Appendix A

Detailed Survey Results

By Change Element

Introduction

This appendix contains the detailed results of the C&L survey by individual change element. The format requires a degree of reader orientation:

First line:	Contains the identity code and title of the change element listed in the survey catalog (Exhibit 1).
Second line:	Provides a brief description of the change element.
Third line:	Shows citation(s) that is the basis for the acquisition reform activity.
Fourth line:	Indicates the implementation date of the change element and occupational discipline(s) of interviewee(s) at each contractor site.
Fifth line:	Shows average level of awareness (on a 0-4 point scale; see Exhibit 3, Survey Protocol) of an interviewee to the change element. Also shown is the average degree of implementation (on a 0-4 point scale) estimated by an interviewee (where the change element was applicable to the contract being reviewed).
Sixth line:	Indicates average estimated outcomes of implementation, expressed in terms of a percentage for time, cost and quality, and based on a 0-4 point scale for commercial access (see Exhibit 3, Survey Protocol). Note that each change element had its own assigned set of expected outcomes. These are indicated in the survey catalog (Exhibit 1).
Seventh line:	Contains barrier analysis. Where the respondents indicated that the change element was less than fully implemented for the contract under review, they were asked to identify a barrier of barriers to greater implementation selecting from those listed in the Survey Protocol (Exhibit 3). Values were calculated using a weighted sum method. In other words, each survey respondent has ten points to assign across the one or more barriers identified as impeding fuller implementation. A multiplier was then applied to these points in inverse proportion to the level of implementation (i.e., the less degree of implementation, the larger the multiplier.
Narrative Section:	Contains selected positive and negative comments from industry recorded during individual interviews. The section also contains selected accounts of unintended consequences of change element implementation as related to the study team by interviewees.
Facing Page:	Provides summary comments that represent the study team's efforts to interpret the collected data and to apply its own experience and judgement so as to leave the reader with a reasonably clear sense of progress to date in implementing the specific change element in DoD contracts.

Observations and Recommendations

Change Element	C01
CL Summary Observations	Generally, industry comments were complimentary on government buyers' efforts to effect more open communications in pre-solicitation phase. However, the quality/effectiveness of interchanges appears to vary among buying commands and from program to program. Implementing guidance at buying command level may be needed along with professional training through the Defense Acquisition University and other training mediums. However, the message is clear - upfront communications between the government and their suppliers reduce the time it takes to get to contract award, and reduce bid and proposal costs.

ACQUISITION REFORM CHANGE ELEMENT: C01 Improved Pre-Solicitation Phase Communication

Description: Increased communication to provide potential suppliers greater understanding of Government's needs and Government greater understanding of supplier capability (incl conferences, bulletin boards, requests for information, Comm Advocates Forum, draft RFPs)

Citation: FAC90-29; FAC90-32; Navy Cardinal Point 3-2 and 4-3;

Implementation Date: 1/1/93 Avg Awareness Level: 3.0

Personnel Interviewed:

Contracting	Engr	Finance	Mfg	Plant Wide	PM	QA
☑	☐	☐	☐	☐	☑	☐

Expected Outcome:

Reduced PALT; reduced Bid & Proposal costs; greater access to commercial.

	Total Numbe	None		Minor		Significant	
Time	107	45	42.06%	21	19.63%	41	38.32%
Cost	107	61	57.01%	24	22.43%	22	20.56%
Quality							
Commercial Access	107	62	57.94%	24	22.43%	21	19.63%

Implementation Level		Barrier A	Barrier B	Barrier C	Barrier D	Barrier E	Barrier F	Barrier G	Barrier H	Barrier I	Barrier J	Barrier K
3.1	Sum	98	16	10	8	29	24	188	6	66	14	41
	Weighted Sum	180	18	12	12	79	70	410	8	109	30	72

Unexpected Outcomes:
- Time (-): can cost more upfront - more people involved but save time during proposal preparation/contract execution phase.
- Quality (+): quality of the contract itself improved by pre-solicitation discussions.

Narrative - Positive:
- Team approach is beneficial - more openness between government and contractor.
- Allows government to explore alternative, cost effective NDI or COTS solutions with industry before developing specific requirements. Less applicable in cases of DoD unique, design spec. requirements.
- RFP to contract in 10 days; pre RFP discussions allow simultaneous preparation of the RFP and proposal; pre RFP discussions involved total program perspective - led to including production proposal tasks into the EMD proposal.
- Level of discussion led to much greater understanding of services requirements.

Narrative - Negative:
- Was implemented but government kept changing requirements. Little result from the measure.
- Took longer than normal because it was a first time experience - trial and error, but benefits were there other than time.
- Lot of what used to be done after RFP release now done before RFP - not much, if any, savings, effort just moved.
- Potential time savings negated by lack of in-place funding.
- PCO perception of constraints related to competition limits type and quantity of pre-RFP discussions.

Observations and Recommendations

Change Element	C02
CL Summary Observations	Results are mixed, but there appears to be a more concerted effort on the part of government buyers in solicitations issued in the past eighteen months to streamline RFPs than prior to that time. Where program managers are proactively involved in driving streamlined RFPs and reduced SOW complexity, success is being achieved. Without program manager leadership, technical managers appear less inclined to embrace streamlining. Buying commands should be tracking RFP streamlining as part of a performance measurement system.

ACQUISITION REFORM CHANGE ELEMENT: C02 RFP Streamlining

Description: Reduction in the size and complexity of RFPs due to elimination of unnecessay SOW complexity and contract clauses

Citation: AF Lightning Bolt #1, 4 and 10; Proc PAT - (Early CAS, DFARS Case 95-D015/DAC 91-11); Navy Cardinal Point 4-3; AMC Pam 70-25.

Implementation Date: 3/3/95 Avg Awareness Level: 3.3

Personnel Interviewed:	Contracting	Engr	Finance	Mfg	Plant Wide	PM	QA
	☑	☐	☐	☐	☐	☑	☐

Expected Outcome:

Reduced PALT; reduced Bid & Proposal costs; greater access to commercial.

	Total Numbe	None		Minor		Significant	
Time	105	46	43.81%	24	22.86%	35	33.33%
Cost	105	48	45.71%	27	25.71%	30	28.57%
Quality							
Commercial Access	105	63	60.00%	20	19.05%	22	20.95%

Implementation Level		Barrier A	Barrier B	Barrier C	Barrier D	Barrier E	Barrier F	Barrier G	Barrier H	Barrier I	Barrier J	Barrier K
	Sum	107	1	1	4	123	36	339	2	89	18	10
2.6	Weighted Sum	183	1	2	5	276	94	738	2	188	41	30

Unexpected Outcomes: - Time (+): clause reduction assists in ease of administration of contract after award.

Narrative - Positive:
- 40% reduction in page volume between RFP for previous contract and this contract.
- Section H streamlined, but SOW still rather voluminous.

Narrative - Negative:
- PM wanted to reduce size of RFP in many areas, but "rice bowl" groups required inclusion of many clauses.
- Have had significant increase in number of line items due to government color of money issues; customer didn't emphasize streamlining - not enough people, not enough priority.
- RFPs still include T&Cs that are not needed - generally get them eliminated in negotiations - perception is that understaffing precludes adequate screening of T&Cs.
- Application of this initiative was abysmal failure. Business as usual. Direct result of the unenlightened practices of buying command.
- Internal cycle time shortened but award date not moved. PALT not decreased.

Observations and Recommendations

Change Element	C03
CL Summary Observations	Legacy programs are less susceptible to elimination of MIL SPECs/STDs than new starts. Even if references to MIL SPECs/STDs are removed from requirements, drawings impose their continued use in many cases. Resistance to change may not all reside within the government. Contractors with combined commercial-DoD customer base are better prepared to shift to commercial processes/standards than contractors with an all government customer base. An often voiced comment during interviews: "They didn't give us anything to replace the MIL-SPEC with." Contractors are employing SPI provisions to put approved commercial processes/standards in their contracts where MIL SPECs/STDs were formerly imposed. The supplier base for MIL-SPEC parts is shrinking. According to many of those surveyed, this is a systemic Diminishing Manufacturing Sources (DMS) issue that needs to be acknowledged and addressed by DoD in a proactive, consistent and substantive manner.

ACQUISITION REFORM CHANGE ELEMENT: C03 Elimination of Military Specs and Standards/Use of Performance-based requirements

Description: Changing the way DoD states its requirements in solicitations and contracts by: Establishing a performance-based solicitation process; Implementing standardization document improvements; Creating irreversible cultural change

Citation: PL103-355, sec8104; FAC90-32; DoDD5000.1 (D.1.I); DoD5000.2 (3.3.3.1); SECDEF memo, 29 Jun 94; SECDEF memo, 6 Dec 95; USD (A&T) memo, 8 Dec 95 (SPI)

Implementation Date: 6/29/94 Avg Awareness Level: 3.4

Personnel Interviewed:

Contracting	Engr	Finance	Mfg	Plant Wide	PM	QA
☑	☑	☐	☑	☐	☑	☑

Expected Outcome:

Reduced contract schedule; reduced contract cost; greater access to commercial.

	Total Numbe	None		Minor		Significant	
Time	211	88	41.71%	13	6.16%	110	52.13%
Cost	211	58	27.49%	23	10.90%	130	61.61%
Quality							
Commercial Access	211	60	28.44%	91	43.13%	60	28.44%

Implementation Level		Barrier A	Barrier B	Barrier C	Barrier D	Barrier E	Barrier F	Barrier G	Barrier H	Barrier I	Barrier J	Barrier K
	Sum	105	9	20	28	249	92	460	42	203	50	131
2.8	Weighted Sum	177	18	37	41	595	195	864	82	302	100	225

Unexpected Outcomes: - Cost (-): Elimination of specs in some cases producing proliferation of company standards/practices. DoD subcontractors faced with meeting prime-unique practices in lieu of single MILSPEC/STD.

Narrative - Positive:
- Preaward activity reuced by 50% - data items also reduced.
- Contractor control of TDP reduces ECP activity; long leadtime parts availability reduced from 24 to 15 months.
- Government has been very flexible - company has flexibility to flow down or not flow down; government source inspection is minimal.
- 61 original specs reduced down to 13. Balance that were retained deal mainly with explosives.

Narrative - Negative:
- Legacy program - program was designed around MILSPECs/STDs. Costs of moving away from MILSPECs/STDs environment would be too great.
- As long term government supplier, many of this company's processes are based on MILSPECs/STDs. It would increase our costs to abandon them. MILSPECs have been reduced but company's processes are still based on them.
- Not all MILSPECs have a commercial equivalent for this system.
- Major problem as a result of not permitting waiver of MILSPEC parts. Supplier base is no longer available at affordable prices.
- Government insisted on more extensive warranty as a result of performance specs. Went from one year standard material and workmanship to a five year performance warranty. Substantially increases contractor risk but buying command wouldn't agree to increased profits.
- Although MILSPECs/STDs have been removed from the contract, the words from some have been incorporated into the performance spec in the contract. As long as the government continues to assume liability, government personnel will want control. Until the liability shifts to the contractor, this problem will not be solved - rice bowls will remain.

Observations and Recommendations

Change Element	C04
CL Summary Observations	Government encouragement of the use of cost/performance trade-offs by contractors in their proposals in response to performance requirements is critical to acquiring the best solution to a need in a constrained fiscal environment. The high level of implementation for this change element shows that DoD efforts to encourage the use of cost/performance trade-offs, where applicable, are working. While the understanding of this technique, and of Cost as an Independent Variable (CAIV), was moderate, there were a significant number of managers who equated CAIV solely with Design to Unit Production Cost (DTUPC) and didn't put the use of cost/performance trade-offs in context of proposing to performance based requirements. As DoD moves deeper into a Performance Based Business Environment, these numbers should drop. Continuing efforts by DoD to educate both their workforce and their suppliers' will also help. The greatest barrier to implementation of this change element is cultural - the desire to give the warfighter the best possible performance inhibits the use of cost performance trade-offs and CAIV. This is gradually being overcome as the reality of a constrained fiscal environment is accepted. Given that the baseline for outcomes was contract schedule and cost(or price) that was eventually agreed to by the parties, the average outcomes as estimated by the managers interviewed, reflect that significant reductions in both can be achieved through use of this approach.

ACQUISITION REFORM CHANGE ELEMENT: C04 Government encouragement of contractor-proposed cost/performance trade-offs

Description: RFPs shall include a strict minimum number of critical performance criteria that will allow industry maximum flexibility to meet overall program objectives

Citation: DoDD5000.1 (D.1.f); DoD5000.2 (3.3.3.1)

Implementation Date: 3/15/96 Avg Awareness Level: 2.8

Personnel Interviewed:

Contracting	Engr	Finance	Mfg	Plant Wide	PM	QA
☑	☐	☐	☐	☐	☑	☐

Expected Outcome:

Reduced contract schedule; reduced contract cost.

	Total Numbe	None		Minor		Significant	
Time	68	35	51.47%	2	2.94%	31	45.59%
Cost	68	29	42.65%	5	7.35%	34	50.00%
Quality							
Commercial Access							

Implementation Level		Barrier A	Barrier B	Barrier C	Barrier D	Barrier E	Barrier F	Barrier G	Barrier H	Barrier I	Barrier J	Barrier K
	Sum	34	15	25	29	46	20	85	1	1	8	16
3.2	Weighted Sum	66	45	54	33	114	50	184	1	1	10	52

Unexpected Outcomes:
- Time (-), Comm Access (+): In an attempt to achieve cost savings (procurement cycle) there was a trade off regarding time. Trying to integrate product design with prime contractor from supplier side to product end costs time, but results in savings. Commercial access was an unexpected positive outcome as COTS was greatly promoted
- Cost (-): Limited use of cost performance trade-offs in the preaward process will have a negative cost impact in the out years.
- Time (-): Requires more time to develop proposals due to the need to provide trade off studies and analyses

Narrative - Positive:
- Initially, there was resistance on the part of the government to consider tradeoffs that would reduce performance, but over time they got more comfortable with the idea under cost/performance tradeoffs. Achieved major reduction in end item costs between low rate production to full rate (i.e., $200K cut down to $70K). As a result of cost/performance tradeoffs, the actual savings were in the 11-20% range.
- 20% increase in time and 10% increase in cost, but enormous improvements in quality because of newness of processes
-

Narrative - Negative:
- Implementation really restricted by competitive environment & government's reaction to it.
- Difficult on the government's part to accept reduced functionality - lack of central decision making - PM wants consensus among customers - difficult to obtain consensus
- (buying command) has greatly limited contractor ability to foster cost/performance tradeoffs
- Mil Spec and Stds callouts in the RFP were significantly reduced, but in Lot 2, did show up in other areas in the RFP such as the SEMP as references and requirements. Thus, the results, despite full implementation by the letter of the law, show only small savings in cost and schedule
- AR Impact
trade off was to fit scope of work for initial phase to available $ with other work deferred to later stages

Observations and Recommendations

Change Element	C05
CL Summary Observations	As displayed by the high level of awareness for this change element, industry has definitely been "sensitized" to past performance. Additionally, those contracts managers and program managers interviewed reported a high level of use of past performance in source selections. A number of managers report that, because of past performance, they are ensuring that contract requirements are kept up to date, that all requirements are on the contract, and that they only perform to those requirements. No effort is directed toward any requirement not on contract. They want to make sure that they maximize their performance against contractual requirements, since this is what they are being measured against. This is resulting in more specificity in Statements of Work on cost-type contracts, where broad interpretation of scope could lead to cost overruns. There is continuing concern over the subjectivity related to past performance ratings. These concerns have been communicated to DoD, and should be resolved as use of past performance continues and successful practices/methodologies are institutionalized.

ACQUISITION REFORM CHANGE ELEMENT: C05 Use of Past Performance /Best Value Evaluation Criteria

Description: FASA and subsequent memoranda require use of Past Performance Evaluation Criteria in source selection decisions. The criteria use past performance information to select the best sources, and motivate contractors to perform better on their contracts

Citation: PL103-355, sec1091 (FASA); FAC 90-26; DoD5000.2 (3.3.4.2); USD (A&T) memo, 28 Apr 95; AF Lightning Bolt #6; Navy Cardinal Point 4-2

Implementation Date:	4/28/95	Avg Awareness Level:	3.5	Personnel Interviewed:	Contracting	Engr	Finance	Mfg	Plant Wide	PM	QA
					☑	☐	☐	☐	☐	☑	☐

Expected Outcome:

Better quality products and services purchases by DoD; More contract awards for contractors with superior performance records

	Total Numbe	None	Minor	Significant
Time				
Cost				
Quality				
Commercial Access				

Implementation Level		Barrier A	Barrier B	Barrier C	Barrier D	Barrier E	Barrier F	Barrier G	Barrier H	Barrier I	Barrier J	Barrier K
	Sum	5				30		15		14		16
3.7	Weighted Sum	5				100		35		42		28

Unexpected Outcomes:
- Time (+), Cost (+), Quality (+): Existing performance is taking on a higher value to the extent it will affect future procurements. PMs are feeling the pressure on current performance
- Cost (-): There are up-front increases in costs because of additional briefings, etc.
- Time (-), Cost (-): Past performance is causing the company to ensure that contract always reflects the business agreement - contract changes needed to ensure performance - measured against actual contract requirements (NOTE - this also applied to cost type contracts - increases in scope were being added by contract changes)

Narrative - Positive:
- Contractor seeing more best value procurements and use of past performance as selection criteria.
- Past performance and best value have helped but feels past performance can be a double-edged sword.Some source selection officials are interpreting past performance beyond prior performance quality but to include past performance/experience which tends to favor incumbents because they tend to have the most contemporary and relevant credentials.

Narrative - Negative:
- Past performance data is a hodge-podge - very subjective - need more objectivity - contractors not happy with pp data source
- Concerned that miscommunications over government expectations on use of funds may cause future past performance issues
- Perception is that government tries to negotiate lowest possible cost for CPFF, then pushes in additional scope on a no fee basis - result is overrun not caused by contractor- could be a factor in lowering past performance record for other procurements.

Observations and Recommendations

Change Element	C06
CL Summary Observations	Some success stories and recent experiences show improvement but it appears IPTs are more effective in working technical requirements than cost or price issues. For the latter, the government tends to fall back on the traditional process. Industry feels there is inconsistency between government's desire for open data sharing under ALPHA or one pass contracting and any subsequent requirements to certify cost or pricing data. There may be a need for better implementing guidelines that define roles and objectives, empower participants, and serve to give process more predictable outcomes (i.e., less personality driven). They also cite the inconsistency with which DCAA auditors participate in these negotiations despite guidelines for their participation issued by DCAA headquarters.

ACQUISITION REFORM CHANGE ELEMENT: C06 Streamlined Pre-Award Process

Description: Use of tools & methods to decrease time & effort required by both Government and industry from solicitation to contract award, including: IPT type activities (Alpha contracting), oral presentations.

Citation: Proc & CAS PATs - USD(A&T) memos - 28 & 29 June 95; DDP memo - 14 Jun 95; DFARS cases 95-D009,010,015,016/DAC91-9&11; FARA, sec4102;AF Lightning Bolt #10; Army Thrust Area VI; Navy Cardinal Point 2-2 and 4-3

Implementation Date: 6/1/95 Avg Awareness Level: 3.0

Personnel Interviewed: Contracting ☑ Engr ☐ Finance ☐ Mfg ☐ Plant Wide ☐ PM ☑ QA ☐

Expected Outcome:

Reduced PALT; reduced Bid & Proposal costs.

	Total Numbe	None		Minor		Significant	
Time	81	27	33.33%	16	19.75%	38	46.91%
Cost	81	35	43.21%	18	22.22%	28	34.57%
Quality							
Commercial Access							

Implementation Level		Barrier A	Barrier B	Barrier C	Barrier D	Barrier E	Barrier F	Barrier G	Barrier H	Barrier I	Barrier J	Barrier K
	Sum	99	33	2	2	53	9	226	8	35	5	18
2.9	Weighted Sum	223	58	4	4	69	9	483	11	91	20	18

Unexpected Outcomes:
- Time (-): Where government does not empower IPT participants, government reviews negate PALT savings.
- Time (-): Process time increased due to increased dialogue; however, improved understanding helped avoid future problems.

Narrative - Positive:
- Opened levels of communication and increased rapport.
- Reduced program risk (cost, technical); both sides knew what they were asking for and getting (reduced PALT).
- Process is underway in FY 98 contract formulation, but requires cultural change to effectively implement. How much information should be shared? Is each party getting everything? DCAA isn't being used by the PCO in negotiations.
- Good progress in IPT developed technical requirements; however, less success in IPT developed cost proposals.

Narrative - Negative:
- Contractor considers there is unequal "openness" in the cost/pricing aspects of negotiation - contractor provides full disclosure; government not necessarily so.
- Not effectively implemented; not all personnel empowered.
- Same government cycle times following submittal of "one pass" proposals.

Observations and Recommendations

Change Element	C07
CL Summary Observations	Some electronic exchange of procurement data is occurring; however, a paperless contracting process is a project in progress. Achievement of a paperless contracting process will require a web of electronic interfaces and systems that are still being established, such as the Standard Procurement System (SPS), which is not scheduled for complete deployment until the end of FY00, and the Central Contractor Registration (CCR) system for making supplier data available electronically, which is still being populated.

ACQUISITION REFORM CHANGE ELEMENT: C07 Use of EDI to streamline procurement process

Description: Initiate, conduct,and maintain business related transactions between the government and it's suppliers without requiring the use of hard copy media, including electronic source selection.

Citation: FAC90-29; DepSecDef Memo, 28 Apr 94; AF Lightning Bolt #10; Army Thrust Area III and IV, Navy Cardinal Point 4-1

Implementation Date: 4/28/94 Avg Awareness Level: 3.2

Personnel Interviewed: Contracting ☑ Engr ☐ Finance ☐ Mfg ☐ Plant Wide ☐ PM ☐ QA ☐

Expected Outcome:

Reduced PALT; reduced Bid & Proposal costs.

	Total Numbe	None		Minor		Significant	
Time	39	24	61.54%	7	17.95%	8	20.51%
Cost	39	26	66.67%	10	25.64%	3	7.69%
Quality							
Commercial Access							

Implementation Level		Barrier A	Barrier B	Barrier C	Barrier D	Barrier E	Barrier F	Barrier G	Barrier H	Barrier I	Barrier J	Barrier K
	Sum	65	5	13	12	80	64	82	5	104		10
1.6	Weighted Sum	200	12	29	36	210	182	220	20	331		40

Unexpected Outcomes:

Narrative - Positive:
- Internet use of electronic bulletin board to post T&Cs, bidder conference results.
- Some e-mail and transfer of disks.
- Big positive - keeps good track on "was" and "is" - with bolding and underlining…can save tremendous amount of time examining changes in negotiations.

Narrative - Negative:
- Government and contractor beginning to exchange data by electronic means; however, no proven system in place to do electronic contracting.
- Contractor has initiative with buying office for prototyping EDI, being delayed by SPS implementation.
- International Traffic in Arms Regulations (ITAR) constrain electronic transmission of some technical data.

Observations and Recommendations

Change Element	C08
CL Summary Observations	There is not a high level of recognition of this change element among those interviewed, who were mostly hardware related program people. Awareness was higher in those cases where the respondent was involved with a contract for contractor logistics support or engineering/technical support. There are some in industry that feel that government oversight people often impose "how to" requirements in their administration of performance based services contracts.

ACQUISITION REFORM CHANGE ELEMENT: C08 Performance Based Service Contracting

Description: SOW for services - "what" not "how"; minimize reliance on intrusive process-oriented inspections and oversight

Citation: OFPP Policy Ltr 91-2, 9 Apr 91; Army Thrust Area II

Implementation Date: 4/9/91 Avg Awareness Level: 1.9

Personnel Interviewed:	Contracting	Engr	Finance	Mfg	Plant Wide	PM	QA
	☑	☐	☐	☐	☐	☑	☐

Expected Outcome:

Reduced contract cost; increased quality of service; increased access to commercial.

	Total Numbe	None		Minor		Significant	
Time							
Cost	19	14	73.68%			5	26.32%
Quality	19	12	63.16%	2	10.53%	5	26.32%
Commercial Access	19	15	78.95%	3	15.79%	1	5.26%

Implementation Level		Barrier A	Barrier B	Barrier C	Barrier D	Barrier E	Barrier F	Barrier G	Barrier H	Barrier I	Barrier J	Barrier K
	Sum	13		7	1	31	3	33		13	9	30
2.4	Weighted Sum	33		14	2	110	9	67		43	32	60

Unexpected Outcomes: - Time (-); Cost (-): Not showing favorable cost or schedule benefits because government oversight is inconsistent at the three work sites. Even though contract direction does not specify "how to", government people on site insist upon telling contractor how to perform certain tasks.

Narrative - Positive: - Performance based SOW resulted in 25% schedule improvement in end item repairs and spares processing.

Narrative - Negative: - Minimal applicability and implementation make benefits somewhat imperceptible.
- Mandated "how to" on certain processes.

Observations and Recommendations

Change Element	C09
CL Summary Observations	No direct ADR experience was found among those interviewed; however, there is broad agreement that improved communications are occurring between government and contractors, which should result in less litigation in the future.

ACQUISITION REFORM CHANGE ELEMENT: C09 Improved communications related to potential disputes during contract execution

Description: More thorough, timely communications during contract execution, including use of ADR, avoiding unnecessary litigation.

Citation: PL 104-320 (Administrative Dispute Resolution Act of 1996); FAC 90-39 (XXIII).

Implementation Date:	6/20/96	Avg Awareness Level:	2.8	Personnel Interviewed:	Contracting	Engr	Finance	Mfg	Plant Wide	PM	QA
					☑	☐	☐	☐	☐	☐	☐

Expected Outcome:

Reduced contract schedule; reduced contract cost.

	Total Numbe	None		Minor		Significant	
Time	22	19	86.36%			3	13.64%
Cost	22	20	90.91%			2	9.09%
Quality							
Commercial Access							

Implementation Level		Barrier A	Barrier B	Barrier C	Barrier D	Barrier E	Barrier F	Barrier G	Barrier H	Barrier I	Barrier J	Barrier K
	Sum	31			3	28	24	36		58		20
2.0	Weighted Sum	113			12	108	86	109		192		50

Unexpected Outcomes: - Time (+); Cost (+): Improved business relationship with DCMC/DCAA - more team effort.

Narrative - Positive: - No disputes yet, but procedure is in place - ADR clause in contract.
- IPT, if properly executed, should eliminate litigation.

Narrative - Negative: - ADR clause is not in the contract.

Observations and Recommendations

Change Element	C10
CL Summary Observations	The primary focus of this change element was the use of commercial warranties, rather than DoD/service unique warranties, for the acquisition of commercial items. However, inclusion of this change element in interviews often resulted in discussion of warranties in general, and sometimes even the product liability issues related to commercial item acquisition and acquisition in a Performance Based Business Environment. Some managers interviewed report there are cases where government unique warranties are still being required. Additionally, others report that warranties are being purchased when they are unnecessary. In all these cases, these managers felt that this was money wasted. One issue raised is related to warranties on commercial components integrated into larger systems. The problem appears to be that, by the time DoD takes delivery of the system, the warranty on the commercial component has expired. Since the cost of the commercial component includes, to some extent, the cost of the warranty on it, DoD ultimately pays for an expired warranty. The cost related to extension of those commercial warranties, and the liability of the prime related to performance of those components were concerns noted. The use of warranties in conjunction with greater use of contractor logistics support throughout the life cycle of acquired systems seems to be an increasing trend. This trend appears to be consistent with the move to a performance based business environment, where contractors may maintain configuration control longer, and take greater responsibility for the performance of their design after the system is fielded. The issue of continuation of the "government contractor defense" in this environment was raised several times.

ACQUISITION REFORM CHANGE ELEMENT: C10 Use of commercial warranties and other product liability issues (risk management)

Description: FASA requires contracting officers to take advantage of commercial warranties

Citation: PL 103-355, sec 8002 (FASA); FAC 90-32; FAR 46.804; FAR 46.709:

Implementation Date:	9/18/95	Avg Awareness Level:	2.3	Personnel Interviewed:	Contracting	Engr	Finance	Mfg	Plant Wide	PM	QA
					☑	☐	☐	☐	☐	☑	☑

Expected Outcome:

Reduced contract cost; increased access to commercial.

	Total Numbe	None		Minor		Significant	
Time							
Cost	49	29	59.18%	2	4.08%	18	36.73%
Quality							
Commercial Access	49	35	71.43%	5	10.20%	9	18.37%

Implementation Level		Barrier A	Barrier B	Barrier C	Barrier D	Barrier E	Barrier F	Barrier G	Barrier H	Barrier I	Barrier J	Barrier K
	Sum	10		10		61	8	47		50	24	10
2.9	Weighted Sum	10		30		235	8	163		160	24	30

Unexpected Outcomes:
- Cost (-): Contractor offers a comprehensive warranty to the government for their product which protects the government over the lifecycle of the unit. It does not, however, reduce the contract price. The warranty is a CLIN and is priced like an insurance policy. The commercial warranties for subassemblies and components are rolled up into this warranty arrangement
- Cost (-): Warranty cost became part of the unit cost of the item and thus increased contract cost. It did however have a very favorable cost benefit in the operational and support cost area.
- Cost (-): Warranty was added cost because there were no seals, moving parts, little lubricnt - nothing to break - added little value.

Narrative - Positive:
- Huge success is reliability
- Government accepted contractor furnished warranty - did not dictate warranty to contractor
- One service preferred its warranty clause and accepted some modification to it which aligned it with another service's warranty on this particular program
- No warranty on this contract, but the company does have a separate commercial type warranty requirement on the maintenance contract for this system - essentially provides "bumper to bumper" coverage on an annual basis.

Narrative - Negative:
- Prime contractor added requirements to subcontractor commercial warranty that added costs
- Government had the opportunity, but imposed its own costly warranty requirements
- Warranties available from commercial vendors typically expire before the units are signed over to the government
- Contractor wanted to use commercial type warranty but service would not relax basic MILSPEC approach to requirements
- Negotiated commercial type warranty on some products - government not set up to execute warranty; commercial spares cost more because warranty risk must be reflected in price.
- Government continues to buy unnecessary warranties on legacy programs that have proven reliability

Observations and Recommendations

Change Element	C11
CL Summary Observations	Contracts managers interviewed concerning this change element reported that there are cases in which DoD continues to acquire, or attempts to acquire, data rights where it is not appropriate. Although the awareness level of this change was high in industry, some managers felt that part of the problem was a lack of awareness on the part of their DoD counterparts. In some cases where DoD did not pursue the acquisition of the data rights, significant cost savings were reported. One surprising result was the low percentage of interviewees that reported a significant increase in access to commercial as a result of implementation of this change element.

ACQUISITION REFORM CHANGE ELEMENT: C11 Rights in Tech Data & Computer Software

Description: DoD acquires only tech data & software rights necessary to satisfy needs; contractor retains rights if data developed at private expense

Citation: PL 103-355, sec8106; DFARS Part 227.71/.72; DFARS Case 91-8

Implementation Date: 6/30/95 Avg Awareness Level: 3.0

Personnel Interviewed:

Contracting	Engr	Finance	Mfg	Plant Wide	PM	QA
☑	☐	☐	☐	☐	☐	☐

Expected Outcome:

Reduced contract cost; increased access to commercial.

	Total Numbe	None		Minor		Significant	
Time							
Cost	32	18	56.25%	2	6.25%	12	37.50%
Quality							
Commercial Access	32	17	53.13%	7	21.88%	8	25.00%

Implementation Level		Barrier A	Barrier B	Barrier C	Barrier D	Barrier E	Barrier F	Barrier G	Barrier H	Barrier I	Barrier J	Barrier K
	Sum	10				41	45	54		10		10
2.7	Weighted Sum	37				118	140	165		10		40

Unexpected Outcomes: Time (+): Spend less time negotiating over rights.

Narrative - Positive:
- Government wanted rights in dtata but basic development was done by the contractor and the government was refused. Therefore the government did save approximately $5M in data on a $22M contract
- Contract had unpriced option for full data rightts which would have cost $50 million if exercised

Narrative - Negative:
- Government has entered into a multi-year contract (long term relationship) and yet wants all rights in data - a traditional government behavior.
- Government has unlimited rights to data - government hasn't learned anything about this one. Zero progress with reform regarding rights in technical data and computer software.
- New standard clause is in this contract, but company considers the data rights issue is not adequately resolved.

Observations and Recommendations

Change Element	E01
CL Summary Observations	Use of the Open Systems Approach to weapons systems acquisition is an area where there was majority agreement by those managers interviewed that significant benefits have been, and will continue to be realized. This approach is primarily being used on newer programs, however, some use on "legacy" programs was indicated. Within "legacy" programs, managers tend to overlook or not accept the benefit that the open systems approach can provide through form-fit-function interface (F3I) solutions within existing constraints.

ACQUISITION REFORM CHANGE ELEMENT: E01 Use of Open Systems Approach

Description: Integrated business/engineering strategy to choose specs & stds adopted by industry stds bodies or defacto stds for selected system interfaces

Citation: DoD5000.2 (4.3.4); USD(A&T) memo, 29 Nov94; USD(A&T) memo, 10 Jul 96

Implementation Date: 11/29/94 Avg Awareness Level: 2.8 Personnel Interviewed: Contracting ☐ Engr ☑ Finance ☐ Mfg ☐ Plant Wide ☐ PM ☑ QA ☐

Expected Outcome:

Reduced contract schedule; reduced contract cost; increased quality (more effective solutions); increased access to commercial.

	Total Numbe	None		Minor		Significant	
Time	74	29	39.19%	1	1.35%	44	59.46%
Cost	74	27	36.49%	6	8.11%	41	55.41%
Quality	74	32	43.24%	2	2.70%	40	54.05%
Commercial Access	74	19	25.68%	24	32.43%	31	41.89%

Implementation Level		Barrier A	Barrier B	Barrier C	Barrier D	Barrier E	Barrier F	Barrier G	Barrier H	Barrier I	Barrier J	Barrier K
	Sum	25	34	19	14	74	17	54		75	12	76
2.9	Weighted Sum	49	112	41	19	147	17	122		143	32	218

Unexpected Outcomes:
- Cost (-): Had to use an ADA processor - there was a faster, less expensive processor on the market. This increased instant and life cycle costs.
- Cost (+): State of the art technology allowed implementation of the key capability in this system at unexpectedly low prices. With open system, you get concurrency, that gets the cost down.

Narrative - Positive:
- Open system has a profound positive impact on cost - new functionality at no cost increase
- Real improvement will come later in program life - in reduced O&S costs
- AR Impact

"Been moving in this direction - time reduction 50% from 60's & 70's; ADA outside of commercial architecture but still answer to real time imbedded software.
Quality improvement as long as customer is amenable to this approach - can deviate from open architecture; thruput utilization & memory utilization has increased in some cases - less efficient.
A lot of commercial offerings don't meet environmental requirements - temperature extremes, shock & vibration - points you to a smaller degree of the commercial market"
- This measure has been reasonably well implemented. To the degree that it is not well implemented, the reason is the cost to change the design.
- Beyond Open Systems Approach, contractor allowed to use commercial software, which gave total flexibility.

Narrative - Negative:
- the implementation level is low because of the use of a hybrid product approach
- Customized applications - ADA related. Specifically, ADA was required - no waiver was applied for. Forced contractor to use an ADA compatible processor which drove up costs
- Inability to control the design of commercial by customer
- software upgrades done - broken out by service. Former subcontractor is now a prime contractor - builds black boxes with proprietary software & boxes are furnished as GFE.

Observations and Recommendations

Change Element	E02
CL Summary Observations	The use of rapid prototyping as an acquisition technique in software development is steadily increasing. On those contracts where there was an opportunity to use this technique, some impressive results were reported, as evidenced by the percentage of interviewees reporting reductions in contract schedule and cost figures, and the increase in quality of the product. There is still some resistance to the use of this technique, on the part of both government and industry, as evidenced by some of the comments made by managers interviewed. Others cited lack of final development o some tools, such as auto code generation, as a reason for lack of implementation.

ACQUISITION REFORM CHANGE ELEMENT: E02 Use of quick (rapid) prototyping in software development

Description: The creation of a working model of a software module to demonstrate the feasibility of the function. The prototype is later refined for inclusion in a final product.

Citation: DoDD 5000.1 (D.1.h); MIL-STD 498; DoD TAFIM, vol I (3.10) (4.2.2)

Implementation Date: 11/2/94 Avg Awareness Level: 2.6

Personnel Interviewed:

Contracting	Engr	Finance	Mfg	Plant Wide	PM	QA
☐	☑	☐	☐	☐	☑	☐

Expected Outcome:

Reduced contract schedule; reduced contract cost; increased quality .

	Total Numbe	None		Minor		Significant	
Time	64	23	35.94%	5	7.81%	36	56.25%
Cost	64	21	32.81%	9	14.06%	34	53.13%
Quality	64	34	53.13%	2	3.13%	28	43.75%
Commercial Access							

Implementation Level		Barrier A	Barrier B	Barrier C	Barrier D	Barrier E	Barrier F	Barrier G	Barrier H	Barrier I	Barrier J	Barrier K
	Sum	22	39	19	6	20	10	73	10	63	48	50
2.9	Weighted Sum	44	97	45	12	80	20	101	14	97	110	140

Unexpected Outcomes:
- Time (+), Cost (+): Government testing cost also decreased substantially as a result of this measure
- Time (-), Cost (-): Customers (lack of) expertise in software development makes it difficult to change the accepted practice.

Narrative - Positive:
- Doing this since 1987-88; increasing since then.One program had schedule & cost reductions = 50%; Not much on large program (production); new development program in place; existing programs - not widely used.
-There were savings on this contract as a result of this initiative - a small percentage of total contract cost, but still many millions.

Narrative - Negative:
- Implementation eliminates critical process steps (e.g. peer reviews as in process quality checks are eliminated) - results in problems not detected soon enough - defects tend to be higher during integration - concept ok, problem is company approach to rapid prototyping.
- Program Director senses a government backlash against rapid prototyping and the increasing levels as a replacement for the classic approach. Should consider some way of achieving an appropriate level that both the government and contract can live with.
- It's difficult to overcome the current comfort level, particularly with safety issues. Validation of new techniques causes a lag
- The contractor and customer feel comfortable with their existing company procedures. Because of the increased cost to implement prototyping and the perceived risk of relying on the prototype, they are both reluctant to change the company wide procedure.
- Only problem is that auto code generation is still immature (rapid prototyping software automatically generates code for system)

Observations and Recommendations

Change Element	E03
CL Summary Observations	One of the more controversial change elements for which managers were interviewed was the concept that the contractor maintain configuration control of the design solution for a longer period of time into a system's life cycle. As indicated by the statistics, the awareness level of this change element was moderate. The level of implementation on those programs where this concept was applicable, was also moderate. And, as with other change elements, where there was implementation, there were some impressive estimates of savings. The primary barriers that keep this change element from being fully implemented are two. First, there was a clearly stated decision on the part of DoD officials not to do it. Second, to a greater extent, there was "cultural resistance" to the change - the decision was not so clearly stated - instead, discussion of the issue was put off, or numerous excuses were found why the implementation couldn't take place. In interviews where this barrier was mentioned, the term "rice bowl" was frequently used - especially where it related to DoD engineering and logistics functional elements. It was recognized by many managers that the movement to contractor configuration control was a natural outcome of the move to a performance based business environment. They also recognized that the logistics support decisions made by DoD drove the overall implementation of this change element. Issues such as two level vs. three level maintenance concept, breakout of spare parts, and the congressionally mandated 60/40 rule were cited as being related to this. Another frequently cited reason for lack of implementation was that the program was a "legacy" program - and the associated improbability that DoD would reverse previous decisions related to this.

ACQUISITION REFORM CHANGE ELEMENT: E03 Contractor maintains configuration of the design solution

Description: Use of performance based acquisition reduces oversight of contractor configuration management practices; allows technology updates, other changes without extensive contract change

Citation: DoDDeskbook -(DoD Standardization Practices; Principles of Configuration Management); AMC-P-715-17, PBBE; MIL-HDBK-61

Implementation Date: 3/15/94 Avg Awareness Level: 3.0 Personnel Interviewed: Contracting ☐ Engr ☑ Finance ☐ Mfg ☐ Plant Wide ☐ PM ☑ QA ☐

Expected Outcome:

Reduced contract schedule; reduced contract cost; increased quality (more effective solutions); increased access to commercial.

	Total Numbe	None		Minor		Significant	
Time	80	35	43.75%	3	3.75%	42	52.50%
Cost	80	30	37.50%	10	12.50%	40	50.00%
Quality	80	45	56.25%	6	7.50%	29	36.25%
Commercial Access	80	35	43.75%	25	31.25%	19	23.75%

Implementation Level		Barrier A	Barrier B	Barrier C	Barrier D	Barrier E	Barrier F	Barrier G	Barrier H	Barrier I	Barrier J	Barrier K
	Sum	17	13	6	13	99	2	137	1	32	10	50
3.0	Weighted Sum	27	37	6	13	183	4	366	1	78	15	160

Unexpected Outcomes:
- Cost (-): In removing old rules, people are more confused. Now tailored decisions must be made & communicated. Lack of standdardization creates it's own cost.
- Cost (+): Whole logistics tail feeds off government configuration control - every minor change changes pubs, tps's, etc., tools, repair parts. Give contractor configuration control & depot - savings in cost of support will be enormous - what does it really cost to put an organic depot capability in place - much cheaper at manufacturer - all personnel, equipment already there.
- Cost (+): Maintenance costs reduced because contractor is responsible for design and subsequent maintenance costs - can make changes to fix dsign problems without extensive gov't qualification & testing

Narrative - Positive:
- Cost reduced 15% - simplifies designs, reduces parts, changes manufacturing techniques to reduce complexity to manufacture; mtbf 10 to 120 hours.
- Customer has come a long way. Contractor now has CL II change authority & configuration control. However, still requires CL I ECP. Review for CL II classification (local DCMC) takes about 5 days. CL I - no savings / reductions. CLII - eliminated (except DCMC)
- Huge savings by virtue of contractor control of the commercial configuration; results in commercial customer paid for, free ECP for life - no developmental cost to government - true COTS benefits

Narrative - Negative:
- Barrier relates to the structure of the program. The contractor has a full configuration control ontract over the system from one service. However, since the identical design is totally integrated into another service's system, the contractor is not allowed to make changes at the level II configuration on the design without that second service's approval.
- Threat of loss of jobs - Unsolicited proposal submitted - rice bowl fought & killed it. This program is an ideal candidate for this.
- This is a cost type contract - dollars constrain what contractor can do - so they do not necessarily have configuration control.
- Prime has some rice bowl issues. Prime retains class II concurrence

Observations and Recommendations

Change Element	E04
CL Summary Observations	Discussions with managers relating to streamlined procedures for review/approval of engineering change proposals (ECPs) raised a number of issues. In some cases, where the contractor was involved in a performance based acquisition, and that contractor maintained configuration control, the population of ECPs was dramatically reduced - a form of streamlining. There were reports of successful efforts to reduce the cycle time to process Class I ECPs. Use of electronic media, creation of joint configuration control boards, batch processing with conformance to strict cycle times, and use of "alpha contracting" techniques all were cited as techniques to streamline the ECP process. Additionally, where a program was operating in a joint government/contractor IPT environment, the improved communications and working relationships related to the IPT had a positive effect on ECP processing times. With all the positive feedback of the techniques being used came impressive results - the average estimated decrease in ECP processing time was over 25%. On the other hand, organizational barriers such as joint programs and joint ventures were cited as barriers to reducing cycle time and cost. And, as often reported in regard to other change elements, cultural barriers were cited - those associated with people's jobs involved in reviewing and processing ECPs. Industry perceives that there are some government engineers involved in efforts to add value by doing a more intense review and thus identifying marginal issues to be resolved.

ACQUISITION REFORM CHANGE ELEMENT: E04 Streamlined procedures for review/approval of engineering change proposals (ECPs)

Description: In performance based acquisitions, ECPs are restricted to those affecting DoD's performance requirements with concurrent elimination of CL II ECPs

Citation: MIL Specs & Standards Reform PAT - MIL-STD-973D

Implementation Date: 1/1/95 Avg Awareness Level: 1.9

Personnel Interviewed:

Contracting	Engr	Finance	Mfg	Plant Wide	PM	QA
☐	☑	☐	☐	☐	☑	☐

Expected Outcome:

Reduced contractor time (ecp cycle); reduced ecp cycle costs.

	Total Numbe	None		Minor		Significant	
Time	50	14	28.00%	9	18.00%	27	54.00%
Cost	50	21	42.00%	19	38.00%	10	20.00%
Quality							
Commercial Access							

Implementation Level		Barrier A	Barrier B	Barrier C	Barrier D	Barrier E	Barrier F	Barrier G	Barrier H	Barrier I	Barrier J	Barrier K
	Sum	18			14	55	13	170	10	59		51
2.5	Weighted Sum	28			26	110	22	348	20	194		142

Unexpected Outcomes: Cost (-): Increased cost due to potential miscues and miscommunications - informality has its price

Narrative - Positive:
- Reduction in ECP processing time is at least 50%. Process about 100 ECP Class 1's a year.
- Paperless ECP - time cycle reduced from 1 year to 6 months; cost - 55 people working this to 35, other 20 put on other critical tasks.
- Contractor has CL II; uses IPT on class I, also alpha contracting; joint CCB with program office.
- IPTs help; also using alpha contracting approach on ECPs
- ECPs are batched - government & contractor have set a 60-90 day tunaround time; Batch processing helps plan $ - prioritize - does save mnor admin costs (2%).

Narrative - Negative:
- Joint venture relationship has limited implementation (concurrence in class)
- Schedule pressures slightly inhibit effective implementation of this. Key personnel are busy working other issues - slowing down ECP processing.
- Takes longer than before due to less expertise in program office and multi-service approval
- Class I ECPs painfully slow - lots of informal time to review, etc.

Observations and Recommendations

Change Element	E05
CL Summary Observations	Simulation as a replacement for some engineering tests is a change element that is still evolving. The program managers and program engineers interviewed about this change element cited cultural resistance as the major barrier to full implementation, but also gave strong weight to the barrier related to not having a proven system in place. This is evidenced by reports that both the old method of testing and the new method of simulation are being used on a number of programs. The results are then checked against each other. It appears that the comfort level with simulations is not adequate, in many cases, to rely on them completely. Time and development of proven simulation tools will raise this comfort level. There were some reports of significant cost reductions on programs using simulation as a replacement for some engineering tests. However, there were also reports of upfront costs to develop the simulation tools, as well as increased costs to run those tools while still conducting the actual testing. Most managers were concerned about these costs, but realized they were required to fully implement this change element.

ACQUISITION REFORM CHANGE ELEMENT: E05 Simulation as a replacement for some engineering tests

Description: Use of modeling techniques to test and evaluate design without building hardware prototypes

Citation: DoDD5000.1 (D.2.f); Army Thrust Area IV

Implementation Date: 3/15/96 Avg Awareness Level: 2.5

Personnel Interviewed:

Contracting	Engr	Finance	Mfg	Plant Wide	PM	QA
☐	☑	☐	☐	☐	☑	☐

Expected Outcome:

Reduced contract schedule; reduced contract cost; increased quality .

	Total Numbe	None		Minor		Significant	
Time	66	32	48.48%	2	3.03%	32	48.48%
Cost	66	30	45.45%	4	6.06%	32	48.48%
Quality	66	38	57.58%	1	1.52%	27	40.91%
Commercial Access							

Implementation Level		Barrier A	Barrier B	Barrier C	Barrier D	Barrier E	Barrier F	Barrier G	Barrier H	Barrier I	Barrier J	Barrier K
	Sum	4	55	16	35	59	20	111		95		25
2.8	Weighted Sum	8	109	22	61	119	40	221		210		50

Unexpected Outcomes:
- Time (-), Cost (-): Increased time & cost to develop tools (up front costs)
- Time (-), Cost (-): Increase in simulation has NOT resulted in a commensurate decrease in testing
- Cost (-): Some increases in cost due to duplication. Contractor may have done this anyway.

Narrative - Positive:
- Analytical modeling as a precursor to a final test resulted in 50% reduction in test time, manhours, and test articles. Expect to see more savings as the AR community gains a higher confidence level in simulation in lieu of test
- Use of simulations extensive - good results - but can & will be used more in next lot.
- The customer was able to take 60% out of the contract costs by going to simulation as opposed to live firing engineering tests. PM could not say enough good things about the use of simulation as a means of verifying performance of an end item such as this. They use the trainer as a simulator in lieu of using the actual system. Thus the high order of savings in cost and use to verify performance.
- Outcome is avoidance - without simulation, they would be above cost, late.

Narrative - Negative:
- Testing community is blocking simulation in lieu of testing - rice bowl issues.
- AR culture not in place within T&E community - they only believe in test results. No replacement of test results with simulation results. Same situation with safety.
- Must do both test & simulation; customer lacks confidence - doing thermal & stress modeling.
- Customer still requires testing - compares results of simulation with actual testing

Observations and Recommendations

Change Element	E06
CL Summary Observations	As evidenced by the low awareness level, many of the program managers interviewed are either not aware or only slightly aware of this change element. However, for those programs where this was applicable, the implementation level was high and, in several cases, program managers reported significant cost savings. Guidance related to this change element was published in a memo from the Deputy Secretary of Defense in June 1995. Additional guidance was later published in DoD 5000.2-R. Due to the requirement to process the waiver to the Component Acquisition Executive or Defense Acquisition Executive, and the reporting requirement to Congress, some contractor program managers felt there may have been a reluctance on the part of their government counterparts to pursue use of this change element unless absolutely necessary.

ACQUISITION REFORM CHANGE ELEMENT: E06 Survivability/lethality testing below end-item level

Description: SECDEF may issue waiver allowing survivability/lethality testing of components, systems and subsystems

Citation: PL 103-355, Sec. 3014 (FASA); DepSecDef policy memo, 6/26/95; DoDI 5000.2 (3.4.9)

Implementation Date: 10/13/96 Avg Awareness Level: 1.3 Personnel Interviewed:

Contracting	Engr	Finance	Mfg	Plant Wide	PM	QA
☐	☐	☐	☐	☐	☑	☐

Expected Outcome:

Reduced contract cost

	Total Numbe	None		Minor		Significant	
Time							
Cost	11	6	54.55%	1	9.09%	4	36.36%
Quality							
Commercial Access							

Implementation Level		Barrier A	Barrier B	Barrier C	Barrier D	Barrier E	Barrier F	Barrier G	Barrier H	Barrier I	Barrier J	Barrier K
	Sum				5	20	5	20				
3.0	Weighted Sum				15	45	5	65				

Unexpected Outcomes:

Narrative - Positive: - Waiver received for component/subsystem end item testing - reduced numbers built by 20%.

Narrative - Negative: - EMI testing still requires end item because the installed "total environment" is still critical to successful EMI testing.
- This program is primarily upgraded subsystems - company has proposed to waive live fire testing of end item - OSD evaluating, but company expects government will require expensive live fire testing.

Observations and Recommendations

Change Element	E07
CL Summary Observations	This change element received mixed reviews from program managers and program engineers interviewed. On programs where this change element was applicable, implementation level was moderate, and some impressive savings were reported on a number of programs. A number of program managers cited resource constraints related to the concurrency of the testing. Some managers felt that experience with integration of these various testing events will result in managers learning how to handle the resourcing issues. As with other change elements related to testing, cultural resistance to change, primarily within the government testing community, was cited as the key barrier.

ACQUISITION REFORM CHANGE ELEMENT: E07 Concurrent developmental testing (DT)/operational testing (OT)

Description: T&E programs structured to integrate all DT&E,OT&E, live fire, and modeling & simulation activities conducted by different agencies.

Citation: DoD 5000.2 (3.4); Army Thrust Area IV

Implementation Date: 12/13/96 Avg Awareness Level: 2.3

Personnel Interviewed:

Contracting	Engr	Finance	Mfg	Plant Wide	PM	QA
☐	☑	☐	☐	☐	☑	☐

Expected Outcome:

Reduced contract schedule; reduced contract cost.

	Total Numbe	None		Minor		Significant	
Time	57	17	29.82%	6	10.53%	34	59.65%
Cost	57	23	40.35%	7	12.28%	27	47.37%
Quality							
Commercial Access							

Implementation Level		Barrier A	Barrier B	Barrier C	Barrier D	Barrier E	Barrier F	Barrier G	Barrier H	Barrier I	Barrier J	Barrier K
	Sum	27	2		22	50	9	115		45		20
3.0	Weighted Sum	47	6		36	120	13	203		125		40

Unexpected Outcomes:
- Time (-), Cost (-): Resource constraints - too much testing concurrency for available resources - tried to keep all the class test tasks (M-Demos, etc.) without setting priorities on test asset use
- Cost (-): Not enough test resources to go around in a compressed test cycle - did not adequately permit parallel testing
- Cost (-): Compression of the test schedule for destructive testing and operational testing creates a domino situation of sequential events that is very success oriented. When test results reflect a defect or need to retest, it puts a cost strain on the contractor to come up with an acceptable fix which permits maintaining schedule to finish the test scenarios.
- Cost (-): Compression of DTE and OTE, while saving some time, resulted in increased cost. A test defect finding in one area resulted in re-testing in another test sequence. Did not get the benefit of optimizing test resources since items were needed to support simultaneous tests resulting in peaks and valleys in utilization
- Quality (+): Quality improved due to earlier knowledge of potential operational deficiencies

Narrative - Positive:
- Repetitive, duplicative agency testing greatly subsided. Government used to do contractor test in the government facility to verify. That is minimal now.
- Biggest impact - no surprises in OT - eliminates recycle which can result in time delays.
- Cost savings less than 1%, but still in excess of several million $
- Benefits of combined DT/OT was improvement in testing synergy between the government and industry from having government military user people involved earlier. Better data test results

Narrative - Negative:
- Government insists on multiple and separate testing so they get independent results - rice bowl issues - drives major cost growth.
- OT community has decided to treat DT/OT as OT. Requirements on hardware/ software fidelity is the same as it would be in OT - however in DT it can normally change. The OT community want the baseline frozen earlier.
- No good guidance - sequence of testing has worked so well that fear of increased risk prevents adoption. Should focus on this during development of TEMP

Observations and Recommendations

Change Element	E08
CL Summary Observations	The conversion from the use of MIL STD 100 for engineering drawings to a commercial standard is still very much a work in progress. Most of what was able to be converted to the ASME standard has been done or is close to being completed. MIL STD 100 will remain only for defense unique requirements. This was one change element where cultural resistance was not the principal barrier. MIL STD 100 has been the industry standard. Both government and their industry partners are trained in it and their systems are developed consistent with it. Until the commercial standard is fully implemented, and people are trained to the changes, the government will directly or indirectly require compliance with MIL STD 100, and companies, for the most part will retain their current systems. Many of the programs for which interviews were conducted already had existing Level 3 drawing packages, and most managers felt that, now in place, they should be maintained Managers interviewed primarily focused on the MIL STD 100 issue, and not the issue related to level of detail required. Of those few that did address level of detail, most seemed to indicate that there has been relaxation to level 2 or 1 where it made sense.

ACQUISITION REFORM CHANGE ELEMENT: E08 Use of commercial engineering drawing practices

Description: MIL-STD-100 being revised to eventually convert to ASME Y 14.100; also, reduction in level of detail required in drawings due to revision of MIL-T-31000 to conform with MIL-STD-961D; also, use of CALS CITIS will help resolve issue of data detail required

Citation: Revised MIL-STD-100

Implementation Date: 2/1/95 Avg Awareness Level: 2.4

Personnel Interviewed: Contracting ☐ Engr ☑ Finance ☐ Mfg ☑ Plant Wide ☐ PM ☐ QA ☐

Expected Outcome:

Reduced time/cost related to drawings.

	Total Numbe	None		Minor		Significant	
Time	41	11	26.83%	18	43.90%	12	29.27%
Cost	41	12	29.27%	17	41.46%	12	29.27%
Quality							
Commercial Access							

Implementation Level		Barrier A	Barrier B	Barrier C	Barrier D	Barrier E	Barrier F	Barrier G	Barrier H	Barrier I	Barrier J	Barrier K
	Sum	5	13	18	5	18	23	37	75	35		31
2.6	Weighted Sum	10	33	64	12	60	63	81	144	110		63

Unexpected Outcomes:
- Time (-), Cost (-): Harder to implement than expected. Developing new procedures was time consuming and costly
- Cost (-): Subcontractor could not adjust to the commercial style drawings. Needs to train his manufacturing floor people better
- Cost (-): Would have increased subcontract cost $1M if implemented by the prime
- Time (-): People on shop floor used to MILSTD 100.

Narrative - Positive:
- Pleased to see more and more willingness to use contractor drawings in lieu of government specified - good progress being made.
- Using CAD models vs engineering drawings now
- Implemented on test equipment only - only 6-7% of the entire contract - big success in terms of test equipment.

Narrative - Negative:
- Services are still wanting unique formats for their drawings - driving multiple legends and other nuances to suit their cultural past.
- Using the same drawing practices despite the cancellation of MILSTD-100
- No common drawing standard -staying with milstd- relaxing to level 1 & 2 when appropriate. Why pay for less than level 3 when you already have a full level 3 TDP - new drawings must fit existing TDP.
- Customer continues to require drawing changes until they are done just like MILSTD 100 requirements.
- barrier is lack of training in non MILSTD 100 drawing practices.
- Customer still insisting on drawings meeting MILSTD 100 requirements even though it is not on contract. This needs to be stopped by SPO director

Observations and Recommendations

Change Element	E09
CL Summary Observations	As with several other change elements related to use of automated tools, a major barrier to full implementation is the lack of a standard automated system. Software incompatibility and, to a lesser extent, problems with transmission systems were cited as major factors inhibiting implementation. Many of those interviewed felt that it was just a matter of time - to develop the technology and get it out where it can be used. Implementation was ongoing on some programs. Where it was implemented, many positive comments were received. There were a number of managers who were involved with "mature" programs, where paper-based documentation was already in place. Some questioned the usefulness of or the justification for converting to a digital system.

ACQUISITION REFORM CHANGE ELEMENT: E09 Use of EDI to streamline engineering design and testing (e.g., JEDMICS, CMIS)

Description: Use of automated tools enable government-contractor interface in standardized manner & operate in integrated database environment. Eliminate lost apeture cards ; contractor receives/delivers drawings in digital format.

Citation: Navy Cardinal Point 1-3 and 4-1; Draft MIL-HDBK-91

Implementation Date: 12/1/95 Avg Awareness Level: 2.8

Personnel Interviewed:

Contracting	Engr	Finance	Mfg	Plant Wide	PM	QA
☐	☑	☐	☐	☐	☑	☐

Expected Outcome:

Reduced time/cost related to drawings; increased quality in drawings.

	Total Numbe	None		Minor		Significant	
Time	86	39	45.35%	28	32.56%	19	22.09%
Cost	86	36	41.86%	33	38.37%	17	19.77%
Quality							
Commercial Access							

Implementation Level		Barrier A	Barrier B	Barrier C	Barrier D	Barrier E	Barrier F	Barrier G	Barrier H	Barrier I	Barrier J	Barrier K
	Sum	13	34	18	13	44	47	47	30	156	20	58
2.8	Weighted Sum	19	91	43	29	108	114	100	90	332	50	124

Unexpected Outcomes:
- Cost (-): Cost up due to incompatible software at each site.
- Quality (+): Use of EDI for drawings results in at least 80% improvement in the quality of the drawing package overall.
- Time (+): This initiative facilitates providing data to subs/vendors - not time constrained; enhances ability to manage revs & changes for outstanding issues.

Narrative - Positive:
- Although low in applicability and implementation, there were high savings in schedule and cost related to drwaings and design data due to EDI
- All CAD - $1million in savings on program

Narrative - Negative:
- Problems with EDI - Each customer desires different media software. Also, each service and program office wants wide range of different media causing proliferation problems at contractors with a large customer base.
- Licensing issues - government wants to see the drawing, but doesn't have the license to use the software that the contractor is using. Every government site has it's own IT system - different with each office. Contractor must accommodate multiple government software & hard ware systems.
- Contractor unable to take full advantage of EDI because customer does not have EDI capability

Observations and Recommendations

Change Element	F01
CL Summary Observations	An awareness of DCAA efforts to adopt a more risk management based approach in their financial oversight of defense contractors did not register very high among those interviewed. While some felt that the DCAA field audit staff was in step with acquisition reform initiatives, others believed that local DCAA audit staffs are resisting reform either out of concern for raising government risks or due to a lack of specific guidance. Also, there is a concern in industry that their required data gathering for defective pricing reviews, et. al. can be totally disproportionate to the ultimate benefits derived. DCAA should possibly consider conducting objective, field level assessment of financial oversight activities aimed at reconciling acquisition reform related policy and local office implementation, drawing on contractor input to define significant issues.

ACQUISITION REFORM CHANGE ELEMENT: F01 Use of risk-based approach to DCAA financial oversight

Description: Tailoring scope of DCAA audits based upon risk assessment methodology; Provided and discussed with contractor executives annually. Objective - work with contractor to correct deficiencies

Citation: ICAPS (Internal Control Audit Planning Summary) - FY 94

Implementation Date: 10/1/94 Avg Awareness Level: 1.8

Personnel Interviewed:

Contracting	Engr	Finance	Mfg	Plant Wide	PM	QA
☑	☐	☑	☐	☐	☐	☐

Expected Outcome:

Reduced overall contractor cost related to oversight.

	Total Numbe	None		Minor		Significant	
Time							
Cost	47	24	51.06%	20	42.55%	3	6.38%
Quality							
Commercial Access							

Implementation Level		Barrier A	Barrier B	Barrier C	Barrier D	Barrier E	Barrier F	Barrier G	Barrier H	Barrier I	Barrier J	Barrier K
	Sum	27		3		15		248		25	2	
2.6	Weighted Sum	38		3		46		674		73	6	

Unexpected Outcomes:

Narrative - Positive:
- Fewer field pricing reviews - fewer floor audits. More characterized by DCAA seeking explanations, not additional data as was the case prior to reform.
- DCAA has been putting big emphasis on final rates supporting contractor close-out.
- DCAA only beginning to become proactive in acquisition reform - now more willing to rely on self-audits, etc. Part of this shift is function of reduced staffing rather than staunch new attitude and approach.

Narrative - Negative:
- As government business declines, have not seen commensurate reduction in DCAA oversight.
- ICAPS being used as means to justify staffing - more risk, more people. Changes in resident auditor can result in changes in risk ratings - even though processes/systems are the same. ICAPS ratings dropped when resident auditor left.
- DCAA doesn't appear to have bought in altogether to acquisition reform. Appears concerned it will erode its need for total independence.
- On field pricing reviews, DCAA auditors often extend their reviews beyond those issues raised by PCO, even looking at process and systems.
- DCAA sat at table during "one pass" IPT discussions but only reluctantly and without contributing in a meaningful way.

Observations and Recommendations

Change Element	F02
CL Summary Observations	Results of industry interviews suggest a relatively low level of awareness of a more flexible approach being used in establishing forward pricing rates. However, there appeared to be a high incidence of current FPRAs in existence, which is a probable reflection of the emphasis being given to maintaining FPRA coverage by DCMC and DCAA. With plant-wide FPRAs in place, this requirement for tailored FPRAs is minimized/eliminated.

ACQUISITION REFORM CHANGE ELEMENT: F02 Use of tailored negotiation of forward pricing rates

Description: Establish tailored FPRAs for smaller contracts when facility wide agreement not possible; Renegotiate elements of FPRA versus total agreement

Citation: CASPAT (Chapter 13); DCMC One Book (DLAD 5000.4) - Part 5, Chapter 3.

Implementation Date: 6/1/96 Avg Awareness Level: 1.2

Personnel Interviewed:

Contracting	Engr	Finance	Mfg	Plant Wide	PM	QA
☑	☐	☑	☐	☐	☐	☐

Expected Outcome:

Reduced overall contractor cost related to oversight.

	Total Numbe	None		Minor		Significant	
Time							
Cost	21	12	57.14%	6	28.57%	3	14.29%
Quality							
Commercial Access							

Implementation Level		Barrier A	Barrier B	Barrier C	Barrier D	Barrier E	Barrier F	Barrier G	Barrier H	Barrier I	Barrier J	Barrier K
	Sum	20			4	22		45	9			
2.7	Weighted Sum	80			16	69		159	26			

Unexpected Outcomes:

Narrative - Positive: - FPRAs do not seem to be a problem. Current FPRA in effect.

Narrative - Negative: - No current FPRA and haven't had one for years.
- Lack of a current FPRA in part attributable to continuous company organizational changes.

Observations and Recommendations

Change Element	F03
CL Summary Observations	Relatively high level of implementation confirms this change element is getting emphasis. With increased use of electronic submittals, industry is starting to question DFAS capability to process any faster, even though it gets to DFAS quicker. DFAS has automated initiatives ongoing, but impact of the Grassley Amendment is uncertain. Industry is generally pleased with this change and feels payment turnaround could be improved by as much as 50%; however, some question remains as to what the government may want in return for this time value of money benefit. It is appropriate to observe here that acquisition reform implementation can require action by both the government and industry. A pre-condition for approval of contractor direct submission of cost vouchers is an adequate billing system. Government data shows that of the 100 contractors that submit the greatest number of individual vouchers to DFAS, as of 31 August 1997, only 67 were eligible to direct bill. Of the 33 ineligible contractors, 85% were ineligible because of government-determined inadequacies in their billing systems.

ACQUISITION REFORM CHANGE ELEMENT: F03 Direct submission of cost vouchers to DFAS

Description: Contractors with adequate billing systems authorized by DCAA to submit direct costs (other than first and last)

Citation: Departmental Ltr 96-013; DFARS 242.803, (DAC 91-11); DCAA memo 22 July 96; DFAS memo 23 Dec 96.

Implementation Date: 5/21/96 Avg Awareness Level: 2.9

Personnel Interviewed:

Contracting	Engr	Finance	Mfg	Plant Wide	PM	QA
☐	☐	☑	☐	☐	☐	☐

Expected Outcome:

Reduced time related to cash flow cycle

	Total Numbe	None		Minor		Significant	
Time	25	8	32.00%	12	48.00%	5	20.00%
Cost							
Quality							
Commercial Access							

Implementation Level		Barrier A	Barrier B	Barrier C	Barrier D	Barrier E	Barrier F	Barrier G	Barrier H	Barrier I	Barrier J	Barrier K
	Sum	18			3	17		10		32		
3.2	Weighted Sum	57			3	48		34		88		

Unexpected Outcomes:

Narrative Positive: - Using EDI on progress payments now, targeting Sept. 97 for cost vouchers and DD250s.
- Direct submission of cost vouchers in place- with electronic submission to begin next fiscal year, expect to reduce turnaround time from 14-16 days to 11-14 days.

Narrative Negative: - DCAA resistance - series of reasons used - may be resolved in near future.
- No cost savings because DFAS is not paying any faster, even though vouchers are getting there sooner.

Observations and Recommendations

Change Element	F04
CL Summary Observations	Approvals of exemptions to requirements for certified cost or pricing data appear to be increasing. However, PCOs at some buying commands have been slow to apply the commercial exemption to TINA, in part due to lack of precise definition of commercial product. Some contractors are engaged in trying to get the endorsement or "prequalification" of their commercial product claims through SPI management councils. There appear to be widely varying positions being taken by PCOs as to the extent of the conditions necessary to qualify for the exemption. Government contracting officers also seem to be having some difficulty with the transition to established catalog pricing in circumstances where the same item was previously procured with certified cost or pricing data, and a significant difference exists between the catalog price and price history. Implementing guidelines at the buying command level may need review and amplification.

ACQUISITION REFORM CHANGE ELEMENT: F04 Use of commercial and other exemptions for cost or pricing data

Description: Created exemptions to requirement for cost or pricing data for services & modifications to commercial items: also, for noncompetitive buys for commercial items.

Citation: PL 103-355, Subtitle IB; FAC 90-32; FAR Case 94-721(FAR 15.804)

Implementation Date:	10/1/95	Avg Awareness Level:	2.9	Personnel Interviewed:	Contracting	Engr	Finance	Mfg	Plant Wide	PM	QA
					☑	☐	☑	☐	☐	☐	☐

Expected Outcome:		Total Numbe	None		Minor		Significant	
Reduced PALT; reduced Bid & Proposal costs; greater access to commercial.	Time	29	9	31.03%	4	13.79%	16	55.17%
	Cost	29	10	34.48%	2	6.90%	17	58.62%
	Quality							
	Commercial Access	29	19	65.52%	2	6.90%	8	27.59%

Implementation Level		Barrier A	Barrier B	Barrier C	Barrier D	Barrier E	Barrier F	Barrier G	Barrier H	Barrier I	Barrier J	Barrier K
	Sum	32			5	16		46		10	1	
3.1	Weighted Sum	59			15	58		95		40	3	

Unexpected Outcomes: - Time (-): Implemenation may be more an issue for subcontractors dealing with primes than primes engaging PCOs. Subcontract administrators at prime level are normally not senior enough or empowered to exercise judgement.

Narrative - Positive:
- One perceptible change is that contracting officers are more willing to listen to the contractor when the latter brings up FASA exemptions/alternatives to certified cost or pricing data.
- Contractor has developed list of commercial products and briefed Management Council and DCMC - hoping for acceptance of logic and ACO endorsement of exemption in future procurements.

Narrative - Negative:
- PCOs are not necessarily taking the initiative to engage the spirit/letter of FASA.
- Government has taken a big step forward in FAR Part 12. However, government PCOs are still reluctant to recognize as commercial items those where the government shared the development exposure with the contractor.
- Commercial product exemption from TINA has been a disappointment especially if the product, even though acknowledged as a commercial product, has been procured in the past based on certified cost or pricing data.
- In those cases where there is a commercial product catalog price, but previous sales were mostly to international customers, PCOs are reluctant to accept catalog price…want to drive down price via cost or pricing data.

Observations and Recommendations

Change Element	F05
CL Summary Observations	There appears to be a relatively high resistance to change regarding this change element as reflected in the barrier analysis. Outcome analysis reflect modest savings to date where implemented. Many in industry believe PCOs are still held to requirement for obtaining certified cost or pricing data, so they are reluctant to consider price analysis or other price support approaches. There is some evidence to suggest that there are PCOs who are unaware of FASA new order of priority for cost/price information. There is a possible need to place more emphasis on use of alternatives to certified cost or pricing data in professional training. Price analysis, parametric estimating and other techniques should be incorporated in training curriculums. More emphasis might also be placed on measuring the government's own cost of individual contracting actions so that PCOs are incentivized to control/mitigate TINA type costs where practical to do so.

ACQUISITION REFORM CHANGE ELEMENT: F05 New order of priority for information/Adjustment of TINA threshold

Description: FASA recognized reliance on unnecessary cost or pricing data increases proposal preparation costs, extends acquisition lead times & wastes resources.

Citation: PL 103-355, Subtitle IB; FAC 90-22; FAC90-32:

Implementation Date: 10/1/95 Avg Awareness Level: 2.6

Personnel Interviewed:

Contracting	Engr	Finance	Mfg	Plant Wide	PM	QA
☑	☐	☑	☐	☐	☐	☐

Expected Outcome:

Reduced PALT; reduced Bid & Proposal costs.

	Total Numbe	None		Minor		Significant	
Time	34	15	44.12%	7	20.59%	12	35.29%
Cost	34	14	41.18%	9	26.47%	11	32.35%
Quality							
Commercial Access							

Implementation Level		Barrier A	Barrier B	Barrier C	Barrier D	Barrier E	Barrier F	Barrier G	Barrier H	Barrier I	Barrier J	Barrier K
	Sum	47				82		139		32		
2.0	Weighted Sum	124				303		395		98		

Unexpected Outcomes:

Narrative - Positive: - Contracting office waived submission of certified cost or pricing data - result was a three month PALT versus normal 12 month - this was third TINA waiver for this company.

Narrative - Negative: - Had one exemption but very next year government required certified cost or pricing data - cultural resistance revolves around concern that PCO will be criticized for not obtaining certified cost or pricing data.
- In no instance has the contractor be relieved of submission of cost or pricing data; however, the irony is that PCO not relying on cost package to validate price - using parametrics.
- Waiver granted for TINA. However, customer still required extensive detailed data - resulted in extended negotiations.
- Part of the problem is that PCOs are used to operating with specific, nonflexible guidelines. They are having some difficulty in discharging the flexibility they now possess.
- Government needs a training course that makes PCOs more comfortable with using price analysis for fair and reasonable price determinations.

Observations and Recommendations

Change Element	F06
CL Summary Observations	It would appear that parametric estimating techniques are not getting enough emphasis at either the government or contractor level despite efforts within the buying commands and DCAA to foster their use. There is some indication that implementation of this change element is being resisted at the local DCAA level, as well as within contractor activities. Use of parametrics is being put in context with past uses of these models - not in the context of a new environment, especially the performance based business environment, and the use of cost-performance trade-offs during pre-award activities.

ACQUISITION REFORM CHANGE ELEMENT: F06 Use of parametric cost estimating

Description: Use of parametrics on firm proposals submitted to Government;

Citation: D, DP memo, 28 Aug 95

Implementation Date: 8/28/95 Avg Awareness Level: 2.5

Personnel Interviewed:

Contracting	Engr	Finance	Mfg	Plant Wide	PM	QA
☑	☐	☑	☐	☐	☐	☐

Expected Outcome:

Reduced PALT; reduced Bid & Proposal costs.

	Total Numbe	None		Minor		Significant	
Time	43	17	39.53%	11	25.58%	15	34.88%
Cost	43	16	37.21%	13	30.23%	14	32.56%
Quality							
Commercial Access							

Implementation Level		Barrier A	Barrier B	Barrier C	Barrier D	Barrier E	Barrier F	Barrier G	Barrier H	Barrier I	Barrier J	Barrier K
	Sum	63				43	35	162	12	32		13
2.2	Weighted Sum	214				146	70	462	28	54		36

Unexpected Outcomes:

Narrative - Positive:
- Parametric cost estimating not used at the top, systems level because of size/complexity of program and lack of reliability versus use of bottom up approach. However, it is used at the subsystem/component level and to some extent, the process level.
- Prime did accept parametrics on increased requirement (i.e.., when requirement increased after submission of certified cost or pricing data on original requirement).

Narrative - Negative:
- Cultural problem with both government and industry - not enough confidence.
- Contractor not necessarily ready to embrace parametric cost estimating due to large investment in cost capturing systems.
- Parametrics not being accepted by government PCOs. Both the contractor and the government need to be more proactive. Significant overhead expense tied up in generating cost or pricing data.
- Contractor upper level management needs training on this.

Observations and Recommendations

Change Element	F07
CL Summary Observations	Responses varied across the spectrum. A surprising number of contractor pricing people were not aware of the change element. It is believed that more emphasis is needed within the government as well as industry to publicize this change element. Some respondents cited a problem where the language in the FAR was changed, but the wording of the certificate was not. In some of these cases, the result was a conservative company policy to avoid defective cost or pricing.

ACQUISITION REFORM CHANGE ELEMENT: F07 Reduced number of TINA sweeps

Description: Use of agreed cut-off date to eliminate endless TINA sweeps prior to contract signing

Citation: PL 103-355, sec 1207 (FASA); FAC 90-32;Proc PAT - Rec. 7A - DCAA Audit Guidance 2 Jun 95

Implementation Date: 9/18/95 Avg Awareness Level: 2.1 Personnel Interviewed:

Contracting	Engr	Finance	Mfg	Plant Wide	PM	QA
☑	☐	☑	☐	☐	☐	☐

Expected Outcome:

Reduced Bid & Proposal costs.

	Total Numbe	None		Minor		Significant	
Time							
Cost	23	11	47.83%	8	34.78%	4	17.39%
Quality							
Commercial Access							

Implementation Level		Barrier A	Barrier B	Barrier C	Barrier D	Barrier E	Barrier F	Barrier G	Barrier H	Barrier I	Barrier J	Barrier K
	Sum	43			10	50		72		5		10
2.3	Weighted Sum	160			40	200		195		15		10

Unexpected Outcomes: - FAR language changed but SF 1411 language has not been changed; thus there is no relief on sweeps.

Narrative - Positive:
- With more ALPHA contracting, the impact of sweeps is less.
- For FY 96, normal procedure is to disclose as received - one final sweep at contract settlement.
- PCOs are agreeing with bill of material cut-off date, not labor.
- Command used a series of cut-offs for various elements of cost.

Narrative - Negative:
- There is little evidence that government PCOs are willing to agree to cut-off date to reduce TINA sweeps. Contractor acknowledges that it needs to be more aggressive in asking for cut-off date.
- Even if available to us, our management would insist on current costs to eliminate any defective pricing allegations.

Observations and Recommendations

Change Element	F08
CL Summary Observations	A significant number of responses indicated that this issue did not come up in preaward activity, suggesting some lack of awareness among government PCOs. It appears that a principal impediment to implementation is a need for mutually acceptable milestone accomplishment criteria. As with a number of other change elements respondents looked at this change element in the context with the way business was done previously, not in the context with the performance based business environment. Clearly, education and training is needed in this area.

ACQUISITION REFORM CHANGE ELEMENT: F08 Use of performance-based progress payments

Description: Contract financing based on output/outcome versus input (labor, materials and overhead costs) - applicable only on contracts for non-commercial items awarded non-competitively.

Citation: PL 103-355, Sec 2001 (FASA); FAC 90-33

Implementation Date: 9/26/95 Avg Awareness Level: 2.3

Personnel Interviewed:

Contracting	Engr	Finance	Mfg	Plant Wide	PM	QA
☑	☐	☑	☐	☐	☑	☐

Expected Outcome:

Impacts time - Incentivizes contractor to adhere to delivery schedule.

	Total Numbe	None		Minor	Significant	
Time	33	21	63.64%		12	36.36%
Cost						
Quality						
Commercial Access						

Implementation Level		Barrier A	Barrier B	Barrier C	Barrier D	Barrier E	Barrier F	Barrier G	Barrier H	Barrier I	Barrier J	Barrier K
	Sum	33		13	10	66	46	36	19	20	7	10
2.2	Weighted Sum	132		46	37	216	184	92	62	80	21	40

Unexpected Outcomes: - Time (-): When performance based progress payments are used, takes longer to process invoices - customers put on additional requirements which unfavorably influence ability to meet milestone schedules.

Narrative - Positive:
- Very happy - full PCO support - works well.
- Negotiating performance based progress payments for FY 98 buy - have not yet settled means for government to monitor milestone accomplishment - hope to have some sort of process approval and spot checking.
- For one major program, company defined acceptance criteria used in manufacturing process - tolerance level - being employed.

Narrative - Negative:
- Don't let government get carried away on oversight on certifying completion of events - concern of management.
- Tried to negotiate performance based financing structure - couldn't reach an agreement on milestones and completion criteria. Also, could not reach an agreement to assign dollar amounts to milestones.
- Problem with training DCMC to the fact that there is a different standard for acceptance of interim milestones versus final acceptance - i.e., minor discrepancies that will be fixed later should not be a basis for rejecting milestone accomplishment.

Observations and Recommendations

Change Element	F09
CL Summary Observations	EFT is reportedly working well. EDI processing of progress payments requests is more successfully implemented to date than cost vouchers or delivery invoices (requiring DD 250 sign-offs). Contractors with both commercial and DoD customers want to use just one billing system. SPS should reduce mismatches due to data entry errors. DFAS has a number of automation initiatives ongoing which will support implementation o the change element. However, there is concern that any relief for the transaction volume problem that automation provides will be adversely impacted by Grassley Amendment requirements.

ACQUISITION REFORM CHANGE ELEMENT: F09 Use of EDI to facilitate contractor payment

Description: Use of EDI for business transaction information in accounting and vendor pay systems reducing data errors & transaction costs; use of DFAS Major Contract Payment System for progress payments & commercial invoices; DFAS major contract payments by EFT.

Citation: PL 104-134 (Debt Collection Act of 1996), sec 31001(x)(1); Director, DFAS memo, 3/20/95.

Implementation Date: 3/20/95 Avg Awareness Level: 2.7 Personnel Interviewed:

Contracting	Engr	Finance	Mfg	Plant Wide	PM	QA
☐	☐	☑	☐	☐	☐	☐

Expected Outcome:		Total Numbe	None		Minor		Significant	
Reduced cash flow cycle time	Time	25	9	36.00%	9	36.00%	7	28.00%
	Cost							
	Quality							
	Commercial Access							

Implementation Level		Barrier A	Barrier B	Barrier C	Barrier D	Barrier E	Barrier F	Barrier G	Barrier H	Barrier I	Barrier J	Barrier K
	Sum	45				10		15		70		
2.9	Weighted Sum	120				20		40		130		

Unexpected Outcomes:

Narrative - Positive:
- Contractor has been submitting invoices via EDI for sometime. Getting paid by EFT. Electronic payment is significantly reducing payment TAT.
- Progress payment requests submitted directly to DFAS using EDI - not able to quantify results.

Narrative - Negative:
- Still have to provide DD250 inspection and acceptance sign-offs. Can't use commercial invoices even though government may have purchased a commercial product.
- Expected a 3-4 day reduction in cycle time - delivery to government speeded up but payments not accelerated - problem in electronic interface between DCMC and DFAS - losing transactions.
- Also, mismatches between contract data in MOCAS and shipping invoice delays payment. Causes are both data entry errors and perhaps inaccurate data in contract.

Observations and Recommendations

Change Element	M01
CL Summary Observations	Although the focus of this change element was to be relatively broad, concerning commercial manufacturing practices, it quickly focused on the use of soldering and the cancellation of MIL-STD 2000A. From interviews with program managers, manufacturing managers and quality assurance managers, it became obvious that soldering standards is a sensitive issue. The conversion to a commercial standard got mixed reviews. Some managers reported that their replacement standard was just as stringent as MIL-STD 2000A as was the ANSI-J Level 3 standard. Savings cited in these interviews primarily focused on streamlined certification processes. Other managers were concerned about a lack of one standard.

ACQUISITION REFORM CHANGE ELEMENT: M01 Use of commercial soldering/other commercial manufacturing practices

Description: MIL-STD 2000A was cancelled 6/95 - no longer required on new contracts. SPI is being utilized to remove off existing contracts. The use of existing manufacturing processes shall be capitalized upon whenever possible.

Citation: DoD5000.2 (4.3.1); SECDEF memo, 6 Dec 95; USD (A&T) memo, 8 Dec 95; (SPI)

Implementation Date:	Avg Awareness Level:	Personnel Interviewed:	Contracting	Engr	Finance	Mfg	Plant Wide	PM	QA
6/1/95	3.0		☐	☐	☐	☑	☐	☑	☑

Expected Outcome:

Reduced contract schedule; reduced contract cost; increased quality; increased access to commercial.

	Total Numbe	None		Minor		Significant	
Time	86	56	65.12%	10	11.63%	20	23.26%
Cost	86	42	48.84%	13	15.12%	31	36.05%
Quality	86	74	86.05%			12	13.95%
Commercial Access	86	45	52.33%	28	32.56%	13	15.12%

Implementation Level		Barrier A	Barrier B	Barrier C	Barrier D	Barrier E	Barrier F	Barrier G	Barrier H	Barrier I	Barrier J	Barrier K
	Sum	2		18	14	68	39	10	15	44		20
3.3	Weighted Sum	6		49	23	211	122	26	45	108		70

Unexpected Outcomes:
- Cost (-): Up front cost increase to implement.
- Time (-), Cost (-): Prime as well as suppliers experienced manufacturing problems as a result of using commercial processes

Narrative - Positive:
- Soldering - use company procedure - cut back significantly in training certification frequency saving time and cost of developing solderers.
- Savings in vendor prices - 60-65% of systems cost.
- Contractor wrote its own soldering spec specifically for this program. This greatly increased quality. Implemented this shift a year before DoD took any action in this area
- Projects future cost savings but was a one-time up front cost to implement. Savings wil primarily result from fact that personnel don't need specialized contract by contract training.

Narrative - Negative:
- Contractor's soldering document looks alot like 2000A
- Company soldering practice was essentially as stringent as MILSTD-2000A with minor exception of solderer certification and some finishing requirements.
- ANSI J 001 class 3 is essentially the same as MILSTD 2000 - no real savings; Class 1 would save money - not implemented.
- QA manager says cancellation of MIL-STD 2000A has complicated his life by making the quality and practice of suppliers more of an unknown now that there isn't a valid, universal practice.
- This is a legacy program in which the design is fixed. Cost of moving to nonMILSPEC environment would be too costly

Observations and Recommendations

Change Element	M02
CL Summary Observations	The conversion to commercial standards and practices for calibration was not one of the change elements that raised a lot of controversy at the contractor locations visited. Generally, interviews were conducted with the manager in manufacturing or quality whose responsibility it was to oversee the calibration process in the facility. Most reported a large number of MILSPEC contracts in house and a contractor system designed to conform with the MILSPEC. In some cases, their systems were more stringent. Those aware of the change to commercial standards reported a similarity between the commercial and military standards.

ACQUISITION REFORM CHANGE ELEMENT: M02 Commercial standards/practices for calibration

Description: DSIC cancellation of MIL-STD-45662A. Contractors given choice of ANSI/NISC 2 540-1, ISO 10012-1 or any comparable standard.

Citation: PL103-355, sec8104; FAC90-32; DoDD5000.1 (D.1.I); DoD5000.2 (3.3.3.1); SECDEF memo, Jun 94; SECDEF memo, Dec 95; USD (A&T) memo, Dec 95 (SPI)

Implementation Date: 2/27/95 Avg Awareness Level: 2.1

Personnel Interviewed:

Contracting	Engr	Finance	Mfg	Plant Wide	PM	QA
☐	☐	☐	☑	☐	☐	☑

Expected Outcome:

Reduced contract cost; increased access to commercial.

	Total Numbe	None		Minor		Significant	
Time							
Cost	15	13	86.67%			2	13.33%
Quality							
Commercial Access	15	12	80.00%	3	20.00%		

Implementation Level		Barrier A	Barrier B	Barrier C	Barrier D	Barrier E	Barrier F	Barrier G	Barrier H	Barrier I	Barrier J	Barrier K
	Sum	10	10			10			10	40		20
2.7	Weighted Sum	10	40			40			40	40		60

Unexpected Outcomes:
- Cost (-): Customer previously paid for calibration (government did it) Now company must pay for their own calibration
- Cost (-): Increase in documentation requirements with the alternatives

Narrative - Positive:
- Implementation is about 95% complete. ANSI 2540-1 is as stringent as MIL-STD-45662A, but is more succinct and user friendly. Full implementation is imminent.

Narrative - Negative:
- Need suitable alternative. Even though government direction is to use the contractor's own calibration procedures, government manager requires the contractor to use a commercial calibration contractor to calibrate GFE equipment used by the contractor on this fixed price contract (this was not a requirement on the contract as negotiated). This is a result of DoD cancellation of MILSTD-45662A.
- Not only is this a legacy program, but there are other programs in house that require MILSPEC calibrtion process on equipment that is shared on many different programs. This is a candidate for SPI.
- The milspec system works for them - in fact their system goes beyond the milspec system - it's automated & has some flexibility - the only positive to commercial is they may get some more flexibility.

Observations and Recommendations

Change Element	P01
CL Summary Observations	Evidence shows joint IPTs are being extensively used and becoming increasingly effective as relationships grow and trust builds. Some instances were cited where cost, schedule and quality have been favorably impacted. Principal frustration seems to be lack of empowerment of participants; results of IPT deliberations often subjec to self-defeating review cycles. One other concern expressed was the use of the IPT forum to suggest additional effort by the contractor that was not foreseen, or priced, when the contract was negotiated.

ACQUISITION REFORM CHANGE ELEMENT: P01 Use of Joint Government Industry IPTs

Description: IPPD concept includes joint government-industry IPTs, focusing on program execution and identification/implementation of AR. Initiative would resolve program issues in a more timely manner through increased communications

Citation: PDUSD (A&T) memo, 28 Oct 94; SECDEF memo, 10 May 95; DoDD 5000.1(D.1.b)(D.3.c) (E.2.f); DoD5000.2 (3.3.5.1)(4.2); AF Lightning Bolt #5; Navy Cardinal Point 1-2,1-3,3-2,3-3; AMC Pam 70-27

Implementation Date:	5/10/95	Avg Awareness Level:	3.6	Personnel Interviewed:	Contracting	Engr	Finance	Mfg	Plant Wide	PM	QA
					☑	☑	☐	☐	☐	☑	☐

Expected Outcome:

Reduced contract schedule; reduced contract cost; increased quality.

	Total Numbe	None		Minor		Significant	
Time	192	88	45.83%	12	6.25%	92	47.92%
Cost	192	95	49.48%	15	7.81%	82	42.71%
Quality	192	95	49.48%	11	5.73%	86	44.79%
Commercial Access							

Implementation Level		Barrier A	Barrier B	Barrier C	Barrier D	Barrier E	Barrier F	Barrier G	Barrier H	Barrier I	Barrier J	Barrier K
	Sum	27	20	10		67	44	301	4	45	15	137
3.4	Weighted Sum	41	25	15		208	104	596	4	59	25	223

Unexpected Outcomes: - Generates additional action items - added costs result from these items - both sides need to better manage IPTs.

Narrative - Positive:
- On new programs with new design - more fertile ground - absolute winner.
- One particular issue would have stretched schedule out from 18 to 24 months - IPT avoided this.
- This company resisted use of IPTs. Have now realized IPTs work and fully endorse this method of management.
- Biggest impact is building trust, not time or cost reduction.
- There are near term cost increases but long term cost avoidance. No impact on contract cost and schedule - this is risk reduction.
- Government is more receptive to team based approach to problem solving. Less adversarial. DCMC is very open and readily facilitates team building.

Narrative - Negative:
- If problems are simple, it works all right - beyond that problems end up going through normal channels.
- More people form the government are now coming to meetings. There are few decisions and a lot more action items. Still need to learn a lot about the IPT process.
- Needs to be guidance concerning authority of IPTs to make decisions and not have contracting officer review unless significant issue.

Observations and Recommendations

Change Element	P02
CL Summary Observations	Awareness of this as a change element was relatively low, but when described, many respondents then acknowledged it as a change in the way DCMC and program offices were doing business. The increasing effectiveness of joint IPTs should help minimize, if not eliminate, redundant oversight activities. The evidence from this survey, however, shows that the provisions of DoD 5000.2 that address oversight coordination between program managers and DCMC may need increased emphasis, to include oversight activities by activities providing matrix support to government program managers.

ACQUISITION REFORM CHANGE ELEMENT: P02 Elimination of Redundant Oversight (Program Office, Services, DCMC)

Description: Reduction of redundant oversight by DCMC, service buying activities and program offices. Citations provided guidance for roles played by various government activities and use of a risk management approach to contract administration activities

Citation: DoD5000.2 (3.3.5.5/6); USD (A&T) memo, 28 Apr 95; CASPAT - USD (A&T) memo 21 Aug 95

Implementation Date:	4/28/95	Avg Awareness Level:	2.0	Personnel Interviewed:	Contracting	Engr	Finance	Mfg	Plant Wide	PM	QA
					☑	☑	☐	☑	☐	☑	☑

Expected Outcome:		Total Numbe	None		Minor		Significant	
Decrease in contractor costs associated with multiple and duplicative government fact-finding visits, technical reviews, etc., seeking same/similar information	Time							
	Cost	124	76	61.29%	36	29.03%	12	9.68%
	Quality							
	Commercial Access							

Implementation Level		Barrier A	Barrier B	Barrier C	Barrier D	Barrier E	Barrier F	Barrier G	Barrier H	Barrier I	Barrier J	Barrier K
	Sum	33	5		7	155	5	399		36	25	65
2.7	Weighted Sum	47	10		14	440	5	1073		96	50	105

Unexpected Outcomes:

Narrative - Positive:
- DCMC sits on the floor with the contractor - coordination is best ever.
- MOU on oversight signed by DCMC, company and government program office to eliminate redundancy.
- Little redundancy; DCMC helps with response to audits - reviews/screens.

Narrative - Negative:
- (Buying command) wants to monitor costs along with DCAA under their C-PARs (Past performance).
- Contractor sees much overlap between DCMC and (buying command). (Buying command) tends to treat DCMC as a second class participant.
- Program office is controlling oversight.

Observations and Recommendations

Change Element	P03
CL Summary Observations	Awareness of this change element as part of a formal risk assessment methodology was low. However, the majority of those interviewed feel DCMC is making successful transition to risk management based oversight. Many were especially complimentary of DCMC support for IPT and SPI activities. Industry is less convinced of reform in quality assurance. QARs, in some instances, are cited as resisting change.

ACQUISITION REFORM CHANGE ELEMENT: P03 Alignment of oversight with program risk

Description: Tailoring contract administration based on risk assessment methodology. Transition of government unique requirements on existing contracts to commercial/contractor specs and standards (DCMC)

Citation: DoD5000.2 (3.3.5.5/6); CASPAT - USD(A&T) memo 21 Aug 95

Implementation Date: 8/21/95 Avg Awareness Level: 1.9

Personnel Interviewed: Contracting ☑ Engr ☑ Finance ☐ Mfg ☑ Plant Wide ☐ PM ☑ QA ☑

Expected Outcome:

Decrease in contract costs related to interfacing with contract/program administration

	Total Numbe	None		Minor		Significant	
Time							
Cost	127	84	66.14%	6	4.72%	37	29.13%
Quality							
Commercial Access							

Implementation Level		Barrier A	Barrier B	Barrier C	Barrier D	Barrier E	Barrier F	Barrier G	Barrier H	Barrier I	Barrier J	Barrier K
	Sum	44	10			87	10	321		39	14	95
2.9	Weighted Sum	96	20			242	10	768		115	14	205

Unexpected Outcomes: - Time (-); Cost (-): DCMC risk management approach has resulted in more work for contractor program office; periodic report must be prepared for ACO.

Narrative - Positive:
- Nature of DCMC oversight has changed dramatically - for the positive. More effective use of same workforce.
- DCMC has moved from product surveillance to process evaluation; personalities sometimes create problems - DCMC methodology is not perfect but their philosophy is O.K.
- Little change in ratio of DCMC people to contractor workforce - however, not as much "prove it to me" episodes.
- DCMC is beginning to downsize to mirror company reductions.

Narrative - Negative:
- QARs are still inspecting product but say they are process auditors - risk management approach varies by local area.
- Programmatic people are reform minded and getting involved in IPTs, etc. Quality assurance activities evidence less change. Hardware being inspected because of paper errors. DCARS are issued for frivolous reasons and require formal response.

Observations and Recommendations

Change Element	P04
CL Summary Observations	The move from CSCSC to Earned Value Management System appears to be taking hold, even given the relatively short period of time the DoD guidance has been out concerning this. Use of automated systems is spreading, with positive results. Company use of EVMS as a management tool on all contracts (not just cost type) is taking place and, in some cases, this information is being passed to their DoD customers, even though it's not a contractual requirement. The primary complaint heard concerned CSSR reporting requirements on contracts where the manager felt the dollar value of the contract did not justify the reporting. Some negative feedback was received concerning the USD(A&T) decision not to accept industry self certification. However, reports of DCMC involvement have been positive.

ACQUISITION REFORM CHANGE ELEMENT: P04 Tailoring cost/schedule reporting standards to industry guidelines/reduction of contractor mgt system reviews

Description: Modification of C/SCSC to accept industry's earned value management criteria. USD (A&T) memo cited stated the industry guidlines (drafted by NSIA, AIA, EIA, SCA and ABA) as acceptable substitutes. DoD PM can tailor K data to specific program needs

Citation: OMB Circluar A-11, Part 3 (1996); DoDD 5000.2R, Part 3.3, 4.3; USD (A&T) memo, 14 Dec 96; SPI; Departmental Letter 97-011, DDP, 5 March 97.

Implementation Date: 3/5/97 Avg Awareness Level: 2.5

Personnel Interviewed: Contracting ☐ Engr ☐ Finance ☑ Mfg ☐ Plant Wide ☐ PM ☑ QA ☐

Expected Outcome:

Decrease contractor costs related to collection and reporting of cost/schedule information and related mgt system reviews

	Total Numbe	None		Minor		Significant	
Time							
Cost	49	18	36.73%	16	32.65%	15	30.61%
Quality							
Commercial Access							

Implementation Level		Barrier A	Barrier B	Barrier C	Barrier D	Barrier E	Barrier F	Barrier G	Barrier H	Barrier I	Barrier J	Barrier K
	Sum	18				45	20	51		46		10
3.0	Weighted Sum	52				160	40	132		116		40

Unexpected Outcomes:

Narrative - Positive:
- Contractor provides EVMS to government since they generate it for their own purposes - no contractual requirements
- In total agreement with OSD's initiative to tailor cost/schedule reporting standards to industry guidelines. Contractor does not have its own commercial based earned value system. Currently working with DCMC to modify its C/SCS system to provide more summary level reporting. DCMC has been very cooperative. Contractor is finding that in those situations where they are lower tier subcontractor that upper tiers are applying greater pressure to provide current performance data. Accordingly, there is more intensity to get data out, analyzed, and forwarded on time
- Reviews added 75% to the cost of this system; Still using full system; Customer now has access to data on line; Reviews reduced/eliminated; EVMS measured weekly
- Although not a requirement on this program due to contract type, EVMS used as a management tool (Tailored)
- Outcome is not cost savings in redundant CPRs; have established on line system; weekly input -real time-better than working off reports which are 2-3 months old

Narrative - Negative:
- Implementation is not as simple as replacement of industry standards versus old cscsc. Companies must inform government as to how they intend to implement industry standards on a contract basis (approval may be required).
- $2 million contract and government has imposed traditional CSSR requirement in lieu of company's earned value system.
- On one study CLIN, PCO dropped CSSR requirement but probably because of funding shortage rather than because of reform; however, in subsequent study CLIN, CSSR requirement imposed
- CSPEC requirement on this contract, which is surprising for $1.5-1.6M cost contract. Probably a function of the requiring activity. DCMC has approved contractor's earned value system. CSSR is imposed on this contract.

Observations and Recommendations

Change Element	P05
CL Summary Observations	The use of electronic means to provide programmatic and technical data to DoD customers received very high ratings when program managers were asked about implementation level. Not all these program managers reported that the system in place was a pull system (government had access to their data) versus a push system (where data was sent to their customer electronically), but many were working toward that. As with many other automation related change elements, a major barrier was the lack of a proven system in place, and the associated lack of equipment, incompatibility and infrastructure problems. Some program managers reported redundancy issues - again, a problem typically reported with automation related change elements. Both paper and electronic information was being provided. Positive comments were made concerning the timelines and quality of data provided, and how that enhanced communication led to more informed decisions.

ACQUISITION REFORM CHANGE ELEMENT: P05 Use of EDI to facilitate information between Government and contractor

Description: Beginning FY97, all new contracts require on-line access to, or delivery of, their programmic & technical data in digital form. Preference is on-line access to contractor developed data through contractor information system.

Citation: DoD5000.2 (3.3.4.5)

Implementation Date: 10/1/96 Avg Awareness Level: 2.7

Personnel Interviewed: Contracting ☐ Engr ☐ Finance ☐ Mfg ☐ Plant Wide ☐ PM ☑ QA ☐

Expected Outcome:

Reduced contract cost; increased quality of major contract deliverables.

	Total Numbe	None		Minor		Significant	
Time							
Cost	61	33	54.10%	2	3.28%	26	42.62%
Quality	61	44	72.13%			17	27.87%
Commercial Access							

Implementation Level		Barrier A	Barrier B	Barrier C	Barrier D	Barrier E	Barrier F	Barrier G	Barrier H	Barrier I	Barrier J	Barrier K
	Sum	6	6	3	5	11	15	26	12	105		21
3.4	Weighted Sum	6	11	9	10	11	35	35	22	210		21

Unexpected Outcomes:
- Time (-): Software incompatibility - can't open documents - must be resubmitted
- Time (+): Time savings - reviewers are more involved in the process
- Cost (-): Unexpected implementation cost - automation (server) & web page (including security of data)
- Time (-): Infrastructure is inadequate
- Time (+): Shortened review & approval time on program submittals
- Time (+): Use of EDI has resulted in 30% improvement in schedule time

Narrative - Positive:
- Better communication results in greater discussion/attention to data; thus greater focus on data content (which negates time/cost savings to certain degree)
- No specific EDI requirement but company has implemented, especially for E-mail transmission of text information.
- The real benefit is the quality & timeliness of decisions.
- Reviews have been reduced dramatically; Using digital cameras to take pictures of prototypes & electronically distributing pictures.

Narrative - Negative:
- Computer systems are not compatible - files are large - won't move - information looks different when it arrives;
- System now includes suppliers; difficult to collect/use standard logistics data because of cancellation of mil std 1388. Company uses wide area net, including program office, users, test sites, & big suppliers.
- Duplicate electronic and paper submitals are required - part of the problem is lack of equipment.
- Still some CDRLs - paper; automation of field offices not complete; automated information is current, trustworthy, twice as good.
- Contractor also delivers paper to program office, who then delivers it to their support contractor.

Observations and Recommendations

Change Element	P06
CL Summary Observations	This change element has a relatively high awareness level as well as a relatively high degree of implementation. Some estimates of significant savings were reported. On-going IPT activity should further reduce non value-added reporting requirements. Additionally, use of EDI between government program offices and their industry counterparts facilitated the reduction in CDRLs - particularly where the government is given access to contractor databases. Two major concerns were expressed. One was indications of the creep of CDRL requirements into statements of work. The second was the lack of format - the specific CDRL was eliminated, but the requirement for the information remained - with no set format. Every submission could result in reworking to a new format.

ACQUISITION REFORM CHANGE ELEMENT: P06 Elimination of non-value added reporting requirements/CDRLs

Description: Review and cancellation of obsolete/unnecessary DIDs by services, DLA and OSD; management data items limited to those essential for effective control.

Citation: DoD5000.2 (3.3.5.1); USD (A&T) memo, 4 Dec 95; DoDM-59C; AMC pamphlet 70-25;

Implementation Date: 12/4/95 Avg Awareness Level: 3.3 Personnel Interviewed:

Contracting	Engr	Finance	Mfg	Plant Wide	PM	QA
☑	☐	☐	☐	☐	☑	☐

Expected Outcome:

Decreased contractor costs related to preparation of reports required by CDRLs

	Total Numbe	None		Minor		Significant	
Time							
Cost	123	34	27.64%	44	35.77%	45	36.59%
Quality							
Commercial Access							

Implementation Level		Barrier A	Barrier B	Barrier C	Barrier D	Barrier E	Barrier F	Barrier G	Barrier H	Barrier I	Barrier J	Barrier K
	Sum	22		10	10	93	33	368		39		35
3.0	Weighted Sum	32		20	20	211	103	730		79		65

Unexpected Outcomes: - Still have informal expectations in lieu of CDRLs - minimizes cost savings of reduced formal reporting requirements.

Narrative - Positive:
- CDRLs reduced from 86 to 22; big savings in using contractor format with DID as a guide.
- CDRL reduction occurring over time through the IPT process; related in part to availability of on-line data. A lot of this work has to be done anyway - only savings is packaging.
- Government is more receptive to suggestions for reducing CDRL requirements.

Narrative - Negative:
- CDRLs reflect control mechanisms - reports went away but control mechanisms remain.
- Have 40 CDRLs in the contract - many are non-value added.
- While reduction of CDRL requirements, reporting requirements are starting to creep back into the body of tasks. More flexible, though, on use of contractor format.

Observations and Recommendations

Change Element	P07
CL Summary Observations	The implementation of Cost as an Independent Variable (CAIV) appears to be progressing fairly well. In interviews with industry program managers, a number of them raised the issue of "what does the "C" in CAIV mean?" They felt that the emphasis was being placed on production cost, not total life cycle cost (including operations and support cost). The primary implementation of CAIV appears to be on newer programs - although guidance has been published discussing a CAIV based program of modernization through form, fit, function, interface (F3I) spares upgrades. The biggest hurdle to overcome in implementing CAIV appears to be overcoming the long standing practice of putting schedule and performance first. However, once the government-industry team accepts the reality of the constrained fiscal environment, and work together to address the issues, there appears to be success. Some impressive results related to reduction of life cycle costs were reported by several program managers.

ACQUISITION REFORM CHANGE ELEMENT: P07 Cost as an Independent Variable

Description: Meeting aggressive cost targets through use of cost/performance trade-offs and making process changes to eliminate non-value added activities

Citation: DoDD5000.1(D.1.f); DoDI 5000.2 (3.3.3); USD(A&T) memo, 4Dec 95/

Implementation Date: 12/4/95 Avg Awareness Level: 2.6

Personnel Interviewed:

Contracting	Engr	Finance	Mfg	Plant Wide	PM	QA
☐	☐	☐	☐	☐	☑	☐

Expected Outcome:

Reduction of life cycle costs

	Total Numbe	None		Minor		Significant	
Time							
Cost	36	18	50.00%	1	2.78%	17	47.22%
Quality							
Commercial Access							

Implementation Level		Barrier A	Barrier B	Barrier C	Barrier D	Barrier E	Barrier F	Barrier G	Barrier H	Barrier I	Barrier J	Barrier K
	Sum	10			13	45	13	45		24	20	10
2.8	Weighted Sum	10			23	140	23	130		44	70	40

Unexpected Outcomes: Quality (+): Dollars saved through CAIV are being applied to better performance & quality of system.

Narrative - Positive:
- Realizing positive impact/outcome related to CAIV - one TRADE study had $200 million LCC delta; this had short term adverse impact, but was done for long term savings. Discussions are ongoing how to increase cost ceiling to allow for these trade-offs and not penalize contractor for overruning the contract (no adverse past performance).
- Will save in support costs - can be greater in software costs. IPT - CAIV link is important.

Narrative - Negative:
- Could realize significant savings but cultural resistance is preventing it.
- User community has no sense for balance between cost & performance. The PM is caught in the middle. CAIV must take place during the requirements generation process and the preaward process. If you limit opportunity prior to award, you've missed the window of opportunity.
- The government is not behind the use of CAIV on this program
- What does the C in CAIV mean - it does not really mean life cycle cost - in practice, it ends up meaning average unit production price or acquisition price. Despite what DoD says it is, it is not life cycle cost. The "c" changes, depending on who you're talking to.
- Congress set the unit cost of this system.
- Applicability - retrofit - tied to previous design; performance is tied to GFE; Cultural resistance - give up performance for cost; Award Fee - get cost out for same performance vs get cost out while reducing performance (CAIV).
- Focused on DTUPC - did look at life cycle costs (O&S), but UPC was primary focus - and non-recurring (balanced UPC & nonrecurring)

Observations and Recommendations

Change Element	Q01
CL Summary Observations	Due to DoD and industry initiatives and related widespread publicity, the implementation level of the change to the use of commercially accepted quality program standards is high. The Single Process Initiative appears to be the vehicle that many companies are using to make the conversion. Full implementation of this change element in many of the companies visited is only a matter of time - implementation is ongoing. There were mixed reactions to this change - many respondents said it was too soon to tell how it will turn out. Some cited the upfront implementation costs as a negative. Others cited the DoD policy of not accepting third party certification as a problem. Some managers gave positive reports on decreases in the number of government Quality Assurance Representatives in plant. Others reported real improvement taking hold in product quality, with reduced scrap and rework rates. A major concern in a number of facilities was the proliferation of company specific add-ons to ISO systems. This is creating a problem at the subcontractor level, when they have contracts with several primes with these company peculiar quality requirements. This makes it nearly impossible for the subcontracting company to have a single quality process for all products produced. One surprising result related to outcomes was that the managers interviewed generally did not report greater access to commercial technology as a result of the conversion to commercial quality standards.

ACQUISITION REFORM CHANGE ELEMENT: Q01 Use of commercially accepted quality program standards (e.g., ISO 9000 series)

Description: Recognition of commercially accepted quality program standards (e.g. ISO 9000 series) in place of MIL-Q-9858 A, MIL-I-45208, etc. This would reduce unnecessary paperwork and eliminate redundant quality assurance systems (both government and commercial)

Citation: SECDEF memo, Jun 94; USD (A&T) memo, 14 Feb 94; DFARS Case 95-007, final rule, 30 Nov 95; USD (A&T) memo, 24 Apr 95; USD (A&T) memo, 8 Dec 95; DoD5000.2 (4.3.2)

Implementation Date: 10/1/96 Avg Awareness Level: 3.6 Personnel Interviewed:

Contracting	Engr	Finance	Mfg	Plant Wide	PM	QA
☐	☐	☐	☐	☐	☑	☑

Expected Outcome:

Reduced contract cost; increased quality; increased access to commercial.

	Total Numbe	None		Minor		Significant	
Time							
Cost	94	68	72.34%	2	2.13%	24	25.53%
Quality	94	79	84.04%	2	2.13%	13	13.83%
Commercial Access	94	59	62.77%	20	21.28%	15	15.96%

Implementation Level		Barrier A	Barrier B	Barrier C	Barrier D	Barrier E	Barrier F	Barrier G	Barrier H	Barrier I	Barrier J	Barrier K
	Sum	1	1	40		33	30	50	15	117	12	30
3.3	Weighted Sum	2	2	40		79	90	110	20	251	24	60

Unexpected Outcomes:
- Cost (-): Increased implementation cost-more frequent audits-every 6 months vs every 2 years when government did them
- Cost (-): The nonavailability of commercial alternatives in every case has caused considerable cost impact to develop those alternatives as well as management of rules to qualify their diverse solutions
- Time (-), Cost (-): DCMC will not accept third party registration, insists on doing their own independent ISO 9001 audit, and issuing a separate qualification certificate. However, even after they have approved a contractor's ISO 9001 system, DCMC continues to impose themselves in the internal operations of the company, as they did under the old military standards. Prime contractors are allowed to flowdown requirements in excess of those imposed by DoD in the prime contract issued to them. Implementation of these unique requirements cost much to implement, and will result in recurring costs each year to maintain. In addition, primes refuse to recognize subcontractor's ISO 9001 third party/government certification. This despite the fact that some primes were allowed to certify themselves to ISO 9001.

Narrative - Positive:
- Using commercial quality programs is a good idea that has intangible benefits that might be reflected over time in reduced overhead; do not feel strongly that there are definitive cost savings or measurable quality improvements using traditional quality metrics. Do not feel that commercial access improvement was relevant.
- Contractor process is by and large as rigorous as the process it replaced; the effect is transparent on cost, quality and commercial. Any savings are in the area of indirect costs which are difficult to measure in terms of overhead reduction
- QARs in plant have dropped about 75% while local DCMC population has dropped 50% over the past three years
- Company improved quality SYSTEM, but that did not, in and of itself, improve quality. It helped focus people on systen issues. Company made dramatic improvements in documentation and some processes - caused them to look at processes & how documented. The goal was optimized system & repeatable process. Once you have a stable process, then you can improve it. ISO 9000 is not the only contributor - but it drives an environment of process improvement. Ultimately better quality product, better performance and / or lower cost. ISO conversion is first step towards performance specs and advanced quality system.
- Tangible benefits - root cause analysis is taking hold (scrap rate going down); discipline developing in system.

Narrative - Negative:
- While they have block change approval to use ISO 9000, each of the primes have their own individual Q.A. systems which they flow down to contractor. Each represents a ""little different twist"" on ISO 9000. So while this contractor now has one Q.A. system versus two (ISO & MILQ-9858) they have to respond to each of the prime's own unique requirements.
- ISO plus add-ons - add-ons limit creativity & growth. Now stuck to that added standard vs. ISO which is very open. Still must have compliant system based on minimum standards, but should be able to go further.
- The SPI that converted to ISO ultimately resulted in an increase in quality audits and more written process procedures than 9858
- Government added requirements to contractor's ISO 9000 process, i.e.., implemented with provisions
- No measurable savings from commercial practices such as ISO. They are being inspected frequently by foreign government teams to verify qualifications. No measurable quality benefits. No commercial access improvement because now have disparate commercial practices at various supplier levels when in the past used standard 9858, etc.

Observations and Recommendations

Change Element	Q02
CL Summary Observations	The managers responses to this change element were mostly positive. They reported that the move to process audits was resulting in reduced numbers of inspectors. They also reported an increase in the use of certified suppliers, more worker self inspection and fewer factory failures of parts as a result of decreased handling in inspection and test. On the other hand, there were reports of an adverse impact on quality of purchased parts. There was also the issue of difficulty with prime /subcontractor relationships, similar to that reported with ISO 9000 conversion, where different primes' approach to this change element varied, creating problems at the subcontractor level.

ACQUISITION REFORM CHANGE ELEMENT: Q02 Elimination of non-value added receiving/in-process/final inspection and testing

Description: Elimination/conversion/revision of multiple MILSPECs & STDs - 883D; 454; I-38535; I-45208; 781; 415; 2165; 810E; most government unique requirements eliminated from RFPs; SPI being utilized to change existing contracts.

Citation: PL103-355, sec8104; FAC90-32; DoDD5000.1 (D.1.i); DoD5000.2 (3.3.3.1); SECDEF memo, 29 Jun 94; SECDEF memo, 6 Dec 95; USD (A&T) memo, 8 Dec 95

Implementation Date: 6/29/94 Avg Awareness Level: 2.7 Personnel Interviewed: Contracting ☐ Engr ☐ Finance ☐ Mfg ☐ Plant Wide ☐ PM ☑ QA ☑

Expected Outcome:

Reduced contract cost; increased access to commercial.

	Total Numbe	None		Minor		Significant	
Time							
Cost	61	28	45.90%	6	9.84%	27	44.26%
Quality							
Commercial Access	61	50	81.97%	9	14.75%	2	3.28%

Implementation Level		Barrier A	Barrier B	Barrier C	Barrier D	Barrier E	Barrier F	Barrier G	Barrier H	Barrier I	Barrier J	Barrier K
	Sum			9	24	69	33	94	10	89	2	50
2.8	Weighted Sum			19	54	170	88	208	30	119	2	150

Unexpected Outcomes:
- Quality (+): Higher level quality - fewer factory failures as a result of decreased handling during receiving test (temperature extremes, etc.)
- Quality (-): Elimination of some inspection/testing has adversly impacted quality
- Time (+): Time for processing has improved by as much as 30% due to reduction of non-value added inspections

Narrative - Positive:
- Through a company program there has been a transfer of several manufacturing checks to the manufacturing workers themselves allowing reductions of dedicated inspectors from 200 to 13. Quality trains and certifies the manufacturing workers and monitors their work as inspectors
- Increasing number of certified suppliers, thus eliminating tests. Not sure what we will be able to do as we move to more commercial (plastic) parts. There may be increased variability on quality of parts.
- Supplier QA - Potential for greater savings in cost/time once complete AR implementation achieved at subcontractor level - conducted AR workshops with suppliers - initiatives that might be cost/time savers can't be implemented only for one prime - all primes must agree to reform initiatives
- Reduction of inspection has had beneficial effect on parts throughput on the line. Greatly speeding up the process.
- Almost exclusively process audits - don't do specific inspections - reductions in inspection personnel approximately 85%, supplier QA from 100 people to 6.
-

Narrative - Negative:
- Implemented at prime but not at suppliers. Issue is how do you flow down to suppliers.
- Having to prove your design against a performance based spec is harder than compliance spec and it will cost more.
- Source inspection requirements remain in effect - ripe area for cost reduction
- There is a FAR part that states, "The Government reserves the right to perform inspections to assess the quality of the product as they deem necessary." Thus, the contractor is not seeing the benefits of reduction in non-value added inspections.

Observations and Recommendations

Change Element	Q03
CL Summary Observations	The relatively high implementation level for this change element is basically due to the fact that many companies are converting this process as part of their overall conversion to commercially accepted quality standards. Both positive and negative feedback was received. Some managers reported that their ISO 9000 or similar system was just as stringent as MIL-STD 1520, and, in some cases more stringent - to include greater DCMC involvement, not less. On the other hand, there were reports that DCMC was assisting companies in streamlining their process related to non-conforming materials.

ACQUISITION REFORM CHANGE ELEMENT: Q03 Streamlined documentation/resolution of non-conforming material issues

Description: Cancellation of MIL-STD-1520A allows contractors to initiate less costly but effective procedures to identify and correct non-conforming parts and materials. This eliminates unnecessary paperwork related to MIL-STD-1520A and reduces cycle times

Citation: Cancellation of MIL-STD-1520A by DSIC (MIL SPEC/STD Reform), 31 Mar 95

Implementation Date: 3/31/95 Avg Awareness Level: 2.4 Personnel Interviewed: Contracting ☐ Engr ☐ Finance ☐ Mfg ☐ Plant Wide ☐ PM ☑ QA ☑

Expected Outcome:

Reduction in contractor costs related to identification and corrective action

	Total Numbe	None		Minor		Significant	
Time							
Cost	48	25	52.08%	15	31.25%	8	16.67%
Quality							
Commercial Access							

Implementation Level		Barrier A	Barrier B	Barrier C	Barrier D	Barrier E	Barrier F	Barrier G	Barrier H	Barrier I	Barrier J	Barrier K
	Sum	3			13	62	12	70	10	16	4	30
3.0	Weighted Sum	12			19	188	18	165	40	64	4	40

Unexpected Outcomes:

Narrative - Positive:
- Have been able to reduce nonconforming items by 50% and thus the number of waivers required, by getting DCMC to agree to standard repair process to be used in lieu of declaring nonconforming.
- Had effective PROCAS support to address this area. Between receiving and QA engineers, still consumes 20-25% of their time, but population of nonconforming categories reduced
- Greatly streamlined the nonconforming quantities with help from DCMC. Government approved new technology "standard repair process" for nonconformance items that would have heretofore been throw aways. Reduced actual nonconformances requiring government waiver by at least 33%.

Narrative - Negative:
- Despite cancellation of MILSTD 1520, there is still a requirement in the SOW, "failure reporting, analysis and corrective action plan which will be a part of the technical library." Even if these words were not in the SOW, the company would still have to do this anyway.
- The change from 9858A to ISO9000 and the government's interpretation of that did not alleviate any of those requirements related to 1520A. Actually, it gave DCMC a broader area of review. DCMC now looks at corrective action AND PREVENTION now, not just corrective action.
- Barrier is that company prefers 1520 stringency. Company has its own nonconforming material procedures but they are at least as stringent as 1520A. They liked MILSTD 1520 and don't want to change.
- Nonconforming procedures have been converted to company process, but is in total compliance in every respect with 9858 and 1520A, thus no recognizable savings in cost

Observations and Recommendations

Change Element	W01
CL Summary Observations	SPI appears to be a successful component of the DoD acquisition reform initiative. However, enthusiasm for SPI varies within industry. Where there is a proactive ACO guiding the process, results appear more extensive. Still, overall savings are very modest to date. Contractors with interchanging roles as prime and subcontractors find change coordination especially daunting. In some cases, they are experiencing more difficulty in getting approbation for their block change from a prime than the government . Or, where there are multiple prime contractors involved, each may impose unique conditions to approving a block change of a subcontractor. Government-industry conferences should be used to emphasize need for greater success of SPI at the subcontractor level as addressed in USD (A&T) memo of May 16, 1997 (one contractor visited sponsored a recent fair of subcontractors where block change ideas were solicited, collected and distributed to various process action teams for evaluation with assigned task completion dates). There is also an industry complaint that block change requests forwarded to headquarters for legal review are not being promptly acted upon or status updates are not being furnished to submitting contractors. Finally, it appears some block change requests are getting bogged down because of protracted fact-finding and negotiations over equitable adjustments. While consideration is a requisite component in SPI approvals, an objective in designing the process is timely disposition of a block change request. To the extent that this objective is not being realized , protracted negotiations should be closely monitored.

ACQUISITION REFORM CHANGE ELEMENT: W01 Single Process Initiative - new requirements/reprocurements and prime/subcontracts

Description: SPI supports MILSPEC & STD reform in DoD by providing a process to do block change removal of government unique requirements off all contracts in a facility; later memos addresed new requirements, subcontractor issues impeding full implementation of SPI.

Citation: SECDEF memo, 6 Dec 95; USD (A&T) memo, 8 Dec 95 (SPI); Army Thrust Area II; Navy Cardinal Point 3-2; PDUSD(A&T) memo, 30 April 97; USD(A&T) memo, 16 May 97.

Implementation Date: 12/1/95 Avg Awareness Level: 2.7

Personnel Interviewed:

Contracting	Engr	Finance	Mfg	Plant Wide	PM	QA
☑	☑	☑	☑	☑	☑	☑

Expected Outcome:

Reduced contract schedule; reduced contract cost; increased quality (more effective solutions); increased access to commercial.

	Total Numbe	None		Minor		Significant	
Time	169	106	62.72%	12	7.10%	51	30.18%
Cost	169	93	55.03%	22	13.02%	54	31.95%
Quality	169	121	71.60%	10	5.92%	38	22.49%
Commercial Access	169	122	72.19%	41	24.26%	4	2.37%

Implementation Level		Barrier A	Barrier B	Barrier C	Barrier D	Barrier E	Barrier F	Barrier G	Barrier H	Barrier I	Barrier J	Barrier K
	Sum	108	8	3	12	156	27	260		200	12	153
2.8	Weighted Sum	287	20	12	18	331	84	506		508	38	373

Unexpected Outcomes: - Cost (-): While (contractor) has approved block change for ISO 9000, and in our capacity as subcontractor to several prime contractors the change has been incorporated in our subcontracts, each prime has its unique additional requirements which have been imposed.

Narrative - Positive:
- SPI process has enabled (contractor) to strengthen relationships with customers who are each represented on Management Council.
- DCMC has been active advocate of SPI.
- SPI impelled company to re-examine its processes and develop improvements.
- Company using SPI to cut costs and increase safety.

Narrative - Negative:
- Biggest problem with SPI has been prime contractor acceptance.
- Until recently, PCO reluctant to incorporate approved block changes in joint venture contracts.
- Source of frustration is that block change requests referred to headquarters level for legal review tend to disappear from view, status never provided.
- SPI outcomes have not been worth the effort. With modest successes achieved, the effort required is considerable and substantive initiatives rejected or beset by inconclusive legal reviews.
- Government's preoccupation with consideration has extended turnaround time and violated intent of SPI process - certified cost or pricing data mentality.

Observations and Recommendations

Change Element	W02
CL Summary Observations	Program stability has always been a subject of considerable concern within the defense industry. Multi-year contracting is a primary vehicle for bringing funding stability to major programs. Several interviewees consider it ironic that at a time when public policy is focused on reforming the acquisition process, Congress seems to be losing interest in approving multi-year funding of defense requirements. Yet, there are huge savings potentials in funding large programs in this manner. Other concerns related to this issue include funding structure (color of money issues) and turnover of government personnel (primarily program managers, but also other government team members due to moves/reorganization).

ACQUISITION REFORM CHANGE ELEMENT: W02 Program Stability

Description: Use of recent statutory & other means to provide increased stability to DoD programs (increased use of multiyear contracting)- increased stability will reduce program restructuring and associated changes in quantities and / or schedules.

Citation: DoDD5000.1 (D.1.c); USD(A&T) memo, 28Apr95; AFFARS 5317.9103; SECNAVINST 5000.23, App II, Annex A, Sec4; DAPam 70-3, 11-C-3d.

Implementation Date: 4/28/95 Avg Awareness Level: 2.4 Personnel Interviewed:

Contracting	Engr	Finance	Mfg	Plant Wide	PM	QA
☐	☐	☐	☐	☑	☐	☐

Expected Outcome:

Reduced contract cost.

	Total Numbe	None		Minor		Significant	
Time							
Cost	4	2	50.00%			2	50.00%
Quality							
Commercial Access							

Implementation Level		Barrier A	Barrier B	Barrier C	Barrier D	Barrier E	Barrier F	Barrier G	Barrier H	Barrier I	Barrier J	Barrier K
	Sum		25	3		24		3		5		10
1.1	Weighted Sum		95	9		92		9		20		35

Unexpected Outcomes:

Narrative - Positive: - Multiyear contract resulted in 23% cost savings. Able to increase quantity on contract for same amount. Able to procure material in EOQs through terminal liability coverage.

Narrative - Negative: - Tried to get multiyear contract; didn't get to square one. There is huge potential for savings - 65% on materials.
- In certain missile program, contractor incentivized to invest in long-term unit cost reduction program in return for promise of stable, reasonably high production requirements over period of years. Program outyear requirements subsequently cut in budget process, injecting considerable instability to the program.

Observations and Recommendations

Change Element	W03
CL Summary Observations	Interviews concerning this change element were conducted with the industrial security managers in each facility visited. Not surprisingly, all had a high level of awareness of the implementation of the National Industrial Security Program (NISP) and the issuance of its operating manual, the NISPOM. Almost all comments received were positive and included some reductions in cost related to the administration of the NISP at that facility, with some cost reductions reported for document control. Improved working relationships with their DoD counterparts were also widely reported.

ACQUISITION REFORM CHANGE ELEMENT: W03 Streamlining procedures/controls related to administration of Defense Industrial Security Program

Description: Efforts to put in place a more simplified, uniform, and cost-effective industrial security program, while ensuring the security of sensitive information & technologies.

Citation: EO12829, 7 Jan 93; NISPOM, Jan 95; FAR Deviation, May 95; FAC 90-39, 20 Jun 96.

Implementation Date: 1/1/95 Avg Awareness Level: 4.0 Personnel Interviewed: Contracting ☐ Engr ☐ Finance ☐ Mfg ☐ Plant Wide ☑ PM ☐ QA ☐

Expected Outcome:		Total Numbe	None		Minor		Significant	
Reduction of costs related to preparation of detailed industrial security policies & procedures, incident reports & records, and costs related to DIS audits.	Time							
	Cost	8	5	62.50%	2	25.00%	1	12.50%
	Quality							
	Commercial Access							

Implementation Level		Barrier A	Barrier B	Barrier C	Barrier D	Barrier E	Barrier F	Barrier G	Barrier H	Barrier I	Barrier J	Barrier K
	Sum			3			3	4				10
3.8	Weighted Sum			3			3	4				10

Unexpected Outcomes: Cost (+): Pre-employment security clearance processing faster - technical personnel can go to work sooner (charge direct vs overhead); Better employee relations - more trusting environment; no increase in theft, no abuse of time & attendance; working relationship with DIS improved (was good, now better)

Narrative - Positive:
- Industrial Security Manual (ISM) - very stringent - previous to NISPOM - strictly by the numbers (do A.B.C., etc.) NISPOM - less stringent, less structure (created some trauma initially because the security people were used to doing everything by the numbers), is much better, and processes for clearances has improved (process to DISCO is much smoother and benefits from automation). Issue - interpretation leads to negotiation - working environment improved at the plant security level and between the contractor and the government.
- Cost of Guards has been reduced; positive ID system put in place; random inspection per contractor system vs. government imposed system.
- 3% reduction in NISP overall, 25% in document control; Savings through continuous joint audits vs. periodic inspections.
- Nominal reductions - changed procedures for secret info record keeping internally - minor savings in record keeping costs since most documents don't require individual document tracking.
- These changes have resulted in a 25% reduction in industrial security costs at this facility.

Narrative - Negative:
- Time delay in NISPOM updates - can't fully implement off letters.
- Standardization has not occurred - for example for personnel clearances there is not a single adjudication authority - FBI, CIA still using own systems - NISPOM not fully implemented, slow implementation of 2 person rule - is causing some increased costs - slow implementation of declassifications at contractor level due to need for services to notify contractor of declassification action.

Observations and Recommendations

Change Element	W04
CL Summary Observations	This change element was selectively addressed with plantwide officials. A low level of awareness was registered and there was a similar low evidence of implementation where a level of applicability was indicated. Since "other transactions" authority can be used to stimulate R&D, but not for the purpose of acquiring goods and services for direct benefit of the federal government, it has limited application within DoD. It does apply, however, to dual-use technology development with both military and commercial applications.

ACQUISITION REFORM CHANGE ELEMENT: W04 Use of "Other Transaction Authority"

Description: Prototype projects conducted using "cooperative agreements and other actions" versus contracts using FAR/DFARS; PL 104-201 expanded authority to military services, requires competitive procedures to the maximum extent practicable.

Citation: PL103-160(FY94 Auth. Act), Sec. 845; PL 104-201(FY97 Auth. Act) Sec 804; USD(A&T) Memo, 14 Dec 96: DoD5000.1 (D.1.h); Navy Cardinal Point 4-3

Implementation Date:	12/14/96	Avg Awareness Level:	1.2	Personnel Interviewed:	Contracting	Engr	Finance	Mfg	Plant Wide	PM	QA
					☐	☐	☐	☐	☑	☐	☐

Expected Outcome:

Reduced contract schedule; reduced contract cost; increased quality; increased access to commercial.

	Total Numbe	None		Minor	Significant
Time	3	3	100.00%		
Cost	3	3	100.00%		
Quality	3	3	100.00%		
Commercial Access	3	3	100.00%		

Implementation Level		Barrier A	Barrier B	Barrier C	Barrier D	Barrier E	Barrier F	Barrier G	Barrier H	Barrier I	Barrier J	Barrier K
	Sum				2	4	4				10	
2.0	Weighted Sum				6	12	12				30	

Unexpected Outcomes:

Narrative - Positive: - DoD is taking some advantage of Section 845 authority, albeit limited applicability where used in ARPA agreements, 10% cost reduction and major increase in commercial access.
- Negotiating exchange agreement with (service) - goods for services - getting old missile for rehab for resale in exchange for development work on future upgrades.

Narrative - Negative: - There is a connotation that 845 implies cost sharing due to its roots in TRP - industry reluctant - need to clarify guidance.

Observations and Recommendations

Change Element	W05
CL Summary Observations	The majority of those interviewed indicated the quality of post award debriefings is improving although they impute no savings in time/costs related to protests. A logical performance indicator of the success of this change element is the number of award protests received by the buying command.

ACQUISITION REFORM CHANGE ELEMENT: W05 More thorough post award debriefings

Description: More thorough, timely communications, including debriefings to losing competitors, to reduce reliance on other means of getting info, such as protests.

Citation: PL 103-355, Subtitle ID (FASA); FAC 90-32; FAR 33.214

Implementation Date: 9/18/95 Avg Awareness Level: 2.3

Personnel Interviewed:

Contracting	Engr	Finance	Mfg	Plant Wide	PM	QA
☐	☐	☐	☐	☑	☐	☐

Expected Outcome:

Reduction in contractor time/costs related to protests.

	Total Numbe	None		Minor	Significant
Time	3	3	100.00%		
Cost	3	3	100.00%		
Quality					
Commercial Access					

Implementation Level		Barrier A	Barrier B	Barrier C	Barrier D	Barrier E	Barrier F	Barrier G	Barrier H	Barrier I	Barrier J	Barrier K
	Sum					10		10				
3.3	Weighted Sum					10		10				

Unexpected Outcomes: - Contractor had some "warts" they hadn't previously realized. Corrected shortcomings, contributed to later wins, better performance; also lessened chance of protest in the future. Debriefs when you are a winner help a lot too.

Narrative - Positive: - Believe postaward briefings are slowly improving.

Narrative - Negative: - Fear of protest/litigation is limiting implementation. The more information put out at a debrief, the more information for a contractor to use in a potential protest - therefore, buying commands put out minimum.
- Quality of debriefings has not improved even though greater willingness of government to provide them. Thus, as deterrent to protests, little change has been made.
- Company does few protests, therefore little savings.

Observations and Recommendations

Change Element	W06
CL Summary Observations	Industry has strongly held views on the need for reform in government property administration. There are numerous concerns with the FAR provisions in this area. These have not been satisfied by the final rewrite of Part 45. Contractor community has been actively working through the AIA to address their concerns with the Director DoD Procurement. Among the most frequently mentioned issues during study interviews, industry wants to: - Exempt low dollar value property physical inventories, utilization reviews, record requirements and reports including those for loss, damage or destruction and simplify end of contract reconciliation. - Be permitted to use government property on other government contracts without advance approval of the contracting officer. - Make government right to unilaterally abandon property subject to bilateral agreement. - Resolve demilitarization coding issue by assigning coding responsibility to Plant Clearance Officers with physical disposition by DRMO. - Have method of depreciating government property so that realistic value is reflected in property record. - Have relief from requirement to insert NSN on property record for material unless unconsumed at the end c contract performance. - Have word "promptly" stricken from FAR provision governing receipt inspection of government property for "suitability for intended use." - Secure relief from need to maintain both a MRP/MMAS record for material and separate property record. Contractors want MRP system to be single source of material record without the need to redesign their system to include NSN/property class, and other required data fields. This is an inventory problem. It is too easy to get government property on the books, and it is too hard to get it off. It has been growing for years, and the problem is now being recognized as contracts and programs end, facilities close, and government property remains behind. We believe that the Director, DoD Procurement should continue to work closely with industry to reduce unnecessary controls and improve, where possible, the cost effectiveness of government property administration.

ACQUISITION REFORM CHANGE ELEMENT: W06 Streamlined Government Property Management

Description: Modifying requirements in FAR Part 45 to account for and maintain government furnished property. FAR deviation allowing contractors to refrain from tracking gov. property valued below $1,500 issued 31 Mar 95. Total rewrite of FAR Part 45 is ongoing

Citation: Contract Administration PAT, Feb 1995; FAR deviation, 31 Mar 95

Implementation Date: 3/1/95 Avg Awareness Level: 2.8 Personnel Interviewed:

Contracting	Engr	Finance	Mfg	Plant Wide	PM	QA
☐	☐	☐	☐	☑	☐	☐

Expected Outcome:

Decrease excessive documentation; Decrease contractor costs related to this function without related risk of loss, damage or destruction to Government Property

	Total Numbe	None		Minor	Significant
Time					
Cost	4	4	100.00%		
Quality					
Commercial Access					

Implementation Level		Barrier A	Barrier B	Barrier C	Barrier D	Barrier E	Barrier F	Barrier G	Barrier H	Barrier I	Barrier J	Barrier K
	Sum	7		2	5	6		32		7		41
0.5	Weighted Sum	24		8	20	14		102		28		154

Unexpected Outcomes:

Narrative - Positive:
- Final FAR rewrite does remove "notice of intent" provision on special test equipment whereby government provided opportunity to provide the property out of existing assets (i.e.., waiting on response from government consumed lead-time).
- Rewrite of use and charges clause did simplify rental fees; rental charges still based on acquisition value, not depreciated value.

Narrative - Negative:
- Low value deviation is not really reform. Must still account for property at the end of the contract - and no standard/remedy on loss. Industry not adopting because there is no savings.
- Accounting for low value government property is impediment to more timely contract closet.
- FAR Part 45 revision is "reformatting, not reform." In fact, increases number of data elements that must go on property record. Disagree with need for NSN on every property record (acknowledge need to cross PLN to NSN at time of disposition). Still hard to follow, not user friendly.
- $1,500 threshold is too low - should be tied to IRS rules on capitalization. Expense all property below threshold.

Observations and Recommendations

Change Element	W07
CL Summary Observations	DCMC and industry appear to be working together to reduce/eliminate CPSRs through SPI block changes and use of CRAG internal review approach. As DoD moves toward full immersion into a performance based business environment, this type of oversight will become a thing of the past.

ACQUISITION REFORM CHANGE ELEMENT: W07 Reduction/elimination of Contractor Purchasing System Reviews

Description: Reviews based solely on risk assessments; no time requirements; conducted only when necessary; limited in scope to those areas where sufficient data is not already available; maximum use of existing contractor data; summary report generated.

Citation: DAC 91-11, Jun 96; DLAD 5000.4, Part VII, Chapter 4; FAR Case 95-011 (consent to subcontract)

Implementation Date: 6/1/95 Avg Awareness Level: 2.3

Personnel Interviewed: Contracting ☐ Engr ☐ Finance ☐ Mfg ☐ Plant Wide ☑ PM ☐ QA ☐

Expected Outcome:

Reduction in time and cost related to contractor interface with CPSRs.

	Total Numbe	None		Minor		Significant	
Time	9	3	33.33%	2	22.22%	4	44.44%
Cost	9	4	44.44%	2	22.22%	3	33.33%
Quality							
Commercial Access							

Implementation Level		Barrier A	Barrier B	Barrier C	Barrier D	Barrier E	Barrier F	Barrier G	Barrier H	Barrier I	Barrier J	Barrier K
	Sum	3				10		14		23		
2.6	Weighted Sum	3				40		34		73		

Unexpected Outcomes:

Narrative - Positive:
- Big acquisition reform positive has been SPI initiative resulting in acceptance of CRAG internal reviews of purchasing operation in lieu of triennial CPSRs.
- Last full CPSR in 1991; Review scheduled for 1994 deferred two years. This year is limited review. Contractor does its own compliance reviews, audits, checks - has a good system.
- CPSRs are now a joint venture of contractor and DCMC.

Narrative - Negative:

Observations and Recommendations

Change Element	W08
CL Summary Observations	Overall there is not much reform in place. The increase in quick close-out ceiling and use of interim final billing rates are of marginal significance in terms of reform to major defense suppliers with large dollar contracts. At the same time any reduction of government property controls could accelerate contract close-out. Another factor affecting contract close-out is the availability of final overhead rates. With some contractors, DCAA is doing an excellent job of minimizing their final billing rate backlog; however, with others, the backlog i very significant. Awareness of the work done by the Interagency Close-Out Process Action Team several years ago was low. This may be an area that requires a review of results since that team completed its efforts.

ACQUISITION REFORM CHANGE ELEMENT: W08 Streamlined Contract Close-Out

Description: Various PAT recommendations affecting both internal government operations and contractor operations. These include changes to interim final billing rates and an increase to the quick closeout threshold

Citation: Interagency Close-Out PAT, 1994; Contract Administration PAT, Feb 1995; FAC 90-39 (XXVI) far cases 95-008,017. FAR deviation 7-13-95 (interim billing rates)

Implementation Date: 7/13/95 Avg Awareness Level: 1.8 Personnel Interviewed: Contracting ☐ Engr ☐ Finance ☐ Mfg ☐ Plant Wide ☑ PM ☐ QA ☐

Expected Outcome:		Total Numbe	None		Minor	Significant
Decreased contractor time related to closing out contracts	Time	6	6	100.00%		
	Cost					
	Quality					
	Commercial Access					

Implementation Level		Barrier A	Barrier B	Barrier C	Barrier D	Barrier E	Barrier F	Barrier G	Barrier H	Barrier I	Barrier J	Barrier K
	Sum	12				8		20		10		10
1.9	Weighted Sum	36				24		40		10		40

Unexpected Outcomes:

Narrative - Positive:
- Increasing quick close-out ceiling helped; CACO does get interim rates to facilitate final payment on small dollars before funds expire.
- At this facility DCAA has placed considerable emphasis on final overhead rate audits.

Narrative - Negative:
- Contractor had PROCAS PAT that wrestled for two years with contract close-out improvement and really didn't come up with any answer.
- DCAA takes too long to do close-out audits.
- Contract close-out problems exist both at company and DoD. Company does not assign high priority to close-out, although that might be changing.
- Critical path in close-out is often government property issues.
- Have disconnects between MOCAS and company accounting records in terms of unreconciled expenditures.
- Would like to see more of an IPT approach involving both DCMC and DCAA in contract close-out. Each has separate responsibilities - need more of an integrated approach.

Observations and Recommendations

Change Element	W09
CL Summary Observations	Industry generally feels there are big opportunities for cost savings if government takes a less risk averse approach to packing/packaging requirements. For example, requirements on end items shipped directly to fina destination for use are cited - where warranty applies, contractors are sufficiently motivated to ensure items delivered safely and economically. A distinction was made, however, between end items for immediate use and spares - industry acknowledges the latter require more stringent and precise military packaging - varying storage conditions, multiple handling, more uncertainty with respect to warranty protection. Contractors emphasize that specification changes, alone, won't achieve meaningful reform - the military packaging technical community needs to believe in change and be motivated to achieve it.

ACQUISITION REFORM CHANGE ELEMENT: W09 Elimination of non-value added packaging requirements;

Description: Ease packaging specifications to allow use of more commercial-type packaging where appropriate.

Citation: SECDEF memo, 29 June 94 ; DSIC cancellation of MIL-STD-1367A, 31 May 95; revised MIL-STD-2073-1/2..

Implementation Date: 6/1/96 Avg Awareness Level: 3.0 Personnel Interviewed: Contracting ☐ Engr ☐ Finance ☐ Mfg ☐ Plant Wide ☑ PM ☐ QA ☐

Expected Outcome:

Reduced costs related to packaging requirements.

	Total Numbe	None		Minor		Significant	
Time							
Cost	3	2	66.67%			1	33.33%
Quality							
Commercial Access							

Implementation Level		Barrier A	Barrier B	Barrier C	Barrier D	Barrier E	Barrier F	Barrier G	Barrier H	Barrier I	Barrier J	Barrier K
1.1	Sum	3		3		10	14	10			10	10
	Weighted Sum	12		12		40	56	20			20	40

Unexpected Outcomes: - While MILSTD-129 (marking) has been updated and still effective, it is being frequently supplanted in prime contracts by the prime's own marking standard. Subcontractors are now being required to adhere to each prime's peculiar marking requirements, rather than a uniform military standard. This increases subcontractor costs.

Narrative - Positive: - MIL-STD-2073 has been consolidated and streamlined. Headed in the right direction. Token cost savings.

Narrative - Negative: - Revised MIL-STD does not adequately address reusability of wooden box containers. Government standard based on new box. Should address functional requirements allowing for repair and reusability.
- Need to relax spec somewhat to allow more flexible use - allow changes to be accommodated in responsive manner. Need to educate working level government people on intended impact of revisions.
- a lot of dollars wasted in repackaging and remarking vendor's commercial pack, which while quite satisfactory, can't be traced to MILSPEC imposed materials, etc.

Observations and Recommendations

Change Element	W10
CL Summary Observations	A high implementation rate was reported for this change element. Originally, the interviews with traffic managers at the visited facilities focused on implementation of the Transportation Automated Management System (TRAMS). As the interview teams quickly discovered, a second automated system, CFMS (CONUS Freight Management System) is being implemented. The majority of the managers interviewed had little good to say about TRAMS, and CFMS is getting mixed reviews . However, reported outcomes still indicate an average estimated reduction of over 20% in the time required to prepare and process shipping documents, and an average estimated cost reduction of approximately 10%. Other issues were brought up during the interviews - one manager expressed a desire to use transportation sources that were used for the company's non-DoD work. They were proven, reliable sources. It seems that many single truck providers get on the source list for a given area, even though they may not regularly service that area, in hopes of possibly getting government backhaul jobs if they have to deliver to that area. It often takes extra time and effort to go through the government list to find an available source.

ACQUISITION REFORM CHANGE ELEMENT: W10 Use of commercial procedures & EDI related to; shipping documentation, GBLs, etc.

Description: Use of commercial practices and modern technology (e.g. TRAMS, CFMS) related to shipping documents; enhanced vendor delivery - use of third party traffic management on FOB origin contracts & use of commercial GBLs.

Citation: 41 CFR 101-41.007

Implementation Date: 9/1/95 Avg Awareness Level: 2.5 Personnel Interviewed: Contracting ☐ Engr ☐ Finance ☐ Mfg ☐ Plant Wide ☑ PM ☐ QA ☐

Expected Outcome:

Reduced time & cost related to preparing & processing shipping documents.

	Total Numbe	None		Minor		Significant	
Time	5	2	40.00%	1	20.00%	2	40.00%
Cost	5	3	60.00%	1	20.00%	1	20.00%
Quality							
Commercial Access							

Implementation Level		Barrier A	Barrier B	Barrier C	Barrier D	Barrier E	Barrier F	Barrier G	Barrier H	Barrier I	Barrier J	Barrier K
	Sum											
4.0	Weighted Sum											

Unexpected Outcomes: Time (-): Difficult to find carriers who will take lighter loads

Narrative - Positive: - Quality improvement as a result of TRAMS - fewer errors than in manual process

Narrative - Negative: - System new but flawed. Government TRAMS system was a disaster and replaced by the automated CFM system. New system takes too long to process (input and transmit) (5 min. vs. 15 min.). A better way is to have DD250 generate GBL at the same time it is generated. Today 90-95% of shipments require GBL from contract - a very expensive process. A notable exception is FMS shipments where the government allows the contractor to determine best transportation method.
- TRAMS replaced by CFM system - switching over now. Some minor technical problems - biggest issue is that DCMAO personnel may not have answers, but contractor must go through them to get the answer.
- New system (beyond TRAMS) being used; still problem - gov't uses cheapest carriers available, anyone with a truck will file a tariff; hopefully will get a backhaul if in that area; may service only once a year.

Observations and Recommendations

Change Element	W11
CL Summary Observations	Domestic source restrictions were generally not cited as a problem by the subcontracts/material managers interviewed concerning this change element. Many respondents reported that established supplier networks are responsive to their needs. Those same managers reported that commercial sourcing in general is having a favorable cost impact, and they will continue to seek greater relief from flow down requirements and restrictive specifications.

ACQUISITION REFORM CHANGE ELEMENT: W11 Commercial Sourcing - Reduction in applicability of certain laws

Description: Reduction in restrictive laws and domestic source restrictions that limited contractors from using commercial sources.

Citation: PL 103-355, sec 8003, 8102, 8105, 8301 (FASA); FY 95 Authorization Act; FAR 12.504; DFARS 212.504

Implementation Date: 6/1/95 Avg Awareness Level: 2.3 Personnel Interviewed: Contracting ☐ Engr ☐ Finance ☐ Mfg ☐ Plant Wide ☑ PM ☐ QA ☐

Expected Outcome:

Reduced contract schedule; reduced contract cost; increased access to commercial.

	Total Numbe	None		Minor		Significant	
Time	12	9	75.00%	1	8.33%	2	16.67%
Cost	12	7	58.33%	1	8.33%	4	33.33%
Quality							
Commercial Access	12	7	58.33%	2	16.67%	3	25.00%

Implementation Level		Barrier A	Barrier B	Barrier C	Barrier D	Barrier E	Barrier F	Barrier G	Barrier H	Barrier I	Barrier J	Barrier K
	Sum	6				5	5	9		10		15
3.0	Weighted Sum	12				15	15	13		30		45

Unexpected Outcomes:

Narrative - Positive:
- Elimination of flowdowns incorporated into standard purchase order terms & conditions. Have not seen any significant impact in terms of new suppliers/vendors. Existing suppliers/vendors very aware of elimination and question if old terms & conditions inadvertently used.
- Commercial sourcing has helped reduce manufacturing costs as a percent of manufacturing sales. Commercial sourcing is also giving the contractor the ability to form longer vendor alliances. Acquisition reform is allowing the contractor to establish common processes for PQA, procurement, material verification, and warehousing. In some cases, this shift to a process is having the effect of upgrading previous commercial processes (ie, receiving). It has also enabled the contractor to seek and establish best practices among various of its plant sites.
- Commercial sourcing clause getting retrofitted in contracts where contractor is the prime. However, where the contractor is a subcontractor, primes are not modifying contracts. New primes and subcontracts seem to be invoking the commercial sourcing clause okay.

Narrative - Negative:
- Real issue - political - local politicians talking to contractors about keeping jobs in their district
- Always used international source base - therefore reduction of restrictions hasn't opened up market. As develop more products, may develop different base.
- Parts are spec'd to a higher degree than the actual end product. Trying to get relief from former which would allow greater use of plastic parts

Observations and Recommendations

Change Element	W12
CL Summary Observations	The interviews conducted for this change element were primarily done with the manager for software engineering for the facility visited. In some cases, there was little or no software development effort ongoing in the facility visited. Most of the work was done by lower tier suppliers and integrated into components or subsystems, which were then procured by these primes and integrated into the system being acquired by DoD. As a result, there were few, if any, reports of redundant software capability assessments.

ACQUISITION REFORM CHANGE ELEMENT: W12 Reduction of multiple SCEs

Description: DCMC lead in effort to coordinate software capability evaluations - provide feedback to contractors

Citation: Joint Logistics Commanders - Acquisition Initiatives

Implementation Date: 10/1/95 Avg Awareness Level: 1.8

Personnel Interviewed: Contracting ☐ Engr ☐ Finance ☐ Mfg ☐ Plant Wide ☑ PM ☐ QA ☐

Expected Outcome:

Reduction in contractor time/cost related to multiple SCEs

	Total Numbe	None		Minor		Significant	
Time	6	3	50.00%	1	16.67%	2	33.33%
Cost	6	3	50.00%	1	16.67%	2	33.33%
Quality							
Commercial Access							

Implementation Level		Barrier A	Barrier B	Barrier C	Barrier D	Barrier E	Barrier F	Barrier G	Barrier H	Barrier I	Barrier J	Barrier K
3.2	Sum					10		20				
	Weighted Sum					30		20				

Unexpected Outcomes:

Narrative - Positive: SCE's infrequent - no evaluations since initiative started

Narrative - Negative: DCMC has not been able to broker trust/acceptance across the services