Incentives for the Adoption of e-Business (IAEB) Team Issue Paper

I.   Issue Description

Incentives must accompany the fundamental end-to-end adoption of e-business (EB) by the Department of Defense (DOD) from both people and process perspectives. The specific issue is:

How to incentivize a move to an EB mode of operations within the Department of Defense (DOD) and promote a true EB partnership between industry and the DOD.

These incentives must ensure continued strong industry support for defense related mission imperatives (i.e., provide the prospect of improved profit margins). They must also ease the joint migration of defense and industry organizations to an agile, efficient, and effective EB relationship model (i.e., speed re-orientation of the functional area and operational interfaces linking the DOD and its industry partners to an EB framework). In summary, these incentives must overcome barriers, promote interoperability and partnership, result in more effective and efficient government, and lead to a more effective DOD and a more profitable private sector.

II.   Background

Similar to the Year 2000 related programs, the forces driving EB have made the move to EB not a "will do" but a "must do" effort. These forces include:

- The move to a networked economy.
- Increasing demand for technical talent.
- Increasing pace of technology change.
- Globalization.
- Increasing importance of partnerships.

Attachment A details some of the implications of these forces for both DOD and industry.

III.   Problem Statement

The fundamental challenge to changing DOD to an EB model is the lack of a true, shared vision of the EB future between Defense and Industry. The following list identifies the necessary components of that future vision based on our team findings:

a. <u>Leadership first and foremost</u>. Grass roots efforts invariably fail to produce results. A long-term vision, continuing executive focus on that vision, a multi-year implementation effort, and the availability of funding are all prerequisites for success. Ideally, this vision needs to promulgated by the Secretary of Defense in partnership with the White House.

b. <u>High-value/high-quality war-fighter support</u>. EB for the DOD extends beyond just equipping the war-fighter for mission readiness. We must ensure our citizen-soldiers can achieve a minimum level of quality of life for themselves and their families. EB provides

the mechanism by which the systems used by the war-fighter in garrison can be the same systems used to go to war.

c. <u>Increased agility</u>. This is facilitated by the move to EB, providing the DOD with a huge opportunity to create the capability to better leverage the industrial base, allowing quicker response to crisis and wartime situations, and greatly increased effectiveness.

d. <u>Rational experimentation</u>. The old ways of study, study, study must be replaced with conceptualize, try, try. Neither industry nor government can afford to process ideas in the same old ways. By the time all the studies would be done, EB will have evolved to the next generation. Industry and the DOD must participate in the e-revolution actively and jointly. Time-boxed (3 month windows) and funds-limited (though sufficient to show plausibility) hands-on experiments need to become the new mechanism for demonstrating a business case.

e. <u>Scalability</u>. Successful experiments must be scalable in order to leverage them across the Defense-to-Industry (D2I) spectrum. This, along with value to the war-fighter, becomes a key criterion for funding new initiatives.

f. <u>Effective utilization of scarce human resources</u>. The challenge is managing cultural perspectives, personnel expectations, and the change coordination process. The communications process and smart application of incentives is critical here.

g. <u>A flexible, standards-based technical infrastructure</u>. This is the foundation of every EB success story encountered by this team. Once in place, this foundation allows for significantly reduced EB implementation/transaction times and costs. This is not currently the case within the DOD. Defense organizations have evolved "e-business islands" of dissimilar systems with differing capabilities supporting manifold functions. Without change at DOD, industry will be forced to operate in a paper/pencil mode for DOD business while using an e-business mode for non-defense business. DOD and industry should to employ a standard-based EB framework.

h. <u>Partnership with Industry</u>. Creating a partnership model that ensures effective partner relationships and extensive leverage of external partners is another common success element we encountered in our survey. The DOD e-business model must be built on partnership.

A number of these components already figure into DOD's Vision 2010. The IAEB team has assumed the necessity for these components in the recommendations that follow.

IV.   Recommendations

In order to transform itself into an e-business, the Department of Defense must mitigate barriers in the areas of leadership, DOD-Industry communications, internal DOD processes, and technical infrastructure. We provide the near-term recommendations (i.e., to be started within the next 6 months) for each of these areas.

Leadership. *How do we incentivize DOD Leadership to accelerate and institutionalize EB across the Department and keep pace with Industry?*

- ▪ Recommendation: Direct the new EB Board of Directors through the DOD CIO to generate policy guidance, have funding oversight, and ensure the integration of both the technical and functional aspects of EB for the enterprise-wide adoption of EB systems.

Discussion: One of the common themes we observed throughout the interview process was the need for strategic vision and leadership for EB at the top of the organization. In nearly every case we found a designated e-business executive reporting to the Chief Executive Officer; a multi-year, long-term commitment (3-5 years), and a ruthless hands-on change agent to lead the implementation.

The team understands that the then-Deputy Secretary of Defense, Dr. John Hamre, directed the establishment of an EB Board of Directors. The team believes that this Board should have the authority to prioritize the adoption of EB in the Department.

Implementation Concerns/Impediments: Change of administration.

Resource Implications: Top down reprioritization for EB funding.

DOD/Industry communications. *How do we promote open communications between DOD and Industry?*

- ▪ Recommendation: Direct the CIO to create an EB Industry Panel that will meet quarterly with the EB Board of Directors. The panel should be composed of EB Executives; include representation by large, mid-size, and small business CEOs; and ensure the business focus includes EB strategies and practices.

- ▪ Recommendation: Direct the continuance of the Incentives for the Adoption of e-Business working group to perform a more complete analysis of survey results and develop a framework for action to be reported to the EB Board of Directors and Industry in the first quarter of fiscal year 01.

Discussion: The team feels that in order for EB to succeed, the DOD and Industry must work together, establishing a strong partnership. Our interview findings highlighted a common trait among successful e-business organizations - the use of cross-functional teams with representation from trading partners, staff, and customers. In the Department, we understand that these kinds of teams are consistent with the tenets of Acquisition Reform. The team further believes that these partnerships with Industry should include representation from small, medium, and large-size businesses. The Department should resource the EB Industry Panel.

The team would like to continue its work by performing a more complete analysis of our interview results. This analysis would provide a more comprehensive picture to the Department of our observations on successful EB implementations, and give the Department a plan of action to move to an EB mode of operations that will cover several years.

Implementation Concerns/Impediments: Will require a review of FACA legislation.

Resource Implications: Identify appropriate funding to support the EB Industry Panel.

Internal Defense Incentives. *How do we incentivize and migrate internal DOD business to a more cost-effective e-business foundation?*

- Recommendation: Direct USD (AT&L) to amend the DOD 5000 series and MIL-HBK-881 (Work Breakdown Structures) to address adoption of EB methods in acquisition programs and include EB as part of the Acquisition Strategy Report.

- Recommendation: Direct the CIO to establish a formal awards program at the SEC DEF level for successful EB initiatives.

- Recommendation: Direct the Defense Management Council to develop plans that will allow a portion of savings realized by EB to be shared by the implementing organizations.

- Recommendation: Direct the CIO to provide additional funding to accelerate existing efforts to include EB awareness and approaches in the curricula of appropriate DOD schools and other training programs.

Discussion. The team discovered through our interview process that policy and regulatory changes, internal awards, shared savings, and training were all critical to effecting internal change related to the adoption of EB. The above recommendations can begin to be implemented immediately, although the team recognizes that the recommendations for policy changes and the insertion of EB into the curricula of DOD Schools may take some time. Nevertheless, the team strongly believes that work on these recommendations should begin as soon as possible.

Implementation Concerns/Impediments: Coordination with DOD 5000 Series updates.

Resource Implications: Requires reprioritization of CIO budget to accelerate changes to the curricula at DOD schools.

Technical Infrastructure. *The ability to incentivize the adoption of internal EB processes is limited by the lack of a standards-based technical architecture framework for EB.*

- Recommendation: Direct the CIO to promote development of a flexible infrastructure compatible with Industry EB initiatives that allows cost-effective and resource-efficient interoperation with Industry.

- Recommendation: Direct the CIO to establish enterprise-wide Quality of Service guidelines for commercial applications installed at the base, post, camp/station level.

- Recommendation: Direct the CIO and the DOD Small Business Office to develop a mechanism to allow small businesses to integrate with the EB infrastructure with minimum cost.

Discussion: The last common theme the team encountered was that a cost-effective EB mode of operations requires a standards-based technical infrastructure. This infrastructure was in every case the basis for each organization's ability to rapidly add capability, to improve customer service, and to realize significant cost savings. The infrastructure, because it is standards-based, provides extensive reuse and interoperability capabilities. The team recommends that the DOD work with Industry to develop infrastructure in consonance with Industry. This means that Industry will not have to comply with multiple standards in order

to do business with the Government. Therefore, there will be a common portal for access between DOD and Industry.

Quality of Service guidelines refer to the contribution the applications make to improved organizational effectiveness and ease of use from the operational user's perspective. Existing Quality of Service activities in the DOD CIO can be extended under this recommendation to address EB/EC specific solutions to ensure clear benefits from the introduction of EB capabilities.

The team's small business participants made it very clear that the Department needs to develop a mechanism to allow small business to integrate with the EB infrastructure at minimum cost. The team strongly supports this point of view and recommends that the infrastructure the DOD adopts must accommodate the needs of all vendors.

Implementation Concerns/Impediments: None.

Resource Implications: Identify and allocate funds for Quality of Service guidelines.

V.   Assumptions

The above recommendations assume:

- DoD is committed to move to an EB environment.

- Existing procurement regulations have the requisite flexibility to support EB - it is their current interpretation and implementation that is inflexible.

- Industry, regardless of the size of the business, is willing to adopt standards to work in an EB environment with DOD, given use of industry-wide standards that are enforceable at all levels of DOD.

- Industry will invest in doing business with DOD, if the rewards are equitable for both large and small businesses.

- Small businesses will require assistance (through funding, offsets, or hosted solutions) in establishing EB implementations.

- Incentives and performance measures (see Performance Measures Issue Paper) must be implemented together in order to realize a successful outcome.

- A flexible technical infrastructure is needed to support exponential EB growth.

VI.   Implementation of Recommendations

The Incentives for the Adoption of e-Business team does not believe there are any strong impediments to these recommendations and urges their implementation. The recommendations should drive a reprioritization of existing resources, and the EB Industry Panel will require a review of FACA.

Attachment A: Discussion of the Forces Mandating the Move to e-Business

1. <u>The move to a networked economy</u> - industry must move in this direction to satisfy its shareholders and maintain its competitive position. DOD must move with industry to ensure that it keeps pace with its industrial support base, and to ensure continuing interoperability and warfighting readiness.

2. <u>Increasing demand for technical talent</u> - e-talent is a scarce resource. It commands high salaries and seeks 'fun' or 'challenging' projects. This same e-talent can significantly speed the successful accomplishment of a particular e-business project. The question is how to incentive these individuals, and the organizations that employ them, to apply this level of talent (i.e., the best talent) to DOD initiatives. A related question is what type of programs are needed to stimulate experienced workers who may be less comfortable with technology to share their functional know-how with the younger workers who may have great comfort with technology but lack mission-critical domain know-how.

3. <u>Increasing pace of technology change</u> - the rate of change of technology means that technology is no longer the time limiting factor in implementing change. Instead, the cultural, political, people, and process issues now limit the speed at which change can occur. The best in class industries have set up their governance and infrastructure models in recognition of this fact. DOD and industry need to rethink how the governance and infrastructure models currently in use need to change to promote the move to e-business.

4. <u>Globalization</u> - the number of new industry providers that can support DOD mission objectives grows daily. Existing barriers to entry prevent DOD from fully exploiting these sources of innovation, talent, and solutions.

5. <u>Increasing importance of partnerships</u> - keeping up with the pace of technology means having the ability to rapidly form and capitalize on external partner relationships. This suggests a much different interpretation of what constitutes a healthy relationship between the DOD and industry.

Attachment B: Some Incentives Success Stories

- General. The initial step into e-business for industry is a leap of faith. There is little hard data on benefits and rewards versus investment. Most data is anecdotal - examples include from 6 to 30 times improvements in cost effectiveness, greatly increased personnel morale and productivity, and exponential returns on investment. Insistence on a business case was cited by most of the surveyed organizations as a barrier to moving forward. The organizations that move the fastest require only an informal business case (based on value to the customer and value to the organization's objectives) that must be demonstrated through rational experimentation within a 90 day period. Those initiatives that do not show promise after 90 days are quickly killed and their resources reallocated to other priorities. This is a model of agility that the DOD and its industry partners should encourage.

- A large technology company transformed itself into an e-business over a five-year period. This company acts as a portal between its customers and a range of manufacturers and suppliers. DOD occupies a similar role between the War-fighter and industry, but lacks some of the key core competencies that this company jealously preserves ... integration, product management, partner management, independent testing, and knowledge management. This suggests a potential future model for DOD with 4 components:

    (1)   War-fighter and business customers,

    (2)   Project and budget prioritization as a core competency within DOD (with industry and external Government participation),

    (3)   Outsourced 'competency' efforts for integration management, partnership management, knowledge management, etc., and

    (4)   Product and services providers.

- A banking company also moved to a horizontal business model similar to the technology company described above. Project funding and executive support are not the limiting factors in getting things done, rather technical resources and infrastructure are the limiting factor. This company requires its executive team to experiment personally in making credit card transactions via the Internet to better understand the customer experience. In the same way, DOD and industry need to encourage its executives to roll up their sleeves and experiment with new e-enabled ways of transacting business.

- A Federal Department (non-DOD) transacts approximately 20% of all purchase card transactions in the Federal Government, and over 95% of its small purchases ($2,500 and under) are conducted using purchase cards. Rebates generated by the program are proportionally returned to the associated centers within the Department to allocate as they see fit. In one instance, a center was able to fund creation of a new eye care clinic from these rebates. This demonstrates the value of de-centralizing purchasing authorization authority, all of which has resulted in improved employee satisfaction, rapid payment to vendors, and no loss of jobs.

- A state government dealt with strong labor unions as a potential barrier to e-business as they moved to Internet-enable their Department of Motor Vehicles registration process. The State used a combination of television awareness spots, training sessions, quality of life benefits,

and shared savings rewards as incentives to motivate successful change within a nine-month timeframe.

- A Federal government organization echoed the success stories we heard from the banking company and the technology company. They demonstrated rapid migration of applications to an e-business framework and exceptional cost effectiveness through reuse of Internet-based software solutions. DOD and industry need to use incentives for reuse to prevent creation of stovepipes, to reduce implementation times, and to greatly reduce costs.

- Another Federal Agency (non-DOD) provides strong support for small businesses. It allows the contracting officer to determine equitable pricing and the small firm to market new customers, manage customer relations of its existing base, and generate new tasking through the GSA schedules. This greatly facilitates the Government contracting process for many smaller businesses. The agency provides the infrastructure for electronic submission of proposal and qualification statements, oral solution presentations, and contract negotiation in less than 5 days.

- Two major weapons programs use electronic commerce capabilities extensively in their implementations to save resources which are then reused by the program. For example, instituting automated data feeds between the prime contractor and the program office and installing video teleconferencing capability reduced paper and travel costs significantly.

Attachment C: Incentives for Adoption of e-Business (IAEB) Team Membership

Defense Co-chair

Ms. Evelyn DePalma, JECPO, 703-767-6912, depalmae@ncr.disa.mil

Industry Co-chair

Mr. Terry Zagar, VP, TRW, 703-345-8280, terry.zagar@trw.com

Defense Members

Mr. Floyd Groce, DON CIO, 703-607-5658, groce.floyd.@hq.navy.mil

Mr. Dennis Idol, Defense Finance Accounting Service (DFAS), 703-607-5028, dennis.idol@dfas.mil

COL Dave Kerrins, OUSD(A&T), Defense Proc. Dep Dir, 703-695-7146, kerrind@acq.osd.mil

Mr. Jim Mulder, ODASD DCIO/EB/KM, 703-604-1588, jim.mulder@osd.pentagon.mil

Mr. Reed White, OUSD(AT&L)ARA/AM, 703-695-5166, whiterr@acq.osd.mil

Industry Members

Mr. Robert Alderman, Department of the Navy CIO Support, (703) 602-1801, alderman.robert@hq.navy.mil

Dr. Marilyn W. Andrulis, President & CEO, Andrulis Corp., 703-824-1449, mwa@andrulis.com

Ms. Billie Bryant, President, CESCO Inc. & Technology Interchange Resources, 214-599-2500, billie_bryant@dfwecrc.com (Dallas-Fort Worth ECRC)

Mr. Ralph Cruikshank, COO, The Presidio Corp, 301-955-3501, rcruikshank@presidio.com

Mr. Tim Hart, Digital Commerce Corp. (Fedcenter.com), 703-481-9682, hartt@fedcenter.com

Mr. Michael Holshey, Program Manager, Asst. VP, SAIC, 703-676-5096, holsheym@saic.com

Mr. Terry Morgan, Defense Alliance Manager, Cisco Systems, 703-484-5656, tmorgan@cisco.com

Consultant Support

Ms. Jodi Narel, Research Fellow, LMI, 703-917-7134, jnarel@lmi.org

Steering Group Support

Robert Sturm, Co-Chair, Federal Electronic Commerce Coalition, 703-742-3308, bsturm@elpress.com