Acquisition Reform Implementation
An Industry Survey

Prepared for:

DoD Service Acquisition Executives

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Executive Summary

This provides the highlights of a study conducted by Coopers & Lybrand L.L.P., with the assistance of Syracuse Research Corporation, to assess the implementation of acquisition reform in DoD contracts. The study was performed during the period of April to September, 1997, at the request of the Service Acquisition Executives, and with the endorsement of the Secretary of Defense.

This Executive Summary is provided in the same annotated briefing format as the body of the report.

Executive Summary

Purpose

A major emphasis of the Department of Defense over the past four years has been centered on streamlining the acquisition process.

The primary purpose of this study is to provide an assessment of how well DoD is doing in implementing, at the contract level, those reform measures originated either through reform legislation or policy changes and aimed at compressing cycle times, reducing program costs and more effectively leveraging commercially available technologies and practices.

Secondarily, this study provides the Service Acquisition Executives with a unique opportunity to utilize a third party to foster and expand the awareness of members of industry to specific components of DoD's acquisition reform program and to obtain important feedback from industry on where they feel future emphasis should be placed in effecting further changes in the DoD acquisition system.

Purpose

- Assess implementation of acquisition reform in DoD contracts
- Enhance awareness within industry of DoD's specific reform actions
- Obtain industry feedback on where future reform efforts should be focused

Approach

This survey involved the assembly of a catalog of significant acquisition reform measures promulgated since January 1993. The catalog, a copy of which is provided as Exhibit 1, provides descriptions of 53 change elements, cites legal authority or administrative reference governing their issuance and lists expected outcome factors or baselines from which change should be measured.

The survey was designed around having the participation of ten major DoD contractors drawn from a cross-section of commodity groupings. Those participants are listed on the next slide.

Each participating contractor was asked to make available for on-site interviews program managers, contract managers and other related functional team members covering up to a dozen active, large dollar DoD contracts that exemplified either "opportunity seized" or "opportunity missed" in terms of acquisition reform implementation. The team asked that the mix of contracts provided for the study be representative of the active workload.

Individual interviews were tailored around change elements relating to a respondent's program role. A matrix of change elements to program role is found in Exhibit 2. Certain change elements are more appropriately addressed at the plant level; accordingly, the survey included such plant-wide managers as: government property, pricing, accounts receivable, purchasing and others, as well as senior executives, as available.

A survey protocol was developed to facilitate interchange on each change element. The protocol was designed to measure a interviewee's responses in the following respects: awareness of a particular change element; degree to which the change element was implemented in the contract; estimate of impact from implementation as it affects cycle time, cost, performance and commercial access; and, barriers to full implementation. Respondents were also asked for their recommendations on where future DoD focus should be placed in effecting further progress in acquisition reform. The survey protocol is found in Exhibit 3.

Approach

- Develop catalog of acquisition reform change elements
- Conduct survey at ten contractor sites
- Address representative cross-section of active, large contracts
- Interview program managers, functional team members and selected process managers
- Use structured survey instrument to assess:
  - personal awareness
  - implementation level
  - impact of implementation (i.e., cycle time, cost, quality and performance, and access to commercial)
  - barriers to full implementation
- Document industry recommendations

Company Sites

This provides a listing of companies that participated in the study. Survey activity encompassed 90 contracts valued at $17.4B. There were 430 structured interviews conducted as well as discussions held with a score of senior management officials at these companies.

Company Sites

Company Site	State	Contract Value Addressed (in millions)	Interviews Conducted	Military Products
AlliedSignal Aerospace	AZ	$100	21	Engines
Boeing McDonnell Aircraft & Missile Systems	MO	$4,029	56	Aircraft/Missiles
General Dynamics Land Systems	MI	$2,827	45	Tracked Vehicles
Hughes Missile Systems	AZ	$1,752	52	Missiles
Lockheed Martin Electronics & Missiles/LMIS	FL	$1,168	49	Electronics/Missiles
Motorola Space & Technology Systems Group	AZ	$372	53	Comm./Electronics
Northrop Grumman ESSD	MD	$1,089	59	Radars/Sensors
Rockwell Collins CACD	IA	$357	59	Comm./Avionics
Textron Bell Helicopter	TX	$4,925	23	Helicopters
UNC Aviation Services	MD	$752	13	Aircraft Repair/Training

Summary Results

The survey found that considerable progress has been achieved in implementing acquisition reform in DoD contracts; however, there is a great deal to be accomplished toward full implementation.

With respect to industry awareness of those individual change elements associated with DoD's acquisition reform effort, there is a moderate level of awareness. This is based on survey responses that averaged 2.6 on a 0-4 point scale.

As to implementation of acquisition reform, the survey results show a moderate level of implementation based on responses across all interviews conducted that average 2.9 on a 0-4 point scale.

Because change elements used in the survey carry varying reference points from which the impact of implementation has been estimated, it is not feasible to roll-up outcomes measured at the change element level to any higher summary level. At the change element level and within the four outcome areas of measure in this study - time, cost, quality and commercial access - there were nine change elements where a majority of respondents estimated significant outcomes. Most savings/avoidance were attributable to time and cost.

Summary Results

- Demonstrable progress being achieved:
  - Awareness - Moderate (2.6)
  - Implementation - Moderate (2.9)
  - Significant Outcomes:
    - nine change elements where majority of respondents estimated significant outcomes
    - most savings/avoidance attributable to time and cost

Least Implemented Change Elements

This slide shows the five least implemented acquisition reform change elements according to those surveyed. The results are based on a 0-4 point scale (Note: Elimination of non-value added packaging requirements and streamlined contract close-out procedures are two other change elements with low average implementation which were omitted to reduce the number of change elements shown in the overview slide).

Least Implemented Change Elements

Acquisition Reform Change Elements	Average Implementation Level
Streamlined Government Property Management	0.5
Program Stability	1.1
Use of EDI to streamline procurement process	1.6
New order of priority for information/Adjustment of TINA threshold	2.0
Use of performance-based progress payments	2.2

Most Fully Implemented Change Elements

This slide shows those five change elements where implementation was rated highest by survey participants (allowing for omission of several with relatively limited scope, e.g., commercial shipping documentation, streamlined industrial security procedures and more thorough post award debriefings).

A key observation is that it is not in the most fully implemented change elements that the most significant impacts are being realized in terms of time or cost savings/avoidance.

Most Fully Implemented Change Elements

Acquisition Reform Change Elements	Average Implementation Level
Use of Past Performance/Best Value Evaluation Criteria	3.7
Use of EDI to facilitate program information exchange between Government and contractor	3.4
Use of Joint Government Industry IPTs	3.4
Use of commercial soldering/other commercial manufacturing practices	3.3
Use of commercially accepted quality program standards (e.g., ISO 9000 series)	3.3

Implementation Results Keyed To Top Cost Drivers Identified In Prior OSD Study

This slide lists the top ten cost drivers identified in the C&L study conducted for OSD in 1994 to quantify the regulatory cost impact inherent in DoD contracts. This shows the corresponding change elements and the average implementation levels. Four of the eight change elements reflect implementation levels greater than the overall average implementation level compiled in this study.

Implementation Results Keyed To Top Cost Drivers Identified In Prior OSD Study

	Cost Driver	Change Element	Average Implementation Level
1	MIL-Q-9858A	Commercial Standard (Q01)	3.3
2	TINA	Commercial Exemption (F04)	3.1
3	C/SCS	Tailored reporting to industry guidelines (P04)	3.0
4	Configuration Management	Contractor maintained (E03)	3.0
5	Contract Specific Requirements	RFP Streamlining (C02)	2.6
		Performance based requirements (C03)	2.8
6	DCAA/DCMAO Interface	DCAA risk based oversight (F01)	2.6
		DCMC risk based oversight (P03)	2.9
7	Cost Accounting Standards	none	
8	MMAS	none	
9	Engineering Drawings	Commercial drawing practices (E08)	2.6
10	Government Property Administration	Streamlined property management (W06)	0.5

Change Elements With Significant Outcomes

Where survey participants indicated that some degree of implementation had been achieved, they were asked to estimate a percent of savings/avoidance/improvement in terms of time, cost and quality change and to characterize change in access to commercial practices or products on the basis of a 0-4 point scale, beginning with no increase to a major increase.

This slide shows those change elements where at least 50 percent of the survey participants indicated that significant savings had been realized in their programs. For the seven of the listed change elements, change was measured on the basis of the contract itself - what the conditions would have been without the reform measure versus the implemented condition. In these cases, a significant outcome is defined as estimated savings/avoidance exceeding 10 percent for time, cost and quality responses and a major increase in commercial access (in accordance with choices provided within the survey protocol). In the remaining cases, where the baseline or expected outcome is process-based (i.e., the contracting process), a significant outcome is defined as estimated savings/avoidance exceeding 25 percent for time, cost and quality and a major increase in commercial access.

Again, these are <u>not</u> the most fully implemented change elements; however, where implemented, they yielded, or are yielding, the largest impacts, according to the survey participants.

Change Elements With Significant Outcomes

(Where estimated by at least 50% of respondents)

Change Element	Expected Outcome	Time Reduction	Cost Reduction	Quality Improvement
Use of Open System Approach	Reduced contract schedule; reduced contract cost; increased quality; increased access to commercial	X	X	X
Elimination of Military Specs. and Standards/Use of Performance Based Requirements	Reduced contract schedule; reduced contract cost; increased access to commercial	X	X	
Use of quick (rapid) prototyping in software development	Reduced contract schedule; reduced contract cost; increased quality	X	X	
Concurrent development testing (DT)/operational testing (OT)	Reduced contract schedule; reduced contract cost	X		
Use of commercial and other exemptions for cost or pricing data	Reduced PALT; reduced B&P costs; increased access to commercial	X	X	

Most Significant Barriers To Full Implementation

Where survey participants indicated that there was less than full implementation of the change element in the contract, they were asked to identify one or more barriers to full implementation.

This slide shows the five most prominent barriers (participants were allowed to cite multiple barriers but were also asked to weight them in importance - these rankings consider the weighted responses).

The top barrier - Government decided not to implement - connotes an explicit decision on the part of the government not to implement a change element although the opportunity existed to do so. It implies discussion of the issue between the government and the contractor. It may or may not suggest that the government's decision not to implement the change was a good business decision. It may involve some element of resistance to change, at least as perceived by the contractor. An example is provided by the Alpha contracting process. The government contracting officer initiated an IPT approach to the contract formation, but the DCAA auditor was not involved in the process. This impeded the effectiveness of the Alpha contracting process although some level of implementation was effected.

An example of the second leading barrier - Government and contractor agreed not to implement - is represented by a joint inability to agree on milestone events for performance-based progress payments.

Cultural resistance applies for the most part to the government side. It was the most frequently cited barrier in the survey, but not as heavily weighted as "Government decided not to implement" where multiple barriers were cited. The difference between the two may be subtle, but cultural resistance is more attitudinal-based than process-based. It involves job security, "rice bowls" and individual concerns over the efficacy of change. A example might involve a reduction in the number of CDRL requirements in a contract while the government still calls for the same reports to be provided as requirements embedded in the SOW or imposed on an extra-contractual basis.

Further delineation of these barriers can be found in Appendix B.

Most Significant Barriers To Full Implementation

Ranking

1 Government decided not to implement

2 Government and contractor agreed not to implement

3 Cultural Resistance

4 Proven system not in place (too early)

5 Insufficient funds to implement

Snapshots Of Success

This slide contains five particularly favorable comments on acquisition reform recorded during interviews with survey participants.

Appendix A contains selected narrative comments for each change element addressed by this summary - both positive and negative. The study team has added a paragraph to each of these summary sheets in an effort to interpret the data and to give context to the comments provided.

Snapshots Of Success

- (C01) Presolicitation: Allows government to explore alternative, cost effective NDI/COTS solutions with industry before developing specs
- (C02) Streamlined RFPs: Forty percent reduction in page volume between RFP for previous buy and this one
- (E01) Open Systems: Had profound positive impact on cost - new functionality at no cost increase
- (E03) Contractor configuration control: Cost reduced 15% - simplifies design process, reduces parts, permits manufacturing technique changes to reduce complexity; MTBF increased from 10 to 120 hours
- (E05) Simulation testing: Contract costs reduced 60-65% by using simulation instead of engineering tests

Snapshots Of Opportunities

This slide contains selected comments of contractor personnel which express concern for the lack of progress they perceive in implementing acquisition reform in DoD contracts.

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Snapshots Of Opportunities

- (C03) Specs/Stds: Callouts in RFP were significantly reduced but reappeared in other documents as references and requirements
- (E05) Simulation testing: Testing community is blocking simulation in lieu of testing - rice bowl issue
- (E08) Commercial drawings: Government continues to require drawing changes until they are done just like MIL-STD-100 requirements
- (F07) Reduced TINA sweeps: There is little evidence that government PCOs are willing to agree to cut-off dates to reduce TINA sweeps
- (Q01) Commercial quality programs: Conversion to ISO resulted in an increase in quality audits and more written procedures than MIL-Q-9858A

Industry Recommendations

This and subsequent slides enumerate recommendations from industry, as provided during this survey, for effecting greater reform in the DoD acquisition process.

Alpha Contracting - industry wants a better understanding of data sharing between themselves and the government. They feel the government withholds data while expecting maximum data sharing from them. They want clearer definition of roles, expectations and limitations with respect to pricing. They feel the process is much more effective in developing technical requirements than pricing. They feel DCAA needs to be a full participant. They think there should be greater empowerment of government team members. They feel that the benefits from the process are often offset by lengthy review cycles and emphasize the need for focus on cycle time reduction.

TINA-related exemptions/provisions - industry feels that government contracting officers are not taking full advantage of FASA-provided relief to TINA provisions. They want greater use made of commercial exemptions to certified cost or pricing data or, in lieu of commercial product applicability, greater use made of alternative pricing support mechanisms (price analysis, market research, etc.). They want to see greater use made of parametric estimating and more use of cut-off dates to reduce the cost "sweeps" inherent in maintaining complete, accurate and current cost packages.

Commercial Pricing - They feel training is required to make government contracting personnel more familiar with commercial pricing principles and techniques.

Industry Recommendations

- Improve quality and consistency of “ALPHA” or “one pass” contracting
- Increase contracting officer understanding and utilization of TINA-related exemptions/processes
- Provide education and guidance to government contracting personnel related to commercial pricing techniques

Industry Recommendations Cont'd

Single Process Initiative - in general, industry is very supportive of SPI. They want the government to continue to emphasize the need for increasing its effectiveness at the subcontractor level. They feel there has been a tendency to pick-off the "low hanging fruit" and they want more substantive change to be addressed in the future. They feel the focus should be on long-term savings, not instant savings, and feel some negotiations of equitable adjustments have been unnecessarily protracted. They also want prompt status reports on change requests referred to Headquarters.

EC/EDI - industry wants DoD to put the necessary resources in place to get automated solutions as soon as possible. They feel it is an absolute requirement that DoD's various automated systems be compatible. They want government personnel to be better trained and educated on applying automation. They want to eliminate redundant electronic and paper requirements.

Performance-based requirements - industry wants better scrubs of the RFP package. They feel non-performance based requirements are creeping back into statements of work, as well as CDRLs. They urge that more government personnel be trained on how to write and acquire performance based requirements as part of an education process on the Performance Based Business Environment. They emphasize that contractor processes should be kept out of contracts as requirements. Requirements, they stress, should be outcome oriented, not input oriented. They also feel the government needs to address the liability issues related to use of performance based requirements.

Industry Recommendations Cont'd

- Continue application of the Single Process Initiative (SPI) with emphasis on facilitating the prime-subcontractor change process
- Accelerate the use of Electronic Commerce and Electronic Data Interchange in the acquisition process
- Increase emphasis/understanding of performance based business environment

Industry Recommendations Cont'd

Integrated Product Teams (IPTs) - industry feels DoD needs to empower their IPT members to act. They feel there is a tendency for IPTs to attract people who have only a tangential role in the IPT. They want government representation limited to "value-added" personnel. They want to ensure an even exchange of ideas and they want to ensure that IPTs do not become a forum for introducing informal or constructive contract changes.

Government Property Administration - industry does not consider that meaningful reform is represented in the draft re-write to FAR Part 45. They want an increase in the low value property threshold to $5,000. They want to use commercial write-off practices below that threshold consistent with Generally Accepted Accounting Principles (GAAP). They want a method of depreciation introduced so that government property is valued realistically and they want resolution of the demilitarization coding issue in a manner that maintains responsibility for coding with the government.

Logistics Support - industry feels that acquisition reform has largely focused on major system acquisition to the exclusion of total life cycle support considerations. They consider that supporting acquired systems with a largely organic logistics support infrastructure introduces increasing complexities in an acquisition environment characterized by performance-based requirements, contractor-maintained configurations and open systems. They also feel that there are large savings to be achieved from adopting a two level maintenance philosophy.

Industry Recommendations Cont'd

- Improve the effectiveness of Integrated Product Teams (IPTs)
- Provide meaningful reform in Government Property Administration
- Integrate life cycle support considerations into future acquisition reform strategies

Industry Recommendations Cont'd

Contractor Oversight - industry believes that there is further need for balancing field level staffing and a risk based management approach. They feel there are pockets of overstaffing both in DCMC quality assurance ranks and DCAA which contribute to the generation of marginal value work motivated by interests in justifying existing staffing levels.

Diminishing Manufacturing Sources - industry feels there is a DMS issue associated with a declining vendor base of MILSPEC parts that needs to be addressed DoD-wide. Contractors are faced with the need to place "lifetime" orders for these parts without termination liability protection. Industry views DMS as an urgent, systemic problem, one that warrants a coherent, DoD-wide plan of action.

Program Stability - A number of senior executives and program managers indicated that the largest source of cost savings on major defense programs lies with multi-year contracting. Industry recommends continued emphasis on multi-year contracting as a means of fostering stability and reducing acquisition costs.

Industry Recommendations Cont'd

- Align field level staffing of contractor oversight organizations consistent with risk based management
- Address Diminishing Manufacturing Sources (DMS) as a DoD-wide, systemic issue
- Foster initiatives to improve program stability

Conclusions

This slide summarizes the high-level conclusions of the Survey Team.

The results of the survey provide a strong empirical basis for demonstrating that significant progress has been made over the past four years in the implementation of acquisition reform in DoD contracts. The interviews with industry participants cited numerous instances where the government has been successful in effecting cycle time reductions or cost savings or avoidance through improved communications between buyer and seller, better teamwork by forming Integrated Product Teams, streamlining the contract process, shifting away from design-oriented, "how to" specifications to performance-based requirements, adopting COTS or NDI solutions or by shifting more oversight responsibilities to the contractor on the basis of risk-oriented management approaches.

While industry is very supportive of DoD's efforts to date, they feel there is a great deal more progress to be made, and they frankly feel the pace of progress should be accelerated.

In their collective assessment of implementation progress, they point to the inconsistency in execution of reform components across respective service buying commands and even within those buying commands. They recognize that leadership at the program manager level is a significant variable in the equation, but question the adequacy of implementing guidance at the buying command level and the effectiveness of local training programs. This inconsistency may result from an initiative by initiative approach to acquisition reform, and the lack of an integrated, cohesive DoD/Service vision and strategic plan to pull the initiatives together, putting them in context to each other and to larger strategic goals.

SAEs need to maintain a strong commitment toward providing the DoD acquisition workforce with the training and professional development necessary for them to pursue reform initiatives to full implementation. Industry members expressed particular interest in seeing more training emphasis placed on:

- performance of market research and preference, where appropriate, for other sources of pricing support over certified cost or pricing data
- use/acceptance of parametric estimating techniques
- understanding and applying commercial buying practices including how commercial products should be defined and commercial pricing used
- improving integrated product team practices
- acquisition in a performance-based business environment

Conclusions

- Significant acquisition reform has been achieved over the past four years
- Industry acknowledges progress and is committed to working with DoD to effect further change…..faster and better
- Implementation is uneven and inconsistent across and within military services and buying commands
- Continued commitment to training is vital. Special emphasis is needed in:
  - market research/exemptions to certified cost or pricing
  - parametric estimating
  - commercial product definition and pricing
  - integrated product team practices
  - performance-based business environment