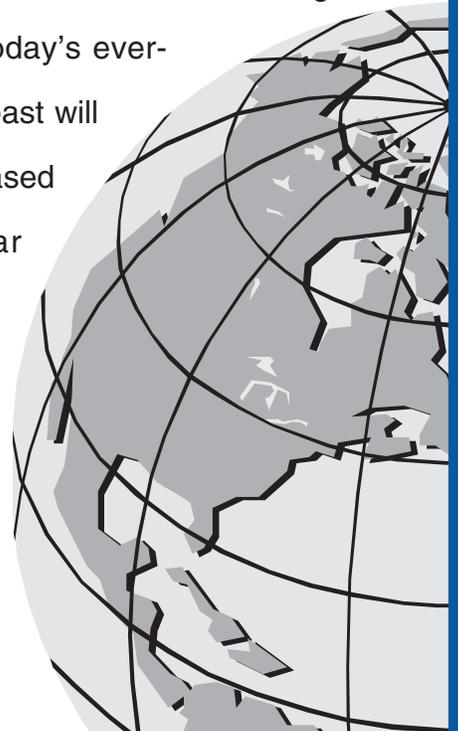




ECSS and Transformation

the way ahead

To effectively support the Expeditionary Air Force, an integrated logistics chain must establish better ways to respond to two critical warfighter questions: “Where is our part?” and “When will we get it?” Clearly, this is no small task in today’s ever-changing world. The solutions of the past will not work for the future. The garrison-based processes born out of the Cold War posture must be fundamentally rethought. Air Force logistics must also become more expeditionary—satisfy operational requirements, be rapid in its response, flexible in its structure, consistent in its delivery, reliable, and economical in its actions.





Strategies for Success

Introduction

The Expeditionary Combat Support System (ECSS) is one of the largest and most comprehensive business transformations ever envisioned. ECSS will enable the end-to-end transformation of Air Force logistics processes and is critical to shaping tomorrow's Air Force capabilities. The benefits of ECSS will be extraordinary. It will enable greater expeditionary combat support capability by providing near real-time asset visibility, increasing availability of mission critical weapon systems, and synchronizing logistics planning and execution, while reducing the cost to support global logistics operations.

For the functional, end-user community, this encompasses the complete service supply chain:

- From original equipment manufacturer through maintenance, repair, and overhaul (MRO)
- Exception-based tools to support enterprise-wide planning
- Integration and links among forecasting, distribution, maintenance, scheduling, and production planning
- Enterprise-wide knowledge management

As such, ECSS serves as the foundation for realizing the Expeditionary Logistics for the 21st Century (eLog21) transformation objectives of increasing equipment availability by 20 percent and reducing operational and support costs by 10 percent. As an eLog21 enabler, ECSS provides a core

platform of integrated functions, such as order management, purchasing, inventory, distribution, and financial information. More specifically, the deployment of ECSS allows the Air Force to deconstruct and migrate data from more than 400 legacy retail and wholesale logistics information technology systems to a single, enterprise-wide solution. By reducing the number of independent and redundant systems currently being used, ECSS will enable improved quality and flow of information to aid decisionmaking across the enterprise.

A proven and competent team is in place. The Air Force ECSS Program Management Office (PMO) and the Logistics Transformation Office (LTO) are staffed and work is underway. The primary focus of the PMO is to ensure that logistics community requirements are met on time and within budget, while the LTO's primary role is gathering requirements and acting as an advocate for the logistics community. Industry partners have also been selected. Computer Sciences Corporation





(CSC) will act as the systems integrator. Software selected includes the Oracle e-Business Suite, complemented by Industrial Financial Systems software for MRO, material requirements planning, and constraint scheduling and Click Commerce software for demand planning, supply planning, and readiness-based sparing.

This is a large, complex effort. A recent study found that less than 10 percent of enterprise resource planning (ERP) implementations were completed on time, within budget, and delivered measurable stakeholder benefits. Many factors can be cited for these shortcomings. Global accounting firm KPMG surveyed over 250 large companies and found nearly 70 percent of problems in failed implementation efforts could be traced to three factors:

- Inadequate project management
- Scope complexity
- A lack of communication

Armed with this knowledge, the PMO determined that, in addition to managing the traditional cost, schedule, performance, and risk paradigm, it would also include governance, requirements management, and change management as critical program success components. Deputy Undersecretary of Defense for Business Transformation, Mr Paul Brinkley, agrees. Recently, when discussing logistics modernization, Brinkley said the key to program success is “emphasis of key transformation principles, leadership engagement, effective governance, and effective change management.”

The PMO also turned to the Government Accountability Office (GAO) report (GAO-05-858, September 2005) regarding the Navy’s four ERP pilot programs for lessons learned. That report validated the

importance of programmatic governance as well as requirements and scope management.

The GAO recommended that Department of Defense (DoD) ERP programs develop and implement quantitative metrics. These metrics are to be used for evaluating project performance and compliance with disciplined processes that help minimize program risk. The GAO further recommended establishing an independent verification and validation (IV&V) function and advised that all IV&V reports be provided directly to program management leadership. Lastly, the GAO suggested DoD ERP PMOs institute semiannual reviews of the program.

Accordingly, due to the complexity and size of the ECSS program and its importance to the Air Force logistics community, the PMO has instituted monthly program reviews with senior leadership. Furthermore, the PMO has adopted the Supply Chain Operations Reference (SCOR) model. Developed by the Supply Chain Council, the model captures the council’s consensus view of supply chain management. It provides a framework that clearly links processes, metrics, best practices, and technology features into a unified structure that supports communication among the PMO, systems integrator, and software partners. Specific, actionable, and verifiable metrics are in place to ensure compliance.

The PMO has also established an IV&V process that reports directly to the program leadership team. As noted by the GAO, performing IV&V activities independent of development and management functions helps to ensure that the results are unbiased and based on objective evidence.

Based on the guidance provided by other DoD organizations involved in ERP implementation and the recommendations of the GAO, the PMO quickly drew some important conclusions. First, KPMG was correct—inadequate program management (governance in particular) will quickly derail the best efforts of the program team. Second, failing to align systems integrator deliverables with end-user requirements and expectations is a recipe for scope chaos. And, third, the scale and scope of DoD ERP implementations magnify the importance of organizational change management, communication, and other *people-related* tasks that must be addressed by the PMO.

Based on industry reports, lessons learned from other DoD ERP implementations, and recommendations from the GAO, the PMO identified three strategies to help ensure success.

Article Acronyms

CSC – Computer Sciences Corporation
DoD – Department of Defense
ECSS – Expeditionary Combat Support System
eLog21 – Expeditionary Logistics for the 21st Century
ERP – Enterprise Resource Planning
GAO – Government Accountability Office
IPT – Integrated Process Team
IT – Information Technology
IV&V – Independent Verification and Validation
LTO – Logistics Transformation Office
MRO – Maintenance, Repair and Overhaul
PMO – Program Management Office
SCOR – Supply Chain Operations Reference

Strategies for Success

Strategy One: Develop and Enforce Strong Programmatic Governance Structure

A recent study of 300 enterprises by the Massachusetts Institute of Technology's Sloan Center for Information Systems Research found that, on average, only 38 percent of senior managers know how their organization's information technology (IT) is governed. The study went on to say that senior management awareness of its IT governance process was the single best indicator of program effectiveness. Without this awareness, managers were slow to make decisions, did not follow processes, and were unable to achieve program objectives. Consequently, governance was one of the first areas addressed by the PMO. The risk was simply too high not to take immediate action.

Developing an effective governance structure is not as easy as it may seem, particularly when governance responsibilities will be split among the PMO, LTO, and industry partners. The questions began:

- How are we going to standardize governance structure and processes?
- Who will be empowered to make decisions?
- How do we enforce adherence to governance processes?

Clearly, the PMO needed a comprehensive governance plan that included senior representation from PMO, LTO, the systems integrator, and other partners with a vested interest in the program's success. It was important the group have the depth and breadth of knowledge to evaluate the wide variety of complex technical and functional issues it would confront. One clear advantage for the group is that all members are geographically situated in Dayton, Ohio, speeding team formation and ongoing interaction across the governance and other functional teams.

The decision was made to elevate governance as a specific subset of the overall change management process and assign a full-time resource to develop and manage the program's governance process. The first step was to develop a governance structure, including an organization chart, a decision-responsibility matrix, and an escalation hierarchy. Its purpose was clear. Members of the governance board needed to know the one person in charge with senior leadership support, what decisions they are empowered to make, and how issues get escalated to a higher decision authority in the event resolution is not forthcoming in a specified period

of time. Furthermore, the governance structure was specifically designed to capture issues affecting policy, architecture, technology, and data. This helps ensure that, in addition to addressing the roles and responsibilities of governance team members, no functional or technical area is underrepresented.

Second, a program issue resolution process was developed. It included issue identification and analysis, issue management, and monitoring processes. This allows the PMO to assign and track each issue to ensure none escapes the governance process. The last step was to assign the solution teams, integrated management team, executive steering group, senior executive oversight group, and process council with specific roles and responsibilities in accordance with assigned programmatic and operational decision thresholds. This structure allows the PMO to manage each issue from introduction to resolution.

This framework helps to ensure each integrated process team (IPT), committee, or group is aware of its decision authority, understands the issues assigned to it for resolution, and knows what happens if issues are not resolved in a timely fashion. Furthermore, by creating an inclusive process that clearly delineates roles and responsibilities and empowers group decisionmaking, overall programmatic risk has been reduced and communication improved. The PMO's expectations are that 80 percent of issues will be resolved by program IPTs, 10 percent by the PMO and LTO jointly, and 10 percent will be elevated to panels, councils, and groups empowered to resolve issues that the PMO and LTO are unable to resolve. In fact, the plan is for less than one-tenth of 1 percent of the issues to actually be elevated to the process council, the program's highest governing board.

Strategy Two: Align and Manage Contractor Performance and End-User Expectations

One of the more important roles the PMO plays is that of honest broker. It must balance the requirements defined by the LTO and its user community and the work that is on contract. The best way to keep this relationship in balance is to foster regular and candid communication between the requirements gathering and product delivery leaders. To accomplish this, the PMO has established weekly executive leadership and project leadership meetings that include representatives from the PMO's functional and business areas, subject matter experts from the LTO, engineers from Oracle, and functional teams from CSC. By bringing these groups together early and frequently, the PMO has been able

to broker relationships that benefit the program, create integrated action teams, and identify and resolve problems before there is any impact on program cost, schedule, and performance.

This type of thinking also influences the program structure. Gone are the functional stovepipes. In their place is an organizational structure that is common to the PMO and its industry partners that integrates the activities of all functional areas. This has made it easier for both the PMO and CSC staffs to identify peers and speed interaction among functional groups—reducing the administrative headaches associated with chasing down the right person for the right decision. The PMO has also fostered a shared work environment where project teams from the PMO, LTO, CSC, and Oracle can share work products, briefings, and technical documents needed to complete program objectives.

The decision by the PMO and the integrator to adopt the SCOR model has influenced the team structure. The following IPTs have been established:

- Plan
- Source
- Make and repair
- Deliver and return
- Enable

This drives discipline into the work and mirrors a commercial best practice.

By fostering leadership communication, aligning teams, and adopting commercial best practices, the PMO has reduced programmatic risk and proactively tackled several ERP stumbling blocks.

Strategy Three: Communicate, Communicate, Communicate

Since ECSS is far more about business transformation than technology insertion, communication is critical. The ECSS PMO worked particularly hard to ensure that each of the program's major stakeholder groups were identified, selected the most appropriate communication method for that group, created context-appropriate messages, and developed a program calendar to coordinate all communication among the PMO and its partners. The PMO's goal is to clearly and accurately articulate to each stakeholder why ECSS is important to the Air Force mission and how it will benefit the ECSS user community. To help ensure that the PMO is successful, it has adopted the mantra that *repetition is retention*. In other words, communicate more frequently than you believe is needed. One-third of your target audience is not listening; another third did

not hear you correctly; and the last third heard you, but is too busy to acknowledge receipt. This is particularly true in an environment where the audience is large, the business transformation is complex, and users will be asked to abandon homegrown systems and learn new processes. With these facts in mind, the PMO developed an overarching strategy that helps ensure organizational change management, communication, and training strategies of the PMO, LTO, CSC, and Oracle are synchronized from beginning to end.

It is also important to ensure that all communication about ECSS, regardless of the source, is consistent, accurate, and timely. To that end, the ECSS PMO has created a collaborative communication network with representation from the LTO, Oracle, and CSC. By combining forces, the program has been able to distribute the communication workload and allow each member of the communication network to focus on specific communication missions. For instance, the PMO is charged with developing the strategy for all communication messages; however, because of its close relationship with the logistics community and its institutional knowledge, the LTO is best equipped to carry the message the *last mile*. Additionally, to ensure that the program never strays from its core mission, the communication team participates in the communication activities of the eLog21 office and the Defense Enterprise Accounting and Management Systems Organizational Change Management Advisory Council.

Communication efforts are also augmented by the use of field agents who are assigned to support strategically selected installations. These agents will eventually visit more than 170 Air Force operating locations. The agents will field questions, deliver briefings, and support local ECSS champions. Combined with LTO resources and support from the PMO, they will be a knowledgeable network of agents, carrying a common message, ready to support each location, as the rollout of the ECSS solution begins.

This combination of activities provides the foundation to support the program's aggressive communication strategy and ensures appropriate team interaction.

Conclusion

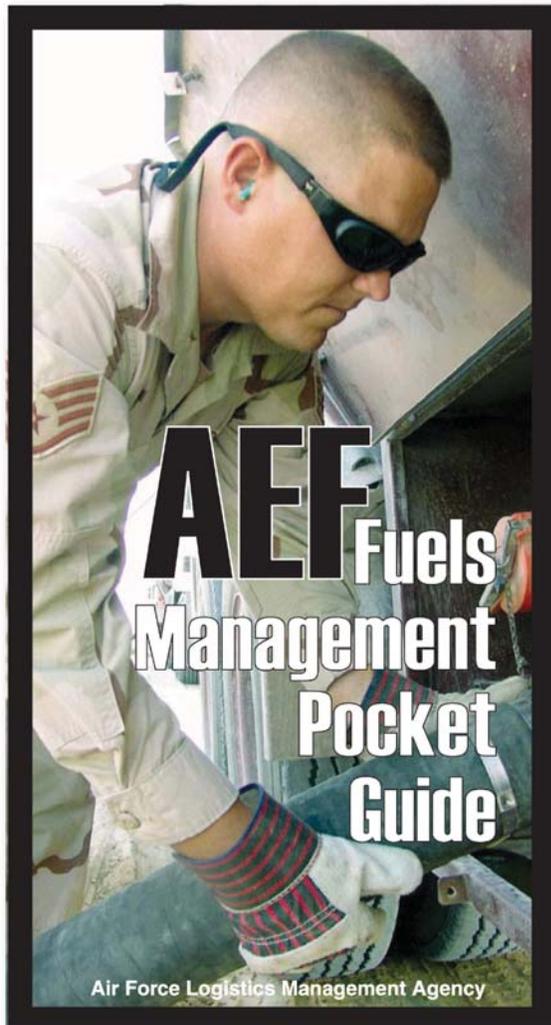
The promise of ECSS is real. Implementation will increase enterprise-wide asset visibility, improve weapon system availability, reduce inventory footprint, and squeeze cost out of the system. Delivering on the promise, however, is not without risk. To ensure

program success, the ECSS PMO has internalized the lessons learned by our predecessors. It has become abundantly clear that a program of this magnitude requires stepping outside of traditional program management responsibilities and embracing new ways of managing governance, balancing user requirements and contract language, and communicating. The ECSS PMO has accepted that challenge.

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