

DoD ESI's Successful New Approach for Enterprise Resource Planning

By Chris Panaro

The Enterprise Software Initiative

The Department of Defense (DoD) Enterprise Software Initiative (ESI) is a joint Defense Department project to leverage the buying power of the DoD for commercial information technology products and services. By consolidating requirements and negotiating Enterprise Agreements with vendors, the DoD realizes significant Total Cost of Ownership (TCO) savings in services, software acquisition and maintenance. The ESI goal is to develop and implement a DoD-wide process to identify, acquire, distribute and manage enterprise information technology (IT) assets.

In the next five years, it is estimated that DoD will invest over \$12 billion on commercial-off-the shelf (COTS) software and related services to automate business systems and operations. Considering that the 2004 Standish Group Chaos Report estimates that over 70 percent of IT projects are late, over budget or fail, the focus on best practices in the acquisition and implementation of these software applications is critical.

With the mandate of the Clinger-Cohen Act to "develop and use best practices in the acquisition of information technology," the DoD has become a leader in leveraging buying power and implementing best practices in program management.

In late 2001, the DoD Logistics Domain made a significant commitment to adopt and deploy commercial best practices in the acquisition and implementation of COTS business application software. The "Log Domain" gathered program managers and experts from DoD Enterprise Resource Planning (ERP) and supply chain programs to form the Program Implementation Group (affectionately termed the "PIG").

The PIG was chartered to capture and deploy best practices so that all programs will benefit from the lessons learned and overall experience of the group. The group immediately recognized the benefit of us-

Figure 1. Enterprise Integration Toolkit

ing the experience of industry representatives to gather commercial perspectives on major software implementation projects. Among the many tools it shares, the PIG developed an Enterprise Integration Toolkit (EI Toolkit), illustrated in Figure 1, to provide a roadmap, tools, templates and checklists for programs to use when embarking on a COTS IT project.

The Web-based toolkit includes sample business cases, Request for Proposals (RFPs), contracts, status reports and hundreds of other tools to use through an entire program life cycle. The EI Toolkit can be accessed by government personnel at <http://www.eitoolkit.com/>. Already, the toolkit has been discovered and used by other government agencies, including the California Department of Motor Vehicles, Alberta, Canada and the Australian Navy.

One immediate benefit of the toolkit is the ability to share common software objects needed to interface ERP software with other DoD systems. If an object has been developed by one program, another program can leverage that investment and use the object for its operations. This has

resulted in considerable savings already since the budgeted costs of an ERP project typically allow up to 40 percent of the total cost for software objects.

Collaboration throughout DoD

With a common mission to use the buying power and expertise of the Defense Department, the ESI has been negotiating DoD-wide software license and maintenance agreements since 1998. Obtaining deep discounts off GSA Federal Supply Service prices, ESI has saved the Defense Department more than \$1.5 billion by securing terms that help even the smallest program reap the benefits of DoD's cumulative buying power.

After years focused on software license and maintenance agreements, ESI joined forces with the PIG to tackle the contracts that demand the largest percentage of a COTS IT program budget — software implementation/systems integration.

In a typical commercial IT project involving COTS packaged software, \$5 is spent for a systems integrator for each \$1 spent on software license fees. Based on an Office



Services to be performed by contractor	Deliverable(s)	Duration	Acceptance Criteria	Payment upon Acceptance
Establish project documentation standards	Project documentation standards	2 weeks	The documented deliverable shall conform to the format and structure of the sample attached as Attachment D-4	\$17,200
Determine project team training requirements	Documented team training plan	3 weeks	The documented deliverable shall conform to the format and structure of the sample attached as Attachment D-5	\$15,500
Perform process and functional gap analysis and document proposed resolutions	Detailed gap analysis report including proposed resolutions	4 weeks	The documented deliverable shall conform to the format and structure of the sample attached as Attachment D-6	\$42,500

Figure 2. Fixed Price Table Example

of Management and Budget (OMB) 2003 finding, the government ratio is as high as \$15 to \$1. ESI brought to the table its expertise in negotiating enterprise-wide purchases — and the PIG brought its collective expertise in ERP and supply chain software implementations.

Fixed-Price Services

The result of this cross-organization effort is a contractual structure that follows the phases and steps of implementation methodologies proven in more than 18,000 business systems projects. The Enterprise Agreements were awarded in May 2004 to five systems integration firms: Accenture LLP, BearingPoint, Computer Sciences Corp., Deloitte Consulting LLP and IBM. The agreements permit any DoD program to order fixed-priced services that follow a vendor’s phased methodology and include descriptions of tasks, deliverables, acceptance criteria, duration and price.

The agreements provide a full range of services including: configuration; integration; installation; data conversion; training; testing; object development; interface development; business process reengineering; project management; risk management; quality assurance; and other professional services for COTS software implementations.

The concept of “commoditizing” a service so that future DoD programs can order services using a best practices contract structure and not just a menu of discounted

labor rates is timely — and at the leading edge of acquisition excellence.

Developing a process in accordance with a proven implementation methodology brings discipline to scope management of COTS implementations and ties payment firmly to the achievement of desired results. Each vendor provided a fixed-price table describing services aligned to methodology for a standard project scenario, including a baseline of user quantities, modules, locations and other key factors involved in a typical ERP project. Figure 2 is an example of a fixed price table.

Where a future DoD program deviates from the standard scenario, fixed prices are provided for variances in scope (e.g., additional number of users, locations,

interfaces, etc.). To accommodate these variances, a fixed-pricing menu, shown in Figure 3, was developed and reflects the extensive experience of the integration firms selected and the maturity of their respective methodologies.

In addition, contractors are required by the Enterprise Agreements to follow procedures to ensure that the government is not paying for services or products that have been purchased in an existing DoD program using similar COTS products. Objects referred to as reports, interfaces, conversions, extensions (RICE) permit the reuse of technology assets and eliminate redundant purchases. This practice is enforced by the Enterprise Agreements and is expected to result in considerable savings. RICE objects are priced as commodities in the Enterprise Agreements. Figure 4 shows an example of a commoditized RICE pricing table for software objects.

Performance-Based Payment

The ESI and PIG joint effort focused on contracting practices that reward contractors for achieving stated government objectives — not just for time and effort spent.

The Enterprise Agreement process incorporates a performance-based approach to tie contract payments to the achievement of an organization’s goals and objectives. The Enterprise Agreements incorporate an incentive structure using baseline variables, acceptance criteria, performance metrics and a payment approach.

Outcomes are defined by project, phase or deliverable to best fit the goals of the

Bold type shows the baseline scope and price for each task/deliverable

Task ID	Task/Deliverable Name	Variability	Factor Description	Factor	Quantity	Unit Price	Project Total Price
1.1.1	Work Plan	Yes	Number of sites or commands	1	1	\$26,391.08	\$26,391.08
				3	1	\$29,030.19	\$29,030.19
				7	1	\$31,669.30	\$31,669.30

Description of the factor that causes a variable price

The variable number that determines the adjusted price

The adjusted price for the variable number of sites or commands

Figure 3. Fixed Pricing Menu Example

R.I.C.E. Pricing Table			
	Complexity		
	Low	Medium	High
Reports & Forms	\$3,592.52	\$6,286.91	\$8,083.17
Interfaces	\$3,592.52	\$10,777.56	\$21,555.13
Conversions	\$7,668.88	\$23,006.63	\$46,013.27
Extensions and Workflows	\$9,580.06	\$29,937.68	\$80,232.98

Price includes creation of technical specifications, coding, documentation and unit testing.

Figure 4. Commoditized RICE Software Object Pricing Table

customer. Figure 5 depicts one of the performance-based approaches.

The Enterprise Agreements provide flexibility in ordering based on specific scenarios. For example, the selected approach may use incentives to reward on-time performance, high customer satisfaction or quality of post-implementation support. A share-in-savings incentive is also provided to better align government and vendor interests in reaching targeted improvements in operational metrics.

The key to entering a performance-based payment structure is having a clear and objective baseline which you can measure against the desired improvement. Think of it as needing a clear understanding of your current body weight before you would pay someone to help you lose weight. Without knowing where you are (your baseline) and where you want to be (your target), performance-based payment structures are difficult to nail down.

As with all acquisition efforts, the work done early in the life cycle is crucial to an effective contract. The program team must clearly articulate the business case or financial justification for the investment being made. This gets defined in greater detail in the requirements gathering process so that a formal requirements document can be attached to the final contract. This process ensures that the contractor will provide services that satisfy the requirements or objectives set by the business sponsors.

Competition

As with all major acquisitions, it is to the buyer's advantage to solicit bids from multiple vendors. You will find that pricing can be reduced and team qualifications enhanced with the proper level of competition.

In a performance-based payment scenario, the percentage of payment that is tied to performance should be a variable that

bidders compete until the highest percentage of risk is appropriately borne by the contractor.

The Enterprise Agreements were solicited using the GSA Federal Supply Service and eBuy, a component of GSA Advantage. eBuy is an electronic Request for Quote (RFQ) system designed for federal buyers to prepare RFQs, directly online for a wide-range of services and products offered through the GSA Multiple Award Schedule (MAS) program. e-Buy allows RFQs and quotes to be exchanged electronically between federal buyers and Schedule contractors.

We used e-Buy to satisfy the requirements of Section 803 of the National Defense Authorization Act of 2002. These agreements were established on a competitive best-value basis as GSA Schedule Blanket Purchase Agreements (BPAs) and are available for ordering by all DoD components. Task orders must be competed among the five BPA holders in accordance with the fair opportunity provisions unless a regulatory exception applies.

Conclusion

The Enterprise Agreements are much more than negotiated discounts. They provide an in-depth knowledge base for any program about to embark on a COTS implementation. Following a disciplined methodology reduces risk, and tying payment to desired results transfers risk to a vendor that has proven technical expertise.

The Enterprise Agreements are excellent examples of government and industry working together to bring best practices to DoD programs that will be investing billions of dollars on business systems during the next five to 10 years.

The Enterprise Agreements can be accessed through the ESI Web site at the following link: <http://www.don-imit.navy.mil/esi/>.

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CHIPS



Figure 5. Enterprise Agreement Performance-Based Approach Structure