of information transformation.

SFIS is only one of the enterprise data standards that have been defined in the DoD in the last two years. Another prominent standard is Real Property Inventory Requirements (RPIR), which is in the area of Real Property Accountability.

The DoD currently maintains more than \$700 billion in real property assets, including more than 2.4 billion square feet of building space and approximately 32 million acres of land. Similar to the financial management information challenges being addressed by SFIS, the Real Property community has struggled for years to provide a real-time information repository to give decision-makers timely, accurate, and reliable information about this tremendous volume and variety of assets. The process of real property accountability often involved more time collecting and reconciling data than using that data for management analysis. The BEA documents the almost 200 data elements that comprise the RPIR standards. The RPIR reengineering effort has extended into a comprehensive data management strategy, sustainable business processes, proposed policy changes, and overall asset accountability. (See the "Case in Point" below for more on the RPIR efforts.)

SFIS and RPIR are the most mature of the data standards that have been defined in the Department, but several more are on the way as a focal point for future iterations of the BEA. The functional areas of acquisition, materiel, and procurement all have data standard working groups underway, each engaging its respective functional community to first prioritize the data elements for consideration, and then do the hard work to agree upon standard definitions and business rules for each element. This data-driven work will ultimately enable the ability to automate the data capture and aggregation of information across each of these functional areas. These efforts represent the building blocks for even further information transformation for decision-makers throughout the Department.

Technology

Information Technology provides a physical instantiation that enables and enforces the strategy, culture, process, and information elements of business transformation. All of these elements are essential to achieving transformational results, and it is the IT portion of the overall solution that often ultimately delivers actual capabilities to the DoD community. Consequently, the Department is investing significantly in business systems at both the Enterprise and Component levels of the organizations. Some of these systems have already been described, such as BEIS which provides the capability to aggregate standards-based financial data at the Enterprise level of the Department and render that information in a meaningful way to decision makers. The Enterprise systems that are entrusted to the BTA cover a variety of capabilities across each of the Core Business Missions within the Department. Some of these systems focus on master data,



some focus on information management (data aggregation and reporting), and some are geared to transaction processing.

Case in Point: Data Standards Enable Strategic Management Decisions

The DoD manages one of the largest portfolios of real property within the federal government and has undertaken a comprehensive effort to improve real property accountability. The Department's portfolio includes airfields, wharves, warehouses, barracks, dining facilities, administrative offices, tank farms, storage facilities, training ranges, and more. The Real Property Inventory Requirements (RPIR) effort encompasses four key elements outlined below – creating a common language, establishing a unique identifier registry, supporting Component Real Property management solutions, and helping enable a Real Property data warehouse.

Creating a Common Language is First Step to Accountability

Until RPIR, aggregating data across the Services has been quite difficult, because there were minimal real property data standards within each Service, and even more limited standards across the Services. Compiling a usable end product of the overall defense real property portfolio involved a one-time annual data call to the Services, which would be reconciled through an extensive series of data queries and application of business rules. OSD and the Components worked together to create the RPIR standards – as such, the RPIR standards represent the culmination of extensive work to define the core data elements, definitions, and business rules associated with the physical, legal, and financial characteristics of DoD's real property.

Real Property Unique Identifier Registry

Fundamental to RPIR implementation has been the development of the Real Property Unique Identifier Registry (RPUIR) that will be used to permanently and uniquely identify real property sites and real property assets. The RPUIR reached full operational capability for sites in June 2007, and is scheduled to reach full operational capability for real property assets in December 2007. These unique identifiers enable on-demand information in a net-centric environment based on specific data for all real property assets in which the Department has a legal interest. The RPUIR provides a constant source of reference on the historical record of a particular asset as it moves from one organization to another or when it is partially or completely disposed of. The real property unique identifier has been recognized as an industry best practice.

IT Solutions for Real Property Management

Component IT systems supporting real property tracking and management are required to become RPIR compliant. Each Component has submitted RPIR implementation plans to OSD I&E and to the Real Property and Installations Lifecycle Management IRB indicating when those implementations will occur. The IRB regularly monitors RPIR implementation progress against these plans, and progress is already being achieved. Implementation efforts include updating legacy systems and embedding the RPIR standards in target systems such as the Army's General Fund Enterprise Business System (GFEBS). Full RPIR implementation is expected by September 30, 2009.

Centralized Real Property Database

In addition to Component RPIR-compliant systems, the Department is standing up an information repository, called the Real Property Assets Database (RPAD). The RPAD is replacing the current Facilities Assessment Database (FAD). RPAD will be fully RPIR compliant and constructed based on DoD net-centric requirements. Begun less than a year ago, RPAD will achieve initial operating capability on October 1, 2007, after completing a test to receive direct data feeds from a Component's compliant system. The RPAD will provide a single point to access real property management information from across the Department. The RPAD also features a four-tiered validation tool that verifies compliant data from the lowest level entry, and will ascertain that the Components' systems are submitting RPIR compliant data.

The benefits of RPIR are far-reaching at both the OSD and Component levels, primarily related to making timely and well-informed management decisions. For example, RPIR will ensure that the right management information on the Department's real estate holdings is available to facilitate implementation of the Base Realignment and Closure (BRAC) recommendations, including the movement of people, property transfers, etc. Second, the capability to respond to queries from external sources such as OMB, GAO, and the Congress will be facilitated by the implementation of the RPIR standards.

The ETP, together with the BEA and Component architectures, describes the target business systems environment. The ETP also provides a roadmap with the milestones, metrics, and resource needs for each of these business system investments.

In an effort to rationalize the IT-enabled capabilities that support business activities across the DoD, the BTA is evaluating its existing portfolio of systems with a focus on determining whether a DoD Enterprise-level system or a Component-level system makes the most sense for maximizing the effectiveness of each capability and improving business operations. To enable structured, informed decisions about implementing the capabilities in the right levels and areas of the Department, the BTA has established a Business Enterprise Rationalization Framework. The



framework guides decision makers through a list of questions that reveal the tradeoffs, such as: “Can the business process supported by the capability be common across all the Components?” and, “Does the capability enable data visibility across the Business Mission Area?” In general the framework recommends that *Enterprise*-level solutions should yield capabilities in one or more of the following four areas: (1) Enterprise information visibility, (2) a single point of entry for business activity, (3) a common reference data for the Department, or (4) a common Enterprise-wide transaction process. As for transaction processes, these are often significantly more efficient and effective when optimized within each Component organization (rather than forcing commonality through an Enterprise system). Therefore, the framework recommends that transactional systems generally be managed at the Component-level and leverage DoD’s investments in the ERP systems, thereby enabling integrated end-to-end processes along each line-of-business. This approach supports the concept of tiered accountability and its associated benefits, and can achieve the desired results as long as these Component-specific solutions are effectively bound by the data, process, and business rule standards defined at the Enterprise level of the organization. The BTA has begun to use the framework by analyzing its own DBSAE-managed Enterprise-solutions and making subsequent recommendations. The next step is to finalize a course-of-action including a plan to implement the changes.

The BTA manages 27 enterprise-level programs. The largest of these, the Defense Integrated Military Human Resources System (DIMHRS), is also one of a dozen ERP implementations ongoing throughout the Department, ten of which are occurring at the Component level. In fact, these dozen programs represent more than 50% of the Department’s total investment in business systems modernization, as shown in Table 1.

Table 1: ERP Spending Relative to Total Target System/Initiative Spending

	# of Systems / Initiatives	2007	2008	2009	3-Yr Total
ETP Totals	102	\$2,166.9	\$2,279.8	\$2,407.3	\$6,854.0
ERP Totals	12	\$1,070.9	\$1,197.1	\$1,211.6	\$3,479.6
ERP % of Total	12%	49.4%	52.5%	50.3%	50.7%

ERPs are a suite of integrated business modules that utilize a common database to execute end-to-end processes. Evolving out of the manufacturing industry, ERPs imply the use of packaged software rather than proprietary software written by or for one customer. ERP systems are designed to replace old stand-alone computer systems in the areas of finance, human resources, manufacturing, procurement, etc., with a single, unified software program divided into modules that accounts for the capabilities provided by the old stand-alone systems; takes advantage of best business practices embedded in these application suites, and leverages the end-to-end process integration embedded directly into the product. Every Component in the Department is actively engaged in one form of ERP implementation or another, many of which are among the largest ERP implementations ever undertaken.

The Department is by no means new to the world of ERPs. In fact, the Department has many such systems in production today, illustrated in Figure 10 on the following page.



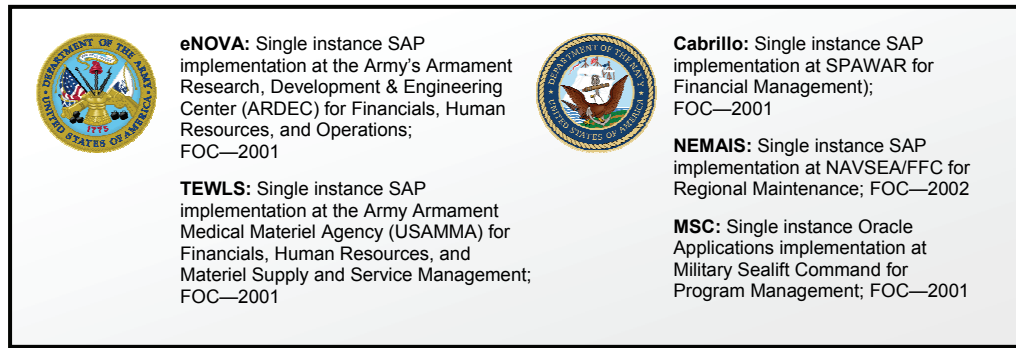


Figure 10: ERP Programs in Operation in DoD Today

While a number of the solutions shown above are slated to be replaced over time by newer ERP efforts, many of these efforts have provided valuable lessons learned on the essential elements of large-scale business system deployments. The Navy is leveraging its experience from its previous pilot implementations into the ongoing Navy ERP effort that will see its first Initial Operational Capability (IOC)—its first “Go-Live”—in October 2007. While some of those lessons are related to the technology itself, many more relate to the people side of business transformation, identifying the many cultural changes necessary to effectively enable migration from the traditional legacy world of DoD business processing to taking full advantage of the transformational-enabling ERP systems. The target ERP deployments, shown below in Figure 11, will dramatically change the way in which business is performed across the DoD.



Figure 11: DoD's Target ERP Programs



Integrated Transformation Example: DLA BSM

Of the target environments identified in Figure 1-11, only one has reached Full Operational Capability: the Business Systems Modernization (BSM) effort at the Defense Logistics Agency. BSM has become a truly transformational solution for DLA, having a dramatic impact on all five of the core transformation elements. The program dates to 1999 when DLA's leaders recognized that to remain viable as DoD's combat logistics support agency, the organization had to completely replace its legacy systems and entire mode of operation, both of which dated from the 1960s.

At the outset of the program, DLA began to reengineer its business processes in response to changing warfighter needs. DLA's transformation initiatives are not only upgrading decades-old legacy systems, but also improving support to its customers and providing better access to DLA's portfolio of business systems and processes. Therefore, DLA was not simply implementing ERP technology, but completely changing and modernizing the DLA Business Enterprise, including culture, processes, information management, and IT infrastructure. Agency leadership's strategy to implement that extensive change was through a phased-in and carefully orchestrated approach.

This transformation took place at a time when DLA's operations tempo was at the highest level in its history. From fiscal year (FY) 2001 to FY 2005, sales/services doubled from almost \$17 billion to nearly \$35 billion, largely as a result of the Global War on Terror, as shown in Figure 12. During this time, the culture of DLA's business operations also took on a much greater focus on the warfighter and warfighting operations than ever before.

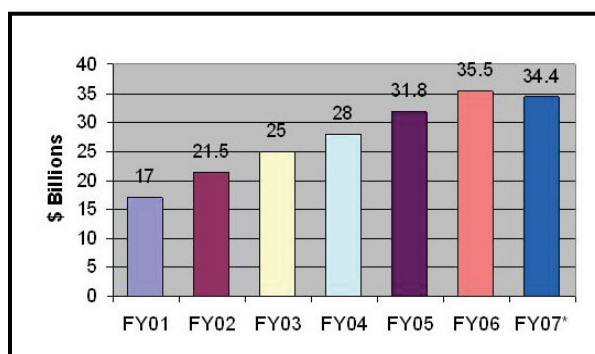


Figure 12: DLA Sales/Services (in Billions)

BSM Technology Transformation

A critical element of DLA's transformation to enhance its capabilities as DoD's combat logistics support agency, was to replace DLA's aging technology legacy systems with state-of-the-art commercial-off-the-shelf software (COTS) technologies configured to meet the unique needs of the DoD. DLA achieved this by developing and implementing an ERP solution using SAP and Manugistics (both COTS products). BSM established the core architecture for DLA's Enterprise Business System (EBS), the ERP platform for supply chain management of DLA's 5.2 million hardware and troop support items.

The first rollout of the ERP system went live as a limited concept demonstration environment in July 2002. It included items from all non-energy categories managed by DLA (e.g., subsistence, maintenance and repair parts, medical, clothing and textile, construction and barrier materials). BSM's first release was with limited items and users. However this limited deployment was broad enough to demonstrate a fully operational system and small enough to manage risk. The Concept Demonstration phase lasted until August 2004, and included the conversion of approximately 170,000 National Stock Numbers (NSNs) and 470 users into the ERP system. It demonstrated improved quality and speed of service, met sustainment/readiness goals and supported best value procurements, and began the Agency's migration from functioning within "stovepiped business units" to proving technologies that support enterprise-wide processes. Additionally, BSM placed a greater focus on the warfighter in theater, for a more complete logistics solution to DLA's customers.



Key lessons learned from this “concept demonstration” included:

1. Change management is paramount. BSM was not only about technology; it was about culture and business process change. There is no such thing as too much change management to help users navigate not only the technology changes, but also the cultural changes required.
2. Top leadership support and involvement at all levels of the organization is invaluable and absolutely necessary for success.
3. Extensive testing is necessary before going live. It is easier to learn that a process does not work properly during testing rather than in the production environment.
4. Cleanse data up-front to ensure up-to-date, accurate, and authoritative information. This also reduces the amount of time spent designing interfaces to handle bad data.

After the Concept Demonstration phase, DLA implemented BSM Release 2.0 in August 2004. Release 2.0 enhanced 37 more functional areas in DLA’s business operations. That release, combined with favorable results from the Initial Operational Test and Evaluation led to IOC in January 2005, which included the first of 19 monthly planned cutovers of supply items and users from the aging legacy systems. All initial functional requirements were operational by December 2005, and further releases over the following year completed the approved BSM solution footprint. Within DLA’s environment today, approximately 8000 system users manage more than 5.2 million DoD items of supply, accounting for more than \$18 billion in annual business.

BSM Strategy and the Leadership of Transformation

Continuity of committed leadership and sustained governance were integral parts of the BSM implementation success story. At the outset of the program, under the guidance of DLA’s Vice Director, Rear Admiral Ray Archer, there was a recognition that any success in a program like BSM that would drive fundamental change across the entire DLA enterprise, would require strong, committed, and sustained leadership. Under this strategy, much of that responsibility for the transformation was vested in the hands of the career civilian leadership that would remain in place throughout the implementation lifecycle, regardless of changes in the military or political leadership. To achieve this end, the Commanders at each of the DLA field locations assigned their Deputy Commanders to hold lead responsibility for the BSM program. This assignment included significant personal commitment of time, working collaboratively with the functional and IT leaders at DLA Headquarters. These business leaders from across the organization formed what is now called the DLA Transformation Executive Board (TEB), which has been in existence since just after the turn of the century, and continues to meet every two weeks. These mandatory sessions became the focal point where fundamental issues were raised, debated, and decisions made that would drive the total solution encompassed by BSM. Unlike many IT steering committees, where members are often reluctant to raise difficult issues in the group forum, the TEB became the environment in which all aspects of the program were discussed and difficult decisions were reached. It then became the responsibility of the Senior Executive Service (SES) members to take action on those decisions within their local communities. Because it was encouraged to air difficult issues in this forum, the Program Manager in the early phases of the program and now the IT Program Executive Officer at DLA, David Falvey, felt that “the TEB worked more for the PM than the PM working for the TEB. We always tried to resolve issues prior to TEB meetings, but that was the place we could always go to get decisions when we needed to.” TEB decisions were then rigorously enforced throughout the BSM implementation across the entire DLA enterprise.

The TEB structure that began under RADM Archer continued and grew under the leadership of Vice Admiral Keith Lippert, DLA’s Director from 2001-2006. VADM Lippert’s time at DLA



encompassed the majority of the actual implementation of BSM. It also represented the longest tenure of any Director in the history of the Agency. That continuity of leadership yielded significant dividends to this Agency-wide business transformation effort. VADM Lippert understood the importance of leadership support in achieving successful outcomes for truly transformational efforts like BSM. While at DLA, he noted, “If any organization, I do not care if it is public or private, wants to implement an ERP solution, there has to be a commitment from the leadership. It is not just a commitment; it is a passion to get this thing done. If the passion to do this is not there, the system will fail.” DLA benefited significantly throughout the BSM implementation by having this strategic leadership passion and support that translated into action at all levels of the DLA organization, all critical steps in achieving the cultural buy-in necessary for success.

Guiding these transformation efforts was a set of basic tenets that dealt with all five of the core business transformation elements (Figure 13):



Figure 13: DLA BSM Tenets

Each of these tenets is easy to proclaim, but can be very difficult to bring into reality. The TEB members held each other accountable to ensure that consistency of both message and action were part of the reality across the DLA enterprise. As an example, like most parts of the DoD, where custom development of business applications had been the norm, DLA faced a huge cultural shift in moving to the adoption of a COTS solution, but it was the only way to achieve the desired benefits available to DLA. Mae De Vincentis has been the Director of Information Operations at DLA throughout the lifecycle of the BSM implementation. According to Ms. De Vincentis, any process owner who wanted to deviate from the configuration available in the COTS system was required to come to the TEB and justify to the entire board the rationale for the change. “This was the only way we were going to fulfill this tenet,” she said. “We did it as a group. And over time, the requests became fewer and fewer as people realized we were all going to stick to this.”

The TEB members led the transformation effort based on personally upholding these tenets. Further, they brought the decisions of this leadership committee back to their local organizations to lead the enabling transformation activities. They created their own process-oriented organizations in the field, which were held accountable to following the enterprise-wide guidance. Moreover, these principles applied not only from one geographic location to another, but also across the functional domains within the DLA enterprise. According to Ms. De Vincentis, “the finance organization recognized early-on that it needed to embrace the end-to-end process orientation of the ERP. ERPs are unforgiving when it comes to bad data, and if the logistics and finance organizations weren't collaborating, the back-end finance activities were never going to be effective. The finance people liked the discipline required by the system, but



they also knew that to get it right, they were going to have to dedicate the time to work with the other parts of the organization to meet their needs.”

BSM Process, Information, and Culture Transformation

Not only did the TEB drive the decisions around the BSM technology efforts, but it also was the center of gravity for the change management functions associated with this massive program. As Ms. De Vincentis stated, “BSM was more than just *change*. Change is when you replace some software. BSM was about *transformation*, and that’s where you change everything about the business.” In conjunction with the BSM rollout, DLA changed not only software, but also transformed processes, metrics, information management, and even fundamental organizational elements to include individual position descriptions (PDs). A total of 1100 PDs from across DLA were reduced to 167 standard, role-based PDs that were consistent with the capabilities provided by the BSM solution. Inventory Managers became Demand and Supply Planners, for example, recognizing the process-orientation of BSM.

One of the additional elements of change has been the metrics DLA uses to manage its business. The organization no longer focuses on functional-oriented metrics such as backorders and order volumes. Rather, senior leadership relies on process-oriented metrics such as material availability, demand plan accuracy, and attainment to plan to see how process improvements are reducing costs, increasing material availability, and reducing cycle times. Even at this early stage following Full Operational Capability, DLA is experiencing significant business results from the transformation:

- Cost of operations (represented in the cost-recovery surcharge to its customers) has been reduced from 22.1% in FY00 to 13.1% in FY07
- Average order processing time has been reduced from frequently exceeding one work day in FY00 to under 4 hours in FY07
- Overall material availability has improved from 88% in FY00 to 92% in FY07
- End-of-year financial close-out time was reduced from 2 weeks in FY00 to one day in FY07

There have been a number of fundamental lessons learned by the DLA organization as a result of these ERP-enabled activities. Those involved in the BSM implementation at DLA carefully studied and learned from earlier modernization efforts. Most importantly, it was demonstrated that best business practices are usable within the government IT environment and that finding ways to fit best business practices into the DLA IT environment was the right thing to do. However, it was also shown that commercial practices are not always the way to go with such complex ERP projects in the government, and that sometimes the government in fact has the best practice. For example, the way DLA’s Defense Logistics Information Service (DLIS) manages data about products is arguably a best practice that is performed better than any other organization in the world.

In terms of the culture element of transformation, DLA recognized that it is incumbent on the leadership and the management staff who own the delivery of the ERP to provide their people with the appropriate training before they gain access to the system, as they gain access to the system, and after they gain access to the system to be fully successful in that new environment. Agency leadership measured employee readiness through a survey process both before and immediately after implementation, and where a gap in understanding was found, the organization became proficient at providing the additional training and one-on-one mentoring needed to close that gap. Although it was a challenging changeover, leadership learned that its employees are extremely flexible and can provide extremely important feedback for improvements to the system and processes to ensure that both function as efficiently and effectively as possible.



The cultural transformation that BSM has enabled for DLA has extended beyond the walls of the organization itself. The new business processes that came along with the new enterprise business system moved the Agency from a traditional wholesaler role into one that more fully engages the Agency, in a more direct way, with its customers and its suppliers. The organization found it was just as important to address this cultural change as it was any of the systems changes that were implemented. This portion of the transformation meant DLA went from being a very internally focused organization to much more customer and supply chain focused and a more tightly integrated enterprise, as opposed to separate entities within a DLA “holding company.” BSM enabled DLA to be a more complete partner with its military customers and more fully engaged with its suppliers to manage, integrate and synchronize supply chains, providing quicker, more efficient service to the end customer.

BSM moving forward

The BSM effort encompasses much of DLA’s enterprise supply chain capability in its order fulfillment, demand planning, technical quality, procurement and financial processes across diverse DLA supply chains. BSM allowed the Agency to transform from being largely an inventory manager to a broader manager of information, suppliers and customer relationships. It complements the organization’s distribution and customer relationship management systems and provides the Agency with the core architecture on which to build further capabilities.

DLA will continue to extend and enhance the capabilities that were introduced by BSM to deliver on its end-state business transformation. This end-state architecture will enable expanded reengineering of business processes throughout DLA with complementary and extended capabilities such as fuels/energy supply chain management, enterprise procurement, and reverse logistics. In this regard, Lieutenant General Robert Dail, the current Director of DLA, has picked up where his predecessors left off. He has embraced the BSM solution, and is now in the process of leading the effort to expand the footprint both in terms of functionality and user base. LTG Dail said, “My focus over my tenure at DLA [will be] to take our new capabilities and extend them beyond where we have traditionally operated at the wholesale level and move the value far forward to the point of sale, wherever the service and warfighting clients want us to be. Then we’ll link supply with their demand so that we purchase better, we manage better, acquiring exactly what they need, reducing inventory, and providing better support and better value to the Department.”

LTG Dail recognizes that the BSM initiative, and all that it encompasses, laid the foundation that will enable DLA to successfully move in this direction. “We have just come through such a revolutionary time, and that required a lot of cultural change in the organization to understand that we were not going to continue running our business units in the same way we had been, where each of our supply centers operated with different processes and tailored systems. Now that we have all of our business units operating under the same processes and systems, that allows the Agency to have tremendous agility to respond to changing requirements by our warfighting clients. It allows us the ability to exercise the unity of command over the actions of the agency which my predecessors did not have available to them.”

BSM is the cornerstone that is enabling this dramatic improvement in business capability, and as has become clear, the enabling technology of the COTS product was just one element of this



transformation. DLA leadership identified a strategy that incorporated a set of fundamental tenets that have been the unwavering guiding focus for the organization for more than seven years. This strategy revolved around information technology, but truly encompassed all five core elements of business transformation, especially the cultural changes that would be necessary to achieve transformational results in both process execution and information management. Dramatic operational improvements have already been achieved at DLA, and those results continue to improve on a regular basis. Now, DLA leadership is positioned to push the envelope even further, extending the business capability footprint and user community to enable even further improvements in efficiency and effectiveness throughout the DoD supply chain. None of that would be available had it not been for the successful implementation of BSM and all the transformational activities associated with that agency-wide initiative.

The Way Ahead

The Department is making significant progress in business transformation, as validated by recent Government Accountability Office (GAO) reports. This progress is evidenced by effective governance, useful architecture and transition plans, better control of system investments, implemented systems, and improved business capabilities, all in conformance with the Clinger-Cohen Act of 1996.

However, the Department agrees with the GAO that much work remains to be done. That work includes continuing those efforts that have initiated across all five elements of successful transformation: improving the Department’s *strategy* through experience and tiered accountability, continuing to build a *culture* of transformation, streamlining DoD *processes*, providing better *information*, and implementing information *technology* systems.

The Department will continue to focus on meeting the needs of warfighters in the field with real and lasting capabilities designed for the theater of operation, along with the traditional focus on peacetime garrison operation. The BCL approach will help speed the delivery of business capabilities to the warfighter and other key stakeholders from across the Department.

Moving forward, DoD will focus its efforts on executing this DBSMC-approved plan—the ETP—in order to provide improved support to warfighters and decision makers and enable greater financial accountability. This plan includes an aggressive schedule to improve business operations and monitors progress through an enhanced performance management framework. As a consequence, business transformation will support the mission of America’s Armed Forces by providing direct, measurable benefits to the warfighter and improved stewardship of the Nation’s resources.

