



DEPARTMENT OF DEFENSE
Defense Contract Management Agency

IMMEDIATE POLICY CHANGE

Data Collection and Analysis

Component Name
OPR: DCMA-QA

DCMA-INST 323 (IPC-1)
June 26, 2015

Administrative Change, July 14, 2015

1. POLICY. This Immediate Policy Change (IPC) implements changes to DCMA-INST 323, “Data Collection and Analysis,” May 15, 2013.

2. PURPOSE. This IPC is issued to update Agency policy and to incorporate new requirements and clarifications.

3. APPLICABILITY. This IPC applies to all DCMA activities performing Government Contract Quality Assurance (GCQA) surveillance.

4. NEW GUIDANCE.

a. Change paragraph 3. to read:

3. MANAGERS’ INTERNAL CONTROL PROGRAM. This Instruction is subject to evaluation and testing IAW DCMA-INST 710, “Managers’ Internal Control Program” (Reference (d)). The process flowchart *and Managers’ Internal Control Program Key Controls is are* located on the Resource *Web* page.

b. Change paragraph 1.1.1. to read:

1.1.1. It is DCMA policy that QA personnel utilize data collection and analysis to assist in determining the acceptability and effectiveness of a supplier’s quality system to control product/services; ~~and~~ to use this information in the development and execution of their surveillance plan; *and to adjust the risk (if appropriate) based on the analysis.*

c. Change paragraph 3.1. to read:

3.1. DEVELOP THE DATA COLLECTION AND ANALYSIS PLAN. QA personnel shall develop a data collection and analysis plan to address the data to be collected, and the method and frequency of collection and analysis. The data analysis plan shall be included in the surveillance *plan*. A simple check sheet such as the sample “Data Collection and Analysis Plan” spreadsheet (*which contains the minimum information and data fields*) in the Tools and Guidance section located on the Resource Web page, may be used to facilitate data collection

and analysis. *The minimum information and data fields in the Data Collection and Analysis Plan required are as follows:*

- *Process*
- *Data (PQDR, CAR, Inspection Records)*
- *Source of Data (DCMA, Supplier, Customer)*
- *Data Owner (Quality, Engineering, Purchasing, Production, etc.)*
- *Type of Data (Attribute; e.g., pass/fail or Variable; e.g., $\pm .001$)*
- *Interval of Collection (Daily, Weekly, Monthly, Quarterly, etc.)*
- *Analysis Tool (Method) (Run Chart, Pareto, Histogram, Check Sheet, etc.)*
- *Interval of Analysis (Daily, Weekly, Monthly, Quarterly, Semi-Annual, Annual, etc.)*

d. Change paragraph 3.1.2. to read:

3.1.2. The frequency of the analysis shall take into account the type and volume of data to be reviewed, as well as the impact on product and services quality which could result from failure to identify adverse trends. The recommended frequency for performing the data analysis is monthly for resident facilities and quarterly for non-resident facilities based on volume of material produced. Contingency Contract Administration Services operations require monthly analysis. For active suppliers, data analysis shall be performed, as a minimum, every 6 months to determine changes in risk and surveillance requirements. If the supplier provides material on an infrequent basis *and an insufficient quantity of data is available for analysis*, the frequency may be extended to an annual review. *During this extended period, data will continue to be collected.*

e. Paragraph 3.2.1. is changed to read:

3.2.1. Types of data to be analyzed include *as applicable (applicability is defined; if the data is available, it will be collected or reviewed and analyzed)* (not all inclusive):

3.2.1.1. Supplier Quality Data.

- Results of third party audits, accreditations, and corrective action plans (Quality Management System, National Aerospace and Defense Contractors Accreditation Program, etc.)
- Records of inspections and tests
- Records of controls applied to production, material treatment, and test procedures
- Supplier process yield
- Records of use-as-is, return to vendor repair, rework, or scrap
- Records of Material Review Board (**MRB**) actions (nonconforming material)
- Records of request for waivers or deviations (MRV/variances/concessions)
- Records reflecting quality requirements imposed on vendors and suppliers and objective evidence attesting to the quality of supplies or services
- CARs

- Customer satisfaction surveys
- Any other documented record, analysis, or report that has a direct or indirect influence on the quality or the product or services
- Process Capability Index
- Control charts
- Cost of quality

3.2.1.2. GCQA Data

- Supplier Risk System (i.e., eTools, SRS)
- Preaward survey results
- Results of special audits, investigations, or examinations conducted by **gGovernment** personnel (QA representative, **gGovernment** technical product representative, subject matter expert, contracting officer's representative, etc.)
- Records of inspections and tests performed or witnessed
- Results of quality system audits
- Results of process reviews
- CARs
- Data collected during GCQA surveillance by a foreign government based on a DCMA request
- Other records, reports, letters or messages (including email) that provide comments or data relative to QA responsibilities
- Results of investigations and actions taken as a result of user quality data

3.2.1.3. Customer/User Data.

- Reports of nonconformance communicated through Government Industry Data Exchange Program (**GIDEP**)
- Product Quality Deficiency Reports (**PQDR**)
- First article testing (**FAT**) (**gGovernment**)
- Business concerns such as bankruptcy, patterns of late delivery, or corrective actions from prime suppliers
- Customer/service evaluations, assessments and reports (hazardous materials, environmental, safety, foreign object damage, dining facilities, etc.)
- Investigations of alleged supplier misconduct by criminal investigative services (with approval of the assigned investigator)

f. Change paragraph 3.5. to read:

3.5. DOCUMENT THE DATA ANALYSIS RESULTS AND ACTIONS/ MODIFICATIONS TAKEN. QA personnel shall record results of data analysis using a method that allows records/results to be easily retrievable. ***CMOs utilizing the Integrated Workflow Management System (IWMS) will file DC&A records in 5CQA48 – Surveillance Result Status Report – QA for contract specific DC&A, and 6FQA34 – Surveillance Event***

Result Report – QA for facility wide DC&A records. Data analysis records shall identify the following, as a minimum:

- Date of the analysis
- Individual performing the analysis
- Data analyzed
- Results of analysis (conclusions)
- Actions taken as a result of the analysis, to include frequency of analysis, if appropriate

7. RELEASABILITY – UNLIMITED. This IPC is approved for public release.

8. EFFECTIVE DATE. This IPC is effective immediately and shall remain in effect until rescinded, superseded, or incorporated in a DCMA policy, whichever is sooner.



Michael E. Shields, Jr.
Executive Director
Quality Assurance



DEPARTMENT OF DEFENSE
Defense Contract Management Agency

INSTRUCTION

Data Collection and Analysis

Quality Assurance Directorate
OPR: DCMA-QA

DCMA-INST 323
May 15, 2013

Validated Current with Administrative Changes, May 8, 2014

1. PURPOSE. This Instruction:

- a. Reissues and updates DCMA-INST 323, "Data Collection and Analysis" (Reference (a)).
- b. Establishes policy and assigns roles and responsibilities for activities performing data collection and analysis which will enable quality assurance (QA) personnel to determine the acceptability and effectiveness of the supplier's quality system to provide a basis of confidence for the acceptance of product.
- c. Is established in accordance with (IAW) DoD Directive 5105.64 (Reference (b)), DCMA-INST 501, "Policy Publications Program" (Reference (c)), and all references listed.

2. APPLICABILITY. This Instruction applies to all DCMA personnel performing Government Contract Quality Assurance (GCQA) surveillance.

3. MANAGERS' INTERNAL CONTROL PROGRAM. This Instruction is subject to evaluation and testing IAW DCMA-INST 710, "Managers' Internal Control Program" (Reference (d)). The process flowchart is located *on the Resource Page*.

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

5. PLAS CODE. 085C - SQA - Surveillance - Risk Handling Methods.

6. POLICY RESOURCE WEB PAGE. <https://home.dcma.mil/POLICY/323r/>

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

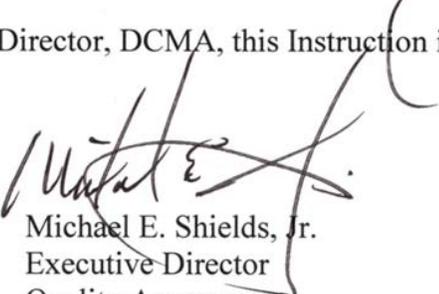

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REFERENCES

- (a) DCMA-INST 323, "Data Collection and Analysis," September 30, 2011 (hereby canceled)
- (b) DoD Directive 5105.64, "Defense Contract Management Agency (DCMA)," January 10, 2013
- (c) DCMA-INST 501, "Policy Publications Program," October 1, 2013
- (d) DCMA-INST 710, "Managers' Internal Control Program," April 21, 2014
- (e) DCMA-INST 318, "QA Development," February 11, 2014
- (f) DCMA-INST 309, "GCQA Surveillance Planning," January 27, 2014
- (g) DCMA-INST 1201, "Corrective Action Process," September 23, 2013
- (h) DCMA-INST 326, "Risk Assessment," February 28, 2012
- (i) Defense Federal Acquisition Regulation Supplement (DFARS) Procedures, Guidance, and Information (PGI) 246.470-2, "Quality Evaluation Data"
- (j) DoD Manual 5200.01, Volume 4, Enclosure 3 "DoD Information Security Program: Controlled Unclassified Information (CUI)," February 24, 2012

CHAPTER 1

POLICY

1.1. POLICY.

1.1.1. It is DCMA policy that QA personnel utilize data collection and analysis to assist in determining the acceptability and effectiveness of a supplier's quality system to control product/services, and to use this information in the development and execution of their surveillance plan.

1.1.2. This Instruction outlines procedures for what data QA personnel shall collect, the frequency in which it shall be analyzed, and the application of the results to revise associated risk assessments, surveillance plans and data collection activities.

1.1.3. *This Instruction* provides a basis for decisions to either increase surveillance on those areas where contract nonconformances are identified or reduce surveillance when supplier performance is consistently acceptable. This information shall provide a basis of confidence for the acceptance of product and services, the ability to provide the customer objective evidence of the supplier's ability to deliver conforming product and services, and assist in decisions related to the allocation of Government resources.

CHAPTER 2

ROLES AND RESPONSIBILITIES

2.1. QA FIRST-LEVEL SUPERVISOR (FLS). The FLS shall ensure QA personnel possess the necessary competencies to perform the tasks defined in this Instruction as related to the assigned facility, program, contract, or product IAW DCMA-INST 318, “QA Development” (Reference (e)).

2.2. QA PERSONNEL. QA personnel shall:

2.2.1. Develop and document a plan for data collection and analysis.

2.2.2. ~~Develop GCQA surveillance strategy and document it on the Risk Profile and Plan and adjust the plan as warranted by data analysis IAW the established GCQA surveillance plan per DCMA-INST 309, “GCQA Surveillance Planning” (Reference (f)).~~ *Develop and document a GCQA surveillance plan IAW DCMA-INST 309, “GCQA Surveillance Planning” (Reference (f)) and adjust as warranted by data analysis.*

2.2.3. Assure GCQA surveillance events that serve as a basis for confidence have been accomplished IAW the established GCQA surveillance plan.

2.2.4. Issue corrective action requests (CAR) IAW DCMA-INST 1201, “Corrective Action Process” (Reference (g)), when contractual nonconformance is identified.

2.2.5. Communicate with customers when problems/concerns arise during the performance of the GCQA surveillance plan.

CHAPTER 3

PROCEDURES

3.1. DEVELOP THE DATA COLLECTION AND ANALYSIS PLAN. QA personnel shall ~~develop a plan for~~ data collection and analysis *plan to address the data to be collected, and the method and frequency of collection and analysis*. The data analysis plan shall be included in the surveillance. ~~plan and address the data to be collected, method and frequency of collection and analysis~~. A simple check sheet such as the sample “Data Collection and Analysis Plan” spreadsheet in the Tools and Guidance section located on the Resource Web page may be used to facilitate data collection and analysis.

3.1.1. The method used for the analysis of the various data may range from a thorough simultaneous review from all sources to a detailed review of data related to a specific problem area, such as receipt of a customer complaint. This analysis shall support the identification and location of risk, as well as the likelihood of occurrence (DCMA-INST 326, “Risk Assessment” (Reference (h))).

3.1.2. The frequency of the analysis shall take into account the type and volume of data to be reviewed, as well as the impact on product and services quality which could result from failure to identify adverse trends. The recommended frequency for performing the data analysis is monthly for resident facilities and quarterly for non-resident facilities based on volume of material produced. Contingency Contract Administration Services operations require monthly analysis. For active suppliers, data analysis shall be performed, as a minimum, every 6 months to determine changes in risk and surveillance requirements. If the supplier provides material on an infrequent basis, the frequency may be extended to an annual review.

3.2. DETERMINE THE TYPE AND SCOPE OF DATA TO BE COLLECTED, RECORDED, AND ANALYZED. QA personnel shall collect supplier, Government, customer/user data, and other data elements (DFARS PGI 246.470-2, “Quality Evaluation Data” (Reference (i))) IAW the surveillance plan. Collection of supplier data should be exercised using contractual prerogatives of access and review. This does not imply that supplier data shall be specially created, duplicated or requested in bulk for the required analysis. QA personnel shall determine those documents that reflect the most significant actions related to quality.

3.2.1. Types of data to be analyzed include (not all inclusive):

3.2.1.1. Supplier Quality Data.

- Results of third party audits, accreditations, and corrective action plans (Quality Management System, National Aerospace and Defense Contractors Accreditation Program, etc.)
- Records of inspections and tests
- Records of controls applied to production, material treatment, and test procedures

- Supplier process yield
- Records of *use-as-is, return to vendor* repair, rework, or scrap
- Records of Material Review Board actions (*nonconforming material*)
- Records of request for ~~concessions (formerly known as waivers)~~ or *deviation permits waivers or deviations (MRV/variances/concessions)*
- Records reflecting quality requirements imposed on vendors and suppliers and objective evidence attesting to the quality of supplies or services
- CARs
- Customer satisfaction surveys
- Any other documented record, analysis, or report that has a direct or indirect influence on the quality or the product or services
- Process Capability Index
- Control charts
- Cost of quality

3.2.1.2. GCQA Data.

- Supplier Risk System (*i.e.*, eTools, *SRS*)
- Preaward survey results
- Results of special audits, investigations, or examinations conducted by government personnel (QA representative, government technical product representative, subject matter expert, contracting officer's representative, etc.)
- Records of inspections and tests performed or witnessed
- Results of quality system audits
- Results of process reviews
- CARs
- Data collected during GCQA surveillance by a foreign government based on a DCMA request
- Other records, reports, letters or messages (including email) that provide comments or data relative to QA responsibilities
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3.2.1.3. Customer/User Data.

- Reports of nonconformance communicated through Government Industry Data Exchange Program
- Product Quality Deficiency Reports
- First article testing (government)
- Business concerns such as bankruptcy, patterns of late delivery, or corrective actions from prime suppliers
- Customer/service evaluations, assessments and reports (hazardous materials, environmental, safety, foreign object damage, dining facilities, etc.)

- Investigations of alleged supplier misconduct by criminal investigative services (with approval of the assigned investigator)

3.3. PERFORM THE DATA ANALYSIS. QA personnel shall perform ~~periodic~~ data analysis *IAW paragraph 3.1.2 of this Instruction*. Data analysis is conducted to obtain an overall assessment of the following:

- Effectiveness of the supplier's quality system
- Appropriateness of the type and location of data collected through GCQA surveillance
- Quality trends (nonconformance, defects, etc.)
- Process stability and process capability
- Scrap rate

3.4. MODIFY SURVEILLANCE PLAN BASED ON THE RESULTS OF THE DATA ANALYSIS. QA personnel shall use all available information to adjust the surveillance plan or take appropriate actions commensurate with indicated risk. Consideration should be given to the information the data is providing to ensure the data type(s) and collection points are appropriate.

3.4.1. Data analysis showing trends in the following may indicate the need to adjust surveillance:

- Customer complaints traceable to a deficiency in the supplier's operation
- Repetitive rejections, *nonconformances* or high scrap rate in a particular supplier operation
- ~~Consistent acceptability of~~ *Consistency of* supplier performance
- Comparison of current and previous results may indicate trends

3.4.2. When data analysis results indicate that customer-imposed mandatory inspections may be discontinued with minimal risk, QA personnel shall communicate in writing with the customer, explaining why efforts should be redirected and request the customer to withdraw mandatory inspection requirements. Mandatory inspections shall continue to be performed until relief is granted in writing.

3.5. DOCUMENT THE DATA ANALYSIS RESULTS AND ACTIONS/ MODIFICATIONS TAKEN. QA personnel shall record results of data analysis ~~in~~ *using* a method that allows ~~them~~ *records/results* to be easily retrievable. Data analysis records shall identify the following, as a minimum:

- Date of the analysis
- Individual performing the analysis
- Data analyzed
- Results of analysis (conclusions)

- Actions taken as a result of the analysis, to include frequency of analysis, if appropriate

3.6. PROTECT DATA ~~COLLECTED~~. Supplier quality data shall be designated “For Official Use Only” unless otherwise designated. It shall be appropriately marked and protected to prevent unauthorized access or disclosure IAW DoD Manual 5200.01, Vol. 4, Enclosure 3 (Reference (j)).

CHAPTER 4

TRAINING

4.1. COMPETENCIES/CERTIFICATIONS. Competency and certification requirements for all QA personnel are addressed in DCMA-INST 318 (Reference (e)), and the Training Competency Assessment Tool at the link located on the [Resource Web page](#).

GLOSSARY

ACRONYMS

CAR	corrective action request
DCMA-INST DFARS PGI	DCMA Instruction Defense Federal Acquisition Regulation Supplement Procedures, Guidance and Information
FLS	first-level supervisor
GCQA	government contract quality assurance
IAW	in accordance with
PLAS	Performance Labor Accounting System
QA	quality assurance