

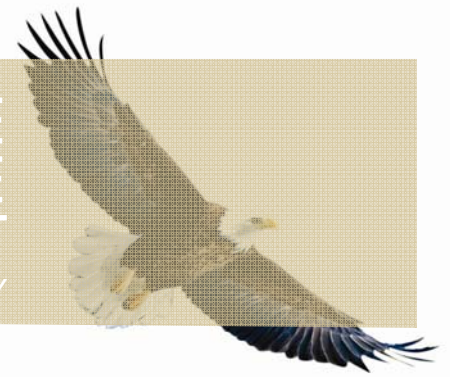
BASELINE LIFECYCLE MANAGEMENT

FOR THE MISSILE DEFENSE AGENCY



CSC

SEPTEMBER 2008
PROPRIETARY



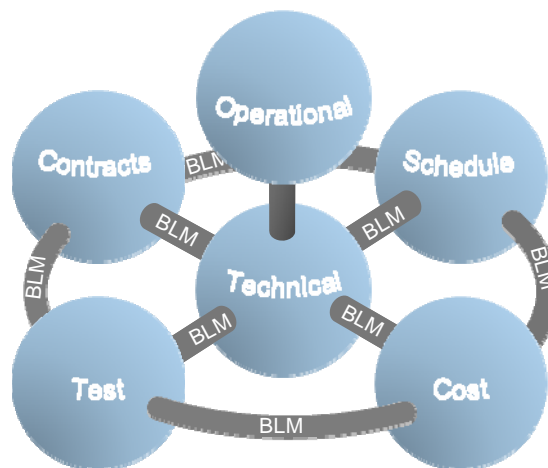
BLM Advantages

- **High-confidence decision making**
- **Improved Agency efficiency**
 - Enhanced configuration management
 - New opportunities for collaboration among BMDS stakeholders
 - Synchronized business processes employed across the Agency
 - Integrated data organization and improved access
- **Consistent and coherent portrayal of the BMDS to the Department, the Administration, and Congress**

OVERVIEW

Developing and fielding the Ballistic Missile Defense System (BMDS) is one of the most complex technological and programmatic challenges ever undertaken by the Nation. Managing the separate yet interdependent programs responsible for generating and deploying BMDS capabilities requires a high degree of management sophistication to achieve desired results. To date, MDA's program management has been guided by the Agency's six configuration-controlled baselines: contractual, cost, operational, schedule, technical, and test. While each baseline has unique value, the real power of the baselines comes from understanding and taking advantage of their interdependencies. Synchronizing these baselines has proven to be labor-intensive, with less-than-optimal results, and providing MDA leadership with a reliable and timely view of Agency activities has been difficult. To move forward with confidence, MDA now faces the challenge of integrating the six baselines into a consistent and balanced Program whole.

CSC's experience, expertise, and resources will enable MDA to meet this challenge. Leveraging its longtime and successful relationship with MDA in support of its mission, CSC is prepared to offer and implement a solution that will integrate the baselines called Baseline Lifecycle Management (BLM) and depicted in **Figure 1**. Integrated baselines will result in improved configuration management, facilitate collaboration among decision makers and support staff, and increase confidence in program management decisions. In addition, they will allow better integration of business processes employed by the Elements and across the Agency. Overall, there will be improved data organization and access, as well as enhanced decision support to MDA leadership, who will be in a better position to portray a consistent and coherent program to the Department, Administration, and Congress.



The Program is balanced and focused on operational capability as a result of clear and well-controlled interfaces between the baselines.

The interfaces between the baselines are the glue that integrates the Program.

Figure 1: Balancing Interdependent Baselines

A NEW PROCESS TO ADDRESS MDA CHALLENGES

The case for implementing the BLM solution is bolstered by a number of fact-of-life changes under way at MDA. As BRAC moves accelerate, MDA will experience dramatic workforce turnover, requiring steps to mitigate the loss of corporate memory and possible staff shortages without sacrificing Agency performance. With MDA's transition to Matrix Management, there is the risk that integration across baselines currently conducted by Program Managers will be complicated by the new functional management. On another front, MDA's mission is expanding, to include placing missile defense assets in Europe, while the priorities of the next Administration may dictate a reduced budget for the Agency. CSC's BLM process will help the Agency deal with these challenges and deliver the best options for the Nation's defense by providing the means to oversee and balance baselines with speed, efficiency, and confidence.

An important benefit of BLM is labor efficiency. According to a Spring 2008 analysis performed by CSC for the Value-Planning Phase of BLM, MDA could gain labor efficiencies equivalent to 200 to 300 FTEs with technology-enabled integrated baselines and improved business processes. The breakdown of these numbers is as follows: Integrated baselines would enable savings of 56 to 84 FTEs, whereas the numbers related to improved business processes are in the 144 to 216 FTE range. With BLM, we are confident labor efficiencies will result from accelerated program execution, among other factors. Accelerated program execution — or cycle-time reduction — will be achieved by providing easier access to baseline changes, as well as higher levels of data integration.

Cycle-time reduction also will result from higher-confidence decision making, as personnel will have access to more current and accurate data. Advanced collaboration tools will diminish unnecessary schedule delays and speed notification of interested parties about pending baseline changes. BLM will use Lean Six Sigma to simplify and automate business processes, reducing the time now spent manually integrating changes affecting multiple baselines. MDA will realize process improvements in areas including: Baseline Change Request and implementation; Operational and Program reviews; ISG and PCB activities; Test Event Management; POM budget cycle management; and major trade study decisions.

A TECHNICAL SOLUTION FEATURING THE DIGITAL COLLABORATIVE ENVIRONMENT

CSC's BLM process offers the Agency an opportunity to integrate and dramatically improve baseline management in order to develop and field robust missile defense capabilities well into the future. Our extensive experience supporting MDA provided the understanding needed to tailor a BLM solution specifically for Agency needs. Through our Air, Missile & National Defense Business Area, we deliver integrated services to MDA from Enterprise Leadership Support to Functional Expertise for day-to-day operations to IT software systems development and sustainment. For BLM, CSC is bringing to bear resources and expertise from across our company.

BLM will promote labor efficiencies. MDA could gain labor efficiencies equivalent to 200 to 300 FTEs.

BLM will accelerate program execution with enhanced data integration and higher-confidence decision making.

Implementation of BLM using Lean Six Sigma will:

- Simplify and automate business processes
- Reduce the time now spent manually integrating baseline changes
- Streamline requirements and specification coordination

MDA will realize process improvements for:

- Operational and Program reviews
- ISG and PCB activities
- Test Event Management
- POM budget cycle management
- And more!

Digital Collaborative Environment Benefits

Compresses delivery schedules by:

- Enabling simultaneous development
- Accelerating alternative designs
- Integrating critical processes

Lowers risk by:

- Improving program visibility and control
- Enhancing assessment and review of project components
- Enabling virtual test and evaluation of systems

Reduces costs by:

- Incorporating technology faster, more efficiently
- Cutting back travel and paper-based communication

BLM is a core set of automated baseline management processes, augmented by a CSC-developed Digital Collaborative Environment, that increases efficiency of data sharing and decision making, while providing better access to accurate baseline information. The BLM solution uses Lean Six Sigma process improvement techniques to improve and standardize baseline support processes. Business process management tools codify business rules and automate tailored workflow to keep processes moving and provide immediate status information on a decision or work package. The Digital Collaborative Environment, an extension of the classified and unclassified portals already operating at MDA, will enhance data sharing and allow for real-time, geographically separated collaboration. The tools and capabilities inherent in the BLM solution will be owned and operated by the Agency.

As shown in **Figure 2**, BLM begins with a Business Process Review of key Agency baseline management and integration procedures. Lean Six Sigma techniques will be applied to gaps or deficiencies in the existing procedures to increase efficiency and baseline integration throughout the Agency. CSC has solid experience implementing Lean Six Sigma methodologies at MDA. Among our responsibilities at the Agency is Lean Six Sigma Green-Belt training for MDA and contractor personnel, resulting in a number of process improvement projects. We also played a key role orchestrating an MDA/GM Logistics and Operations Directorate Lean Event in April. The goal for those attending was improving operational reporting processes within GM and the Boeing reporting chain.

CSC envisions the Digital Collaborative Environment as the means for reinforcing improved business processes because it will enable MDA personnel to create, organize, and integrate products across MDA functional and Element organizations. This Environment will leverage and improve utilization of existing capabilities like E-Tasker, the E-Management System (EMS), Program Resource Internet Database Environment (PRIDE), and Resource Allocation Decision Support (RADS), as well as other high-value-added tools.

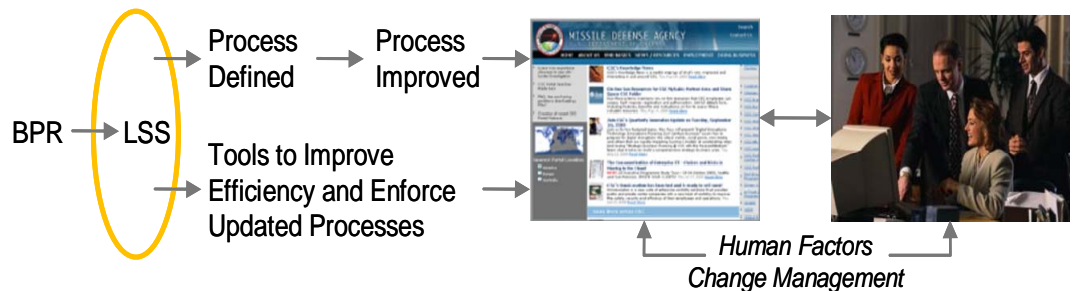


Figure 2: The Process to Achieve Baseline Lifecycle Management

SOLUTION ROAD MAP TO ACHIEVE INTEGRATED BASELINE MANAGEMENT

CSC has invested its own resources to develop a BLM prototype that is available to highlight BLM’s utility for meeting MDA’s challenges. We used our key personnel working at MDA to conduct a Business Process Review and craft this prototype because they understand the Agency’s challenges and were able to offer insights for improving baseline management. The prototype showcases the features and benefits of using enhanced processes supported by a representative Digital Collaborative Environment to integrate MDA’s six baselines.

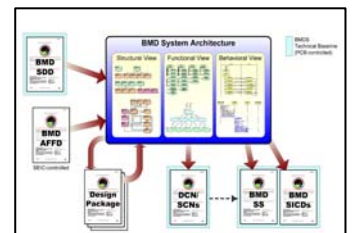
The prototype Digital Collaborative Environment features information management, business process management, and a management dashboard. Information management ensures all pertinent data are at the fingertips of the users. The keys to this solution are consolidated data repositories that enable federated searches and data control. During review and executive meetings, information is readily available — no need for continuous follow-up from session to session. Business process management is enhanced with capabilities that alert users to take actions. Other capabilities include a visualization tool that promotes understanding of the steps being taken to implement baseline changes, and a tool for publishing and distributing results of those efforts. The dashboard is a tool for executive and operational management to use for command and control of baseline integration activities. The tool, shown in **Figure 3**, features key metrics for identifying trends that require attention from decision makers.

CSC is ready to design, develop, and install the Digital Collaborative Environment, and train the people who will use it. The Environment informs and reinforces a Human Factors Change Management process that will enable the integration of MDA’s six existing baselines. Throughout BLM implementation, CSC will focus on MDA’s people and mission. For example, we will provide transition management, including training and formulating new roles. Further, we will plan and execute the organizational, process, and system changes required to achieve a more collaborative and integrated environment. BLM will empower DE to more firmly take on the role of single technical authority, allow DT to more rapidly and confidently integrate the BMDS, and help draw the entire MDA enterprise closer to the Warfighter.

Digital Collaborative Environment: Information and Business Process Management



Figure 3: The Digital Collaborative Environment Dashboard



- Thought Leadership.** CSC provides expert advice on industry trends, best practices, leading collaborative technologies, IT implementation, and user-adoption strategies.
- Client Focus.** CSC carefully evaluates our client's needs and goals to maximize practical innovation, productivity, and profitability, while achieving a lower lifetime total cost of ownership.
- Best Total Solution.** CSC collaborates with select partners to leverage proven technologies and supply the best near-term solution with a predictable road map for the future.
- Global, Industry-Leading Service.** CSC has decades of managed services experience, combined with best practices and leading global support resources, allowing us to deliver more secure collaboration services at higher quality levels and lower total cost.

CSC: COUNT ON US TO IMPLEMENT THE BLM SOLUTION

As MDA's trusted partner, CSC is committed to the Agency's mission and operations. We provide a full spectrum of support to MDA, benefiting the Agency's technology, financial, and management organizations. CSC also has a track record of delivering cost-effective results to MDA, while operating fairly and without conflict of interest because the company does not supply military hardware. We are ready to expand our partnership with MDA to include implementation of the BLM process.

CSC has extensive experience developing digital environments for MDA, the military services, Defense prime contractors, and others, as shown in **Figure 4**. For example, at MDA we contributed to the development and operation of the Agency's unclassified portal. Another success story is CSC's performance building and operating the Defense Acquisition University's public Web site, which supports more than 140,000 users and provides training in defense acquisition principles and processes. As many as 850,000 users have access to Navy Knowledge Online, the Navy's learning and education Web portal, which CSC developed and continues to run for the service. We also design, build, and run Integrated Digital Environments for several Navy carrier programs.



Figure 4: Customers turn to CSC for collaborative solution design and deployment

For the Army, CSC successfully implemented the service's Logistics Modernization Program, one of the largest and most comprehensive business transformation and technology modernization efforts in the world. As part of the Logistics Modernization Program, Army Materiel Command (AMC) contracted with CSC to re-engineer the Command's logistics processes and provide the continuous process improvement needed to manage a global supply chain with more than 50,000 vendors and \$40 billion in inventory. We instituted commercial best practices and IT-based solutions, allowing AMC to simplify and standardize its supply chain processes. Now AMC's logistics practices rival the capabilities found in the world's best commercial supply chain systems. With support from CSC's Lean Six Sigma Master Black Belts, we also are providing a COTS-based IT solution for Air Force logistics as part of the service's Expeditionary Combat Support System (ECSS), a major business transformation project that involves replacing more than 700 legacy service IT systems.

Another CSC specialty is knowledge capture and training for organizations in transition. For this reason, the Defense Finance and Accounting Service (DFAS) turned to us when it needed support for its BRAC Project, which involves closing six DFAS field offices and transitioning additional workload to the organization's Cleveland office. Only 10 percent of the field workforce elected to move to Cleveland, which made transmitting their knowledge to new employees a top priority. CSC developed a solution to capture and organize the core knowledge of departing employees, then provided Web-based training and performance support for DFAS processes.

For Defense prime contractors such as Lockheed Martin, General Dynamics, Raytheon, BAE Systems, and United Technologies, CSC is conducting a variety of Product Lifecycle Management (PLM) and Enterprise Resource Planning (ERP) activities, including vision assessment and road-mapping; legacy systems consolidation; PLM and ERP hosting; systems implementation; and systems integration and operation. Examples of our support to prime contractors include work on the multiservice Joint Strike Fighter program and the Navy's Virginia-class submarine program.

With tools and capabilities provided by CSC, supported programs have achieved reductions in design cycle time (as much as 35 percent) and reductions in design errors found during construction (as high as 90 percent). In addition, our customers realized reductions in procured parts and drawing approvals. Export control processes in certain cases were accelerated from two weeks to two minutes, and clients experienced faster memo coordination turnaround from two weeks to one day. Our customers also clocked a 53 percent average reduction in engineering cycle time.

CSC will bring all of this experience to bear in establishing a BLM solution for MDA. As a Tier 1 company that has provided mission solutions to the Federal Government for nearly 50 years, we can deliver a BLM solution that satisfies MDA's unique requirements and achieves desired business results at a lower cost of ownership. MDA can have confidence in CSC as one of its trusted partners in missile defense, and in our proven ability to take the complexity out of collaborative solution design and deployment.

CSC is ready to leverage its investment in BLM by developing and implementing a BLM solution for MDA that will integrate the Agency's six baselines into a consistent and balanced Program whole. BLM implementation will position MDA for mission accomplishment as BRAC transitions intensify, aligning Agency processes and streamlining operations with a new Lean Six Sigma-enabled Functional Management construct.

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About CSC

The mission of CSC is to be a global leader in providing technology enabled business solutions and services.

With the broadest range of capabilities, CSC offers clients the solutions they need to manage complexity, focus on core businesses, collaborate with partners and clients, and improve operations.

CSC makes a special point of understanding its clients and provides experts with real world experience to work with them. CSC is vendor independent, delivering solutions that best meet each client's unique requirements.

For more than 45 years, clients in industries and governments worldwide have trusted CSC with their business process and information systems outsourcing, systems integration and consulting needs.

The company trades on the New York Stock Exchange under the symbol "CSC."