



DEPARTMENT OF DEFENSE
Defense Contract Management Agency

INSTRUCTION

Systems Engineering Surveillance

Engineering and Analysis Directorate
OPR: DCMA-EA

DCMA-INST 207
September 21, 2012

1. PURPOSE. This Instruction:

a. Establishes policy, assigns responsibilities, and provides instruction for Systems Engineering Surveillance in carrying out DCMA Contract Administration Service functions.

b. Reissues DCMA Instruction (DCMA-INST), “Systems Engineering Surveillance Policy,” Reference (a), to update the policy and to bring it into compliance with DCMA-INST 501 (Reference (b)).

c. Implements DoD policy pursuant to References (c) through (o).

d. Is established in compliance with DoD Directive 5105.64, Reference (c), establishing DCMA.

2. APPLICABILITY. This Instruction applies to all DCMA activities performing systems engineering surveillance functions.

3. MANAGERS’ INTERNAL CONTROL PROGRAM. In accordance with DCMA-INST, “Managers’ Internal Control Program” (Reference (d)), this Instruction is subject to evaluation and testing. The process flowchart is located at Appendix A.

4. RELEASABILITY – UNLIMITED. This Instruction is approved for public release.

5. PLAS CODE. The following PLAS codes apply:

- 069A - Identify Contract Systems Engineering Requirements (future Contract Technical Review - CTR)
- 069B - Plan Systems Engineering Surveillance
- 069C - Execute Systems Engineering Surveillance
- 069D - Document Systems Engineering Surveillance
- 069E - Accomplish Systems Engineering Corrective Action
- 069F – Other Systems Engineering Support

6. POLICY RESOURCE WEB PAGE. <https://home.dcma.mil/policy/207r>

7. EFFECTIVE DATE. By order of the Director, DCMA, this Instruction is effective immediately.

A handwritten signature in cursive script that reads "Karron E. Small".

Karron E. Small
Executive Director
Engineering and Analysis Directorate

TABLE OF CONTENTS

REFERENCES	4
CHAPTER 1 – POLICY	
1.1. Policy Purpose	5
1.2. Policy Applicability	5
CHAPTER 2 – ROLES AND RESPONSIBILITIES	
2.1. DCMA Systems Engineer (SE)	6
2.2. Engineering/Manufacturing Group Chief (EMGC) or Engineering Team Lead (ETL)...	7
2.3. DCMA Systems Engineering/Division (DSE).....	7
CHAPTER 3 - PROCEDURES	
3.1. Overview	8
3.2. Contract Receipt and Systems Engineering Review.....	8
3.3. Systems Engineering Surveillance Planning	9
3.4. Systems Engineering Surveillance Execution and Documentation	10
APPENDIX	
Appendix A. Systems Engineering Surveillance Process Flowchart.....	12
GLOSSARY	
Acronyms	14

REFERENCES

- (a) DCMA-INST, “Systems Engineering Surveillance,” October 31, 2010 (hereby canceled)
- (b) DCMA-INST 501, “Policy Program,” May 25, 2012
- (c) DoD Directive 5105.64, “Defense Contract Management Agency,” September 27, 2000
- (d) DCMA-INST, “Managers’ Internal Control Program,” September 12, 2011
- (e) Federal Acquisition Regulation, “Contract Administration Functions,” Subpart 42.302(a), April 1, 1984
- (f) Federal Acquisition Regulation, “Value Engineering,” Subpart 48.1, April 1, 1984
- (g) DCMA-INST, “Major Program Support,” November 2010
- (h) DCMA-INST, “Records Management,” May 2009
- (i) Defense Federal Acquisition Regulation Supplement, “Assignment of Contract Administration,” DFARS 242.202, 1991
- (j) Federal Acquisition Regulation, “Assignment of Contract Administration,” Subpart 42.202, April 1, 1984
- (k) Federal Acquisition Regulation, “Inspection of Research and Development Cost-Reimbursement,” Subpart 52.246-8, April 1, 1984
- (l) DCMA-INST, “Corrective Action Request,” March 2009
- (m) DoD Directive 5000.01, “The Defense Acquisition System,” May 12, 2003
- (n) DoD Instruction 5000.02, “Operation of the Defense Acquisition System,” December 8, 2008
- (o) Defense Acquisition Guidebook, Chapter 4 – Systems Engineering, November 2004

CHAPTER 1

POLICY

1.1. POLICY PURPOSE. The purpose of the policy is to enable agency Systems Engineers (SE) to accomplish SE surveillance through a standard set of processes, tools, and competencies; to ensure contractual compliance when SE requirements exist.

1.2. POLICY APPLICABILITY. This policy is applicable to all DCMA SE entities. Exceptions due to security requirements will be mitigated through the DCMA Special Programs Division Staff.

CHAPTER 2

ROLES AND RESPONSIBILITIES

2.1. DCMA SYSTEMS ENGINEER (SE). All supervisors shall ensure that SE supervisors and SEs have Systems Planning, Research, Development and Engineering (SPRDE) SE designated as their primary career field with a required certification level in accordance with the Office of the Under Secretary of Defense for Acquisition, Technology, and Logistics Workforce Desk Guide. The SE must plan and accomplish all SE surveillance duties required by Federal Acquisition Regulation (FAR) Part 42.302a (40-43, 45, 48-49) (Reference (e)) and FAR Part 48.1, Value Engineering (Reference (f)). The SE must:

2.1.1. Conduct SE Contract Review by:

2.1.1.1 Completing the Systems Engineering Contract Criticality (SECC) Determination.

2.1.1.2 Completing a Systems Engineering Requirements Report (SERR) for each contract or Letter of Delegation (LOD) received.

2.1.2. Plan SE Surveillance by:

2.1.2.1. Determining the extent of surveillance of contractor processes required at the subcontract level and initiating delegations using the Delegation e-Tool or Electronic Contract Administration Request System (ECARS) for reimbursable contracts.

2.1.2.2. Developing a new or updating an existing Systems Engineering Surveillance Plan (SESP) and reviewing the plan annually.

2.1.2.3. Providing a copy of the approved SESP to the Program Integrator (PI), if applicable; and to the customer's Chief Engineer or Lead Engineer.

2.1.2.4. Submitting the SESP to the HQ-E-SE@dcma.mil mailbox for review.

2.1.3. Execute and Document SE Surveillance by:

2.1.3.1. Using the SESP and associated Event Based Surveillance Table (EBST) to conduct surveillance and record surveillance data using the Systems Engineering Surveillance Record (SESR).

2.1.3.2. Ensuring that contractual SE requirements are addressed.

2.1.3.3. Identifying and documenting any deficiencies in performance of SE contract requirements and executing Corrective Action Request (CAR) actions.

2.1.3.4. Documenting surveillance results in the Functional Input Template (FIT) in accordance with DCMA-INST, "Major Program Support" (Reference (g)).

2.1.3.5. Communicating analysis results to the Engineering/Manufacturing Group Chief (EMGC) or Engineering Team Lead (ETL) monthly, and obtaining and documenting concurrence of the SESR and FIT records.

2.1.3.6. Maintaining records in accordance with the DCMA-INST, “Records Management” (Reference (h)).

2.1.3.7. Completing planned surveillance events.

2.1.3.8. Archiving final surveillance related records in accordance with Reference (h).

2.2. ENGINEERING/MANUFACTURING GROUP CHIEF (EMGC) OR ENGINEERING TEAM LEAD (ETL). The EMGC/ETL must:

2.2.1. Review and approve the completed SERR for each contract or LOD.

2.2.2. Approve all new and revised SESP, ensuring that they comply with the SESP template, are executable, and identify surveillance events that are linked to priorities and risks.

2.2.3. Review analysis results and concur with the SESR and FIT records, as appropriate.

2.3. DCMA SYSTEMS ENGINEERING DIVISION (DSE). DSE must receive and facilitate review of SESP submitted to the HQ-E-SE mailbox.

CHAPTER 3

PROCEDURES

3.1. OVERVIEW.

3.1.1. The SE shall plan and accomplish all systems engineering surveillance duties required by FAR 42.302(a) (40-43, 45, 48-49) (Reference (e)), Contract Administration Functions, and FAR 48.1, Value Engineering (Reference (f)), as documented in the Systems Engineering Surveillance Process flowchart (Figure 1, Appendix A). Tasks involving FAR 42.302(a) 44, 46, 47 and 67 (Reference (e)) are covered in other DCMA Instructions. All contracts delegated to DCMA for administration and LODs that result from such contracts shall be subject to surveillance, unless engineering functions are specifically withheld in writing in accordance with the DFARS 242.202 (Reference (i)).

3.1.2. Throughout this Instruction, it is intended that the SPRDE-PSE (Program Systems Engineer) or SE certified EMGC approve all SERR, SESP, SESR, CAR, and FIT documents or delegate to a SPRDE-PSE or SE certified ETL. If the EMGC is not SPRDE PSE or SE certified, this authority must be delegated to a SPRDE PSE or SE certified ETL. If neither is certified, then the EMGC must request assistance from the Region's engineering staff. The EMGC, regardless of certification, shall maintain responsibility for the content of each of these documents, notwithstanding any delegation of signatory responsibility.

3.2. CONTRACT RECEIPT AND SYSTEMS ENGINEERING REVIEW.

3.2.1. SE Contract Review.

3.2.1.1. The SE shall complete the SECC section of the SERR for contracts containing SE requirements. If a decision to forgo surveillance upon completion of the SECC section of the SERR is made, the SE shall document SECC results (Low, Medium, High) and the rationale. In this case, the SE does not fill out the remaining sections of the SERR and completing Section 3.2.1.2, below, is not required. If a decision is made to forgo surveillance planning, the SE shall document rationale for not accomplishing surveillance and maintain records in accordance with the DCMA Records Management Instruction (Reference (h)).

3.2.1.2. The SE shall continue performing Contract Receipt and SE Review by filling out the remaining sections of the SERR for each contract or LOD where surveillance is not withheld based on the SECC rating. The SE shall ensure identification of SE specification requirements including those invoked by the contract through higher level Quality Management System (QMS) requirements, such as AS-9100 or ISO-9001. If a decision is made to forgo surveillance planning, the SE shall document rationale for not accomplishing surveillance and maintain records in accordance with the DCMA Records Management Instruction (Reference (h)).

3.2.2. SERR Review and Approval. The SPRDE PSE or SE certified EMGC or ETL shall review and approve the completed SERR for each contract or LOD.

3.3. SYSTEMS ENGINEERING SURVEILLANCE PLANNING.

3.3.1. Delegation of Subcontracts or SE Surveillance Roles.

3.3.1.1. The SE responsible for surveillance of the prime contract shall determine the extent of surveillance of contractor processes required at the subcontract level, including the prime contractor's relationships with its suppliers.

3.3.1.2. The SE shall initiate delegations to CMOs at the subcontract level in accordance with FAR 42.202 (Reference (j)) and FAR 52.246-8 (Reference (k)) when applicable to accomplish this function.

3.3.1.3. SEs may also delegate SE surveillance responsibility to other CMOs when the contract requirement activity, such as test and evaluation activities or flight test, is being executed at a location other than that of the prime contractor.

3.3.1.4. SEs receiving delegations for SE surveillance activities may further delegate to sub-tiers when needed to accomplish the delegated surveillance role. The SE issuing SE related delegations shall use the Delegation e-Tool or ECARS for all reimbursable contracts.

3.3.2. Create New or Update Existing SESP.

3.3.2.1. The SE shall develop a new or update an existing SESP in accordance with the SESP template. If an existing SESP is sufficient to address the new requirement, the SE, with approval from the SPRDE PSE or SE certified EMGC or ETL, may incorporate the new work instead of writing a new SESP. The existing SESP must be updated accordingly. If neither the EMGC nor the ETL is SPRDE PSE or SE certified, the EMGC shall contact the Region for guidance.

3.3.2.2. Based upon surveillance observations, data collection, and needed changes to surveillance events based on risk, including frequency and intensity of surveillance, the SE shall update the EBST in the SESP as needed. When surveillance events are identified within the EBST but there is no plan to accomplish surveillance, the SE shall document reasons for not accomplishing surveillance for the identified events and maintain records in accordance with DCMA Records Management Instruction (Reference (h)).

3.3.3. SESP Approval.

3.3.3.1. The SPRDE PSE or SE certified EMGC or ETL shall approve all new and revised SESP, ensuring they comply with the SESP template, are executable, and surveillance events are linked to priorities and risks.

3.3.3.2. The SE shall provide a copy of the approved SESP to the PI, if applicable, and to the customer's Chief Engineer or Lead Engineer. Providing this copy ensures that the customer

is cognizant of DCMA's surveillance intentions and plan of action as early as possible. The SESP will be provided to the customer within 1 month of the CMO approval. If the customer expresses concerns about the SESP, the SE should discuss the concerns with the customer and elevate them to CMO leadership for resolution.

3.3.4. SESP Review.

3.3.4.1. At a minimum, the SE shall review the SESP annually or any time new work is added or a new contract/delegation is required.

3.3.4.2. SESP's shall be submitted annually by email to the HQ-E-SE mailbox for review.

3.4. SYSTEMS ENGINEERING SURVEILLANCE EXECUTION AND DOCUMENTATION.

3.4.1. SE Surveillance and Data Collection/Recording.

3.4.1.1. The SE shall use the SESP and associated EBST to conduct surveillance and record surveillance data according to the Systems Engineering Performance Indicator (SEPI) Evaluation Process Flowchart, using the SESR. When the surveillance action is in conjunction with a formal QMS audit, the SE defers management of the audit to the lead auditor.

3.4.1.2. The SE shall ensure that contractual systems engineering requirements are addressed and any deficiencies in performance of systems engineering contract requirements identified are documented as CARs issued by the Quality Assurance lead as a result of the audit.

3.4.2. Documentation of Surveillance Discrepancies.

3.4.2.1. The SE shall identify and document any deficiencies in performance of SE contract requirements and execute CAR actions in accordance with the DCMA-INST, "Corrective Action Request" (Reference (l)).

3.4.2.2. If the SE identifies any SE process or improvement area that is not determined to be a contractual deficiency, the SE shall document it as a Continuous Improvement Opportunity (CIO). CIOs are not directive from the Government and do not authorize any constructive changes to the contract. Contractors are not required to adopt CIOs. Furthermore, if they decide to adopt the improvements, the contractor assumes all associated risks and costs of implementation.

3.4.2.3. The SE shall document surveillance results in the FIT included in the Program Assessment Report (PAR) template in the Major Program Support Instruction (Reference (g)). Additional slides and charts may be developed to accommodate Program Manager or Program Executive Office customer requests for surveillance reporting, including Value Engineering. The engineering monthly input provided by the SE to support PI/Program Support Team PARs shall be in accordance with Reference (g). The CMO should share surveillance results with the contractor as necessary.

3.4.3. Approval of SESR and FIT. The SE shall communicate analysis results to the SPRDE PSE or SE certified EMGC or SPRDE PSE or SE certified ETL monthly and obtain and document concurrence of the SESR and FIT records in accordance with local CMO procedures.

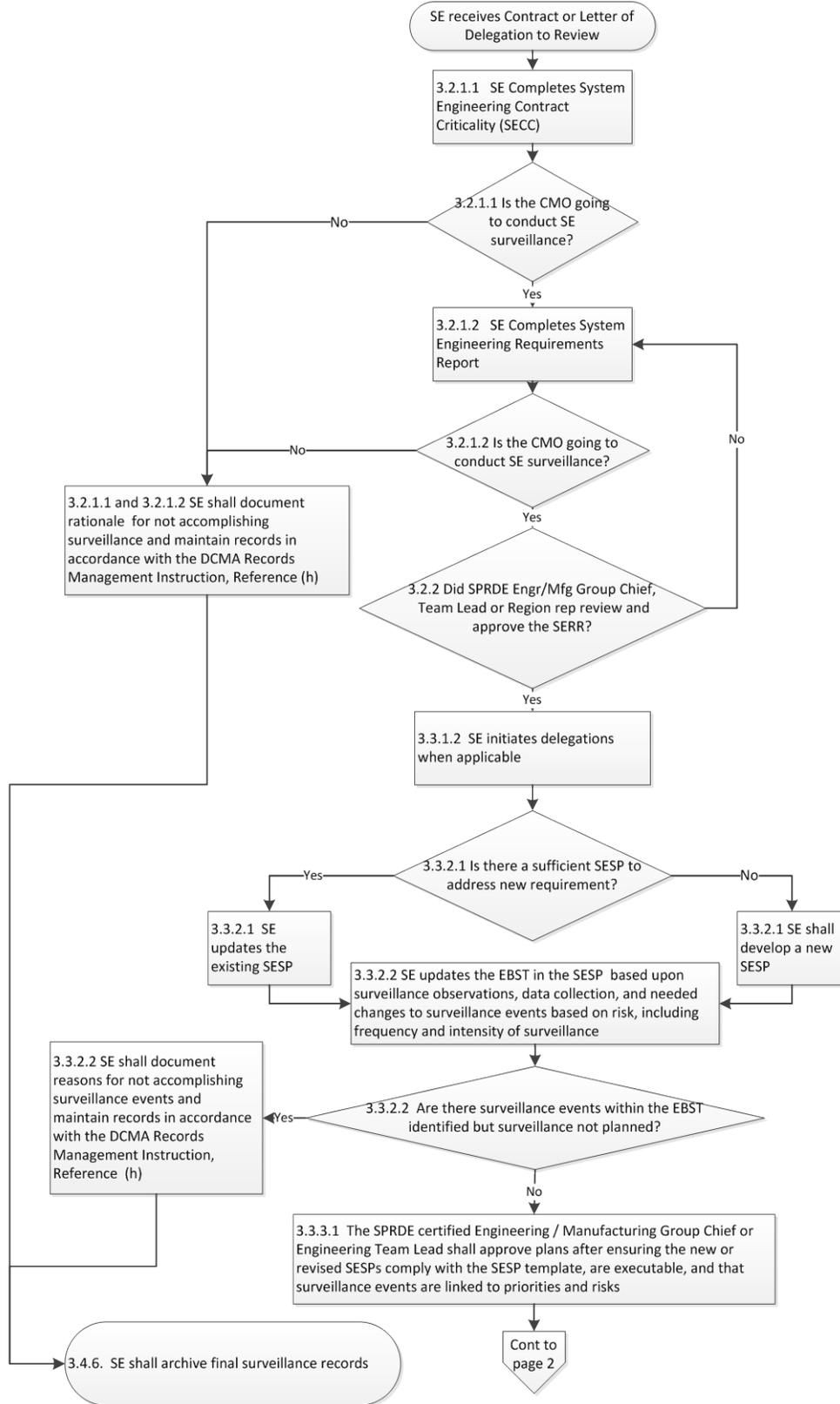
3.4.4. SE Records Maintenance. The SE shall maintain records of all SERRs, SESP, SESRs, FITs, CARs, and summary briefings in accordance with DCMA Records Management Instruction (Reference (h)).

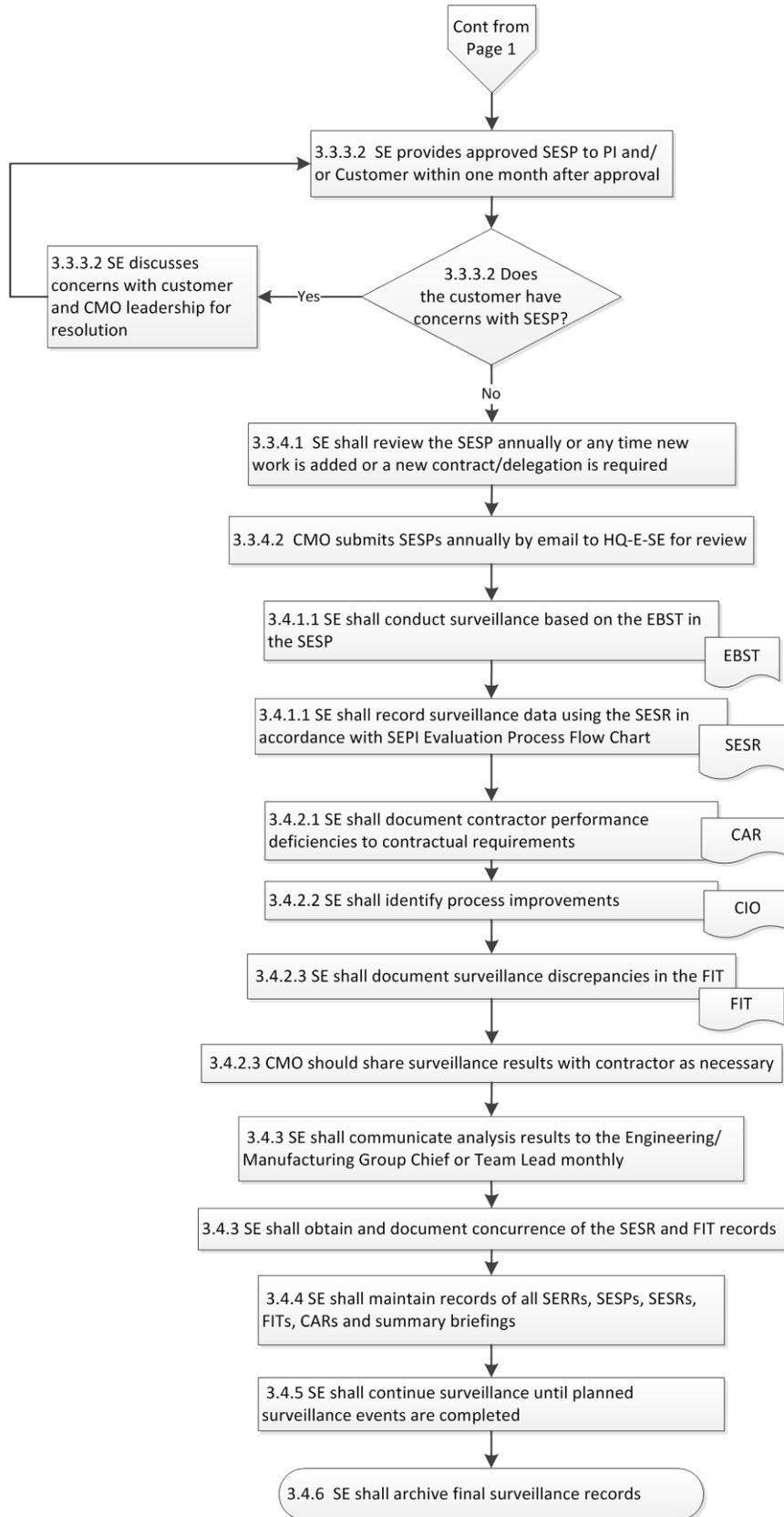
3.4.5. SE Surveillance Completion. The SE shall continue surveillance until planned surveillance events are completed.

3.4.6. SE Records Archival. The SE shall archive final surveillance related records as specified in the DCMA Records Management Instruction (Reference (h)).

APPENDIX A

Figure 1. SYSTEMS ENGINEERING SURVEILLANCE PROCESS FLOW CHART





ACRONYMS

CAR	Corrective Action Request
CIO	Continuous Improvement Opportunity
CMO	Contract Management Office
CTR	Contract Technical Review
DCMA-INST	DCMA Instruction
DSE	Systems Engineering Division
EBST	Event Based Surveillance Table
ECARS	Electronic Contract Administration Request System
EMGC	Engineering/Manufacturing Group Chief
ETL	Engineering Team Lead
FIT	Functional Input Template
LOD	Letter of Delegation
MPS	Major Program Support
PAR	Program Analysis Report
PI	Program Integrator
PSE	
QMS	Quality Management System
SE	Systems Engineer / Systems Engineering
SECC	Systems Engineering Contract Criticality
SERR	Systems Engineering Requirements Report
SESP	Systems Engineering Surveillance Plan
SESR	Systems Engineering Surveillance Record
SPRDE	Systems Planning, Research and Development Engineering