

**Army Regulation 702-11**

**Product Assurance**

# **Army Quality Program**

**Headquarters  
Department of the Army  
Washington, DC  
25 February 2014**

**UNCLASSIFIED**

# ***SUMMARY of CHANGE***

AR 702-11  
Army Quality Program

This major revision, dated 25 February 2014--

- Expands applicability of this regulation to activities that provide and produce products and services (para 1-1).
- Updates responsibilities (throughout chap 1).
- Adds requirement that quality performance objectives be established for responsible officials that develop, implement, and provide oversight of quality activities (paras 1-5 and 1-6).
- Establishes new guiding principles for quality programs (para 2-2).
- Updates definition of "voice of the customer" (para 2-7).
- Establishes "service quality management" as a new core competency (para 2-9).
- Establishes new Internal Control Evaluations for Army Quality Programs test questions (app B).
- Makes administrative changes (throughout).

**Product Assurance**

**Army Quality Program**

---

By Order of the Secretary of the Army:

**RAYMOND T. ODIERNO**  
*General, United States Army*  
*Chief of Staff*

Official:



**GERALD B. O'KEEFE**  
*Administrative Assistant to the*  
*Secretary of the Army*

**History.** This publication is a major revision.

**Summary.** This regulation prescribes Department of the Army policy and responsibilities for Army quality programs.

**Applicability.** This regulation applies to the Active Army, the Army National Guard/Army National Guard of the United States, and the United States Army Reserve, unless otherwise stated.

**Proponent and exception authority.** The proponent of this regulation is the

Assistant Secretary of the Army (Acquisition, Logistics and Technology) (ASA (ALT)). The proponent has the authority to approve exceptions or waivers to this regulation that are consistent with controlling law and regulations. The proponent may delegate this approval authority, in writing, to a division chief within the proponent agency or its direct reporting unit or field operating agency, in the grade of colonel or the civilian equivalent. Activities may request a waiver to this regulation by providing justification that includes a full analysis of the expected benefits and must include formal review by the activity's senior legal officer. All waiver requests will be endorsed by the commander or senior leader of the requesting activity and forwarded through higher headquarters to the policy proponent. Refer to AR 25–30 for specific guidance.

**Army internal control process.** This regulation contains internal control provisions and identifies key internal controls that must be evaluated at appendix B.

**Supplementation.** Supplementation of this regulation and establishment of command or local forms are prohibited without prior approval from the Deputy Assistant Secretary of the Army (Acquisition Policy and Logistics) ATTN: SAAL–ZL, 103 Army Pentagon, Washington, DC 20310–0103.

**Suggested improvements.** Users are invited to send comments and suggested improvements to this regulation on DA Form 2028 (Recommended Changes to Publications and Blank Forms) directly to the ASA (ALT), ATTN: SAAL–ZL, 103 Army Pentagon, Washington, DC 20310–0103.

**Distribution.** This publication is available in electronic media only and is intended for command levels C, D, and E for the Active Army, the Army National Guard/Army National Guard of the United States, and the U.S. Army Reserve.

---

**Contents** (Listed by paragraph and page number)

**Chapter 1**

**Introduction, page 1**

*Section I*

*General, page 1*

Purpose • 1–1, *page 1*

References • 1–2, *page 1*

Explanation of abbreviations and terms • 1–3, *page 1*

*Section II*

*Responsibilities, page 1*

Assistant Secretary of the Army (Acquisition, Logistics and Technology) • 1–4, *page 1*

Commanding General, United States Army Materiel Command • 1–5, *page 1*

---

\*This regulation supersedes AR 702–11, dated 2 March 2007.

## **Contents—Continued**

All Army staff elements, Army commands, Army service component commands, and direct reporting units • 1–6,  
*page 1*

### **Chapter 2**

**Quality Program Policy and Requirements, *page 2***

#### *Section I*

*Policy, page 2*

The Army Quality Program • 2–1, *page 2*

General policy • 2–2, *page 2*

Quality management • 2–3, *page 3*

#### *Section II*

*Quality Program Requirements, page 3*

Life cycle support • 2–4, *page 3*

Interface with systems engineering processes • 2–5, *page 3*

Risk-based planning • 2–6, *page 3*

Voice of the customer • 2–7, *page 3*

Preventive and corrective action • 2–8, *page 3*

Core competencies • 2–9, *page 3*

Quality community of practice • 2–10, *page 4*

Benchmarks and partnerships • 2–11, *page 4*

Single-process initiatives • 2–12, *page 4*

Supplier quality management • 2–13, *page 4*

Metrics • 2–14, *page 4*

Continuous improvement • 2–15, *page 4*

### **Appendixes**

**A.** References, *page 6*

**B.** Internal Control Evaluations for Army Quality Programs, *page 7*

### **Glossary**

# Chapter 1 Introduction

## Section I General

### 1–1. Purpose

This regulation sets forth policy and responsibilities in development, implementation, and sustainment of an Army Quality Program as an integral component of acquisition, logistics, and technology business areas. This regulation applies to all Army activities that acquire, provide, and produce products and services in support of acquisition, logistics, and technology missions.

### 1–2. References

Required and related publications and prescribed and referenced forms are listed in appendix A.

### 1–3. Explanation of abbreviations and terms

Abbreviations and special terms used in this regulation are explained in the glossary.

## Section II Responsibilities

### 1–4. Assistant Secretary of the Army (Acquisition, Logistics and Technology)

The ASA (ALT) will—

- a. Establish policy and goals for the Army Quality Program.
- b. Establish quality program performance measures consistent with Army strategic objectives in collaboration with the Commanding General (CG), United States (U.S.) Army Materiel Command (AMC) and other stakeholders.
- c. Foster quality partnerships with other military Services, Federal agencies, industry, and academia.
- d. Facilitate identification of resources for servicewide execution of Army quality programs.

### 1–5. Commanding General, United States Army Materiel Command

The CG AMC will manage the Army Quality Program and will—

- a. Serve as the Army's primary point of contact for quality matters.
- b. Identify a management representative with responsibility, authority, and resources to execute the Army Quality Program.
- c. Develop procedures and guidance for effective implementation of the Army Quality Program.
- d. Establish performance measures, reporting methods, and frequency of performance reviews of Army quality programs.
- e. Require quality performance objectives for responsible officials that develop, implement, and provide oversight of quality activities.
- f. Assess compliance to this regulation using objective performance measures.
- g. Conduct performance reviews of Army quality programs.
- h. Provide guidance for annual quality management system self-assessments, and as necessary, validate self-assessments through means such as site visits, inspections, or audits.
- i. Participate in Government and industry quality forums, where deemed of value to the Army.
- j. Facilitate development of skills and competencies for all Army quality professionals that are representative of current Government and industry quality trends.
- k. Facilitate the Army's quality community of practice.
- l. Ensure standardized quality practices are employed throughout the Army.
- m. Maintain the Army quality portal (<https://collab.aep.army.mil/sites/quality>).
- n. Provide technical assistance to commands, activities, installations, and other applicable organizations. This assistance includes, but is not limited to, development of corrective action plans.
- o. Continuously improve all quality program areas, performance and processes.

### 1–6. All Army staff elements, Army commands, Army service component commands, and direct reporting units

All Army staff elements, Army commands, Army service component commands, and direct reporting units responsible for procuring products and services in support of Army missions will—

- a. Implement procedures and guidance to institutionalize the requirements of this regulation.

- b.* Identify organizations and points of contact responsible for development and management of quality programs and ensure effective implementation and control.
- c.* Identify an Office of Primary Responsibility to execute a quality program and management system that includes:
  - (1) Objectives, standard operating procedures, implementation strategies, and measures of program performance.
  - (2) Resources and documented processes needed to deliver quality products and services.
  - (3) Communication and control of the quality program throughout the organization.
- d.* Ensure subordinate organizations promote information exchange and standardization across the Army and participate in Army Quality Communities of Practice.
- e.* Conduct annual assessments to ensure effective implementation of quality programs.
- f.* Require quality performance objectives for responsible officials that develop, implement, and provide oversight of quality activities.

## **Chapter 2**

### **Quality Program Policy and Requirements**

Quality programs will satisfy the requirements as stated in this chapter.

#### **Section I**

##### **Policy**

##### **2–1. The Army Quality Program**

The Army Quality Program will enable—

- a.* Maximum operational readiness, mission effectiveness and efficiency, and customer satisfaction with Army products, services, and systems.
- b.* Products and services to conform to performance and technical requirements and satisfy the customer’s life cycle needs.
- c.* Quality planning, organization, direction, control, and support in achieving Army objectives.
- d.* Effective implementation of technical specifications and performance expectations, including but not limited to those pertaining to design, analysis, development, acquisition, production, storage, distribution, operations, sustainment, maintenance, and disposal of, by, or for the Army consistent with customer(s) needs.
- e.* Continued review, evaluation, and improvement of Army quality practices.

##### **2–2. General policy**

All Army activities that acquire, provide, and produce products and services in support of acquisition, logistics, and technology missions will have quality programs consistent with this regulation, comprised of repeatable and reproducible processes.

- a.* Quality programs will model Government or commercial standards and best practices (for example, American National Standards Institute, International Organization for Standardization (ISO), American Society for Quality Q9001–2008, American National Standard Quality Management Systems-Requirements, Aerospace Standard 9100, and ISO Technical Standard 16949, 16949:2009, and so forth). Organizations should find out more information about these commercial standardization groups from their Web sites.
- b.* Quality planning begins early in the life cycle of products and services and continues throughout.
- c.* Each quality program will integrate the following guiding principles:
  - (1) Mitigation of customer risk through assessment of processes, products, and services against defined performance requirements.
  - (2) Commitment to excellence, customer satisfaction, and continuous improvement.
  - (3) Adoption of proactive, concurrent, and confirmatory quality measures to assess performance.
  - (4) Communication of quality requirements to all stakeholders.
  - (5) Authority to positively affect product and service quality.
  - (6) Oversight for planning, organizing, and directing quality resources for program success.
  - (7) Development and training of competent quality professionals.
  - (8) Partnering with Government and industry in addressing quality issues.
  - (9) Application of International Organization for Standardization Quality Standards, Baldrige Criteria, Shingo Prize evaluation criteria, and the Capability Maturity Model Integration.
  - (10) Management of quality standards at all levels of the organization and supply chain.
  - (11) Assessment through Quality Audits.
  - (12) Identify, investigate, track, and correct non-conformances, and comply with AR 702–7–1, Reporting of Product Quality Deficiencies within the U.S. Army, when applicable.

(13) Collaborative development of local policy and guidance with the quality community of practice to optimize efforts.

d. Detailed quality guidance and procedures can be found at: <https://collab.aep.army.mil/sites/quality>.

### **2-3. Quality management**

All quality requirements must be necessary, practical, measureable, verifiable, and enforceable. Each requiring activity will assign responsibilities, define requirements, and provide performance and assessment metrics for quality. Requiring activities will address the following areas:

- a. Measurement and verification of conformity to requirements.
- b. Fact-based decisionmaking.
- c. Reduction in variation.
- d. Use of performance information to foster continuous improvement.
- e. Effective root-cause analysis and corrective action.
- f. Performance of functions by persons who—

(1) Have sufficient responsibility, authority, expertise, and organizational freedom to identify and evaluate quality issues to initiate, recommend, or provide solutions.

(2) Ensure processes needed for a quality management system are established, implemented, and maintained.

(3) Ensure and promote awareness of customer requirements throughout the organization.

(4) Are not assigned direct responsibility for ensuring that cost or schedule objectives are met.

g. Annual review of program performance.

## **Section II**

### **Quality Program Requirements**

#### **2-4. Life cycle support**

Quality programs will identify and assess quality requirements early and continually throughout product or service life cycles giving due consideration to total life cycle costs and risks associated with design, development, production, deployment, sustainment, and disposal.

#### **2-5. Interface with systems engineering processes**

Quality programs will—

- a. Integrate quality disciplines within systems engineering processes.
- b. Perform independent and objective assessments of products and services.
- c. Ensure appropriate management and integration of quality competencies for the product or service life cycle.

#### **2-6. Risk-based planning**

Through design and implementation, quality programs will manage risks associated with product or service nonconformity, giving consideration to the total life cycle costs of quality. Risk management will consider the likelihood and consequences of nonconformity, and influence of maturity, complexity, criticality, and value of work performed, as well as demonstrated past performance.

#### **2-7. Voice of the customer**

Quality programs will—

- a. Identify, prioritize, document, and assess customer quality requirements to ensure consistent understanding and customer satisfaction.
- b. Assess products and services to ensure conformance with customer defined quality requirements.
- c. Develop, document, and measure relevant quality level requirements to ensure that the delivered products and/or services meet the customer's needs.

#### **2-8. Preventive and corrective action**

Utilizing process improvement tools and techniques, such as statistical process control, which focuses on inputs, and statistical quality control, which focuses on outputs, quality programs will—

- a. Institute preventive measures to reduce the probability of nonconformance.
- b. Establish corrective protocols with specific schedules to mitigate risks and prevent recurrence of issues (through root cause elimination) when nonconforming performance is identified.
- c. Track corrective protocols to ensure completion.

#### **2-9. Core competencies**

Management of a comprehensive quality program requires subject matter experts.

a. The Defense Acquisition University offers courses and certifications in Production, Quality, and Manufacturing, and persons with quality responsibilities should be encouraged to complete applicable Production, Quality, and Manufacturing courses.

b. Organizations should consider coding positions that have acquisition quality responsibilities as Acquisition Production, Quality, and Manufacturing positions when writing position descriptions.

c. Quality programs will develop and utilize a skills development plan that defines and develops quality competencies to ensure appropriate internal quality expertise. Quality competencies are those inherent and fundamental disciplines that ensure customer requirements for products and services are satisfied. At a minimum, the following quality competencies will be considered:

(1) *Quality engineering*: The application of mathematical and scientific principles in the analysis of a product's design and manufacturing system to identify, reduce, or manage variation at all life cycle stages.

(2) *Product quality management*: The application of techniques, such as statistical process and product control, to ensure sustainment of acquisition quality provisions and product quality requirements throughout the life cycle of the product.

(3) *Service quality management*: The application of techniques to ensure sustainment of service quality provisions and requirements throughout the service relationship.

(4) *Product verification and validation*: The application of techniques to ensure product meets operational needs and product design and performance meets specified requirements.

(5) *Software quality*: The planned and systematic approach to evaluate effectiveness and conformity with software product requirements, processes, and procedures.

(6) *Quality systems management*: The management of a formalized system that controls the structure, responsibilities, and procedures, to achieve maximum customer(s) satisfaction at the lowest overall cost to the organization.

## **2-10. Quality community of practice**

All Army activities that acquire, provide, and produce products and services in support of acquisition, logistics, and technology missions will exchange best quality practices and lessons learned by means of a community of practice. Member organizations to this forum will work in collaboration with Headquarters, U.S. AMC to solve common challenges through joint process action teams, benchmarking, partnerships, and other vehicles that facilitate component-wide solutions. This community of practice will serve as subject matter experts on all quality matters impacting the Army.

## **2-11. Benchmarks and partnerships**

Quality programs will utilize benchmarking against similar programs to reflect best practices. When appropriate, quality stakeholders should establish partnerships with other military services, Federal agencies, industries, suppliers, professional societies, regulatory bodies, academia, and so forth to foster an environment of information exchange and to promote collective improvement strategies.

## **2-12. Single-process initiatives**

To the maximum extent possible, quality programs should utilize standardized quality practices throughout the Army to reduce performance variation, increase customer(s) confidence, and minimize associated costs.

## **2-13. Supplier quality management**

Reliance upon the expertise and performance of suppliers is a paramount consideration during product and service acquisition. The selection, evaluation, and management of suppliers will consider past quality performance and risk criteria. When appropriate, acquisition documents will incorporate specific quality requirements. Quality programs will assess and manage all suppliers within the value chain by establishing and tracking supplier performance metrics and comparing the performance of supplier products and services against quality requirements.

## **2-14. Metrics**

Quality programs will identify quality objectives and measures and establish metrics to evaluate the performance and value of quality programs to the Army. Such measures will be associated with readiness, customer satisfaction, cost of quality, and factors that can adversely affect component and organizational performance.

## **2-15. Continuous improvement**

a. All activities will be subject to variation reduction and continuous process improvement through the use of metrics.

b. Quality programs will focus on:

- (1) Reducing complexity and non value-added activities;
  - (2) Increasing the quality of the product or service;
  - (3) Reducing associated operating costs;
  - (4) Reducing cycle times;
  - (5) Satisfying customer requirements.
- c. Integrating products, processes, and performance is a key element of all quality programs.

## **Appendix A References**

### **Section I**

#### **Required Publications**

This section contains no entries.

### **Section II**

#### **Related Publications**

A related publication is merely a source of additional information. The reader does not have to read it to understand this publication. Army publications are available at <http://www.apd.army.mil>. DOD publications are available at <http://www.dtic.mil/whs/directives>. MIL-STDs are available at <http://quicksearch.dla.mil/>.

#### **AR 5-1**

Total Army Quality Management

#### **AR 11-2**

Managers' Internal Control Program

#### **AR 25-30**

The Army Publishing Program

#### **AR 700-139**

Army Warranty Program

#### **AR 702-6**

Ammunition Stockpile Reliability Program

#### **AR 702-7**

Product Quality Deficiency Report Program

#### **AR 702-7-1**

Reporting of Product Quality Deficiencies within the U.S. Army

#### **AR 702-16**

Chemical Materiel Stockpile Reliability Program

#### **AR 702-17**

Quality Improvement and Product Nonconformance Reduction

#### **AR 702-18**

Materiel Quality Storage Standards Policy for Shelf-Life Materiel

#### **MIL-STD-1916**

DOD Preferred Methods for Acceptance of Product

### **Section III**

#### **Prescribed Forms**

This section contains no entries.

### **Section IV**

#### **Referenced Forms**

Unless otherwise indicated, DA forms are available on the Army Publishing Directorate Web site (<http://www.apd.army.mil>).

#### **DA Form 11-2**

Internal Control Evaluation Certification

## **Appendix B**

### **Internal Control Evaluations for Army Quality Programs**

#### **B-1. Function**

The function covered by this evaluation is Army quality programs.

#### **B-2. Purpose**

To assist Army Leaders, Materiel Developers, and supporting Life Cycle Management Commands in evaluating their key internal controls. It is not intended to cover all controls.

#### **B-3. Instructions**

Answers to the below evaluation must be based on the actual testing of controls such as document analysis, direct observation, interviewing, sampling, and simulation. Answers that indicate deficiencies must be explained and corrective action indicated in supporting documentation. These internal controls must be evaluated at least once every year. Certification that the evaluation has been conducted must be accomplished in accordance with AR 11-2 on DA Form 11-2 (Internal Control Evaluation Certification).

#### **B-4. Test questions**

- a.* Has a Quality Program been implemented?
- b.* Is the Army Quality Program used to reduce program costs and risks associated with design, development, production, deployment, sustainment, and disposal?
- c.* Is Quality continually assessed throughout the product or service life cycle?
- d.* Are quality requirements necessary, practical, measureable, verifiable, and enforceable?
- e.* Have metrics been identified to evaluate the performance and value of quality activities to the Army?
- f.* Are trends for key quality metrics monitored?
- g.* Have program risks been analyzed, mitigated or accepted?
- h.* Have quality performance objectives been established for those responsible officials with significant life cycle cost, schedule, and performance responsibilities?

#### **B-5. Supersession**

This internal control evaluation supersedes AR 702-11, dated 2 March 2007.

#### **B-6. Comments**

Help make this a better tool. Submit comments to HQDA, ASA (ALT) (SAAL-ZL), 103 Army Pentagon, Washington, DC 20310-0103.

## **Glossary**

### **Section I Abbreviations**

#### **AMC**

Army Materiel Command

#### **ASA (ALT)**

Assistant Secretary of the Army (Acquisition, Logistics and Technology)

#### **CG**

commanding general

#### **ISO**

International Organization for Standardization

#### **U.S.**

United States

### **Section II Terms**

#### **Benchmarking**

The continuous process of measuring products, services, and practices against the public or private sector organizations that are recognized as best in class.

#### **Community of Practice**

An affinity group. An informal network or forum where tips are exchanged and ideas generated. A group of professionals informally bound to one another through exposure to a common class of problems, common pursuit of solutions, and thereby themselves embodying a store of knowledge.

#### **Conformity**

Compliance with applicable standards, policies, regulations, and laws.

#### **Continuous Improvement**

Recurring activity to increase the ability to fulfill requirements.

#### **Nonconformity**

Failure to comply with applicable requirements, standards, policies, regulations, or laws.

#### **Partnership**

A strategy leading to a relationship with suppliers or customer(s) aimed at reducing costs of ownership, maintenance of minimum stocks, just-in-time deliveries, joint participation in design, exchange of information on materials and technologies, new production methods, quality improvement strategies, and exploitation of market synergy.

#### **Quality**

The composite of materiel attributes including performance features and characteristics of a production or service to satisfy a customer's given need.

#### **Quality management system**

Management system to direct and control an organization with regard to quality.

#### **Quality program**

A program that is developed, planned, and managed to carry out, cost-effectively, all efforts to affect the quality of materiel and services from concept through technology and system development, production, deployment, and disposal.

#### **Supplier**

Any provider whose goods and services may be used at any stage in the production, design, delivery, and use of another company's products and services. Suppliers include businesses, such as distributors, dealers, warranty repair services, transportation contractors, and service suppliers, such as healthcare, training, and education. Internal suppliers

provide materials or services to internal customer(s). An external producer, distributor, retailer, vendor, or contractor that provides a product, service, or information.

**Validation**

The process of evaluating a system or software component during, or at the end of, the development process to determine whether it satisfies specified requirements.

**Verification**

Confirms that a system element meets design-to or build-to specifications. Throughout the system's life cycle, design solutions at all levels of the physical architecture are verified through a cost-effective combination of analysis, examination, demonstration, and testing, all of which can be aided by modeling and simulation.

**Section III**

**Special Abbreviations and Terms**

This section contains no entries.

**UNCLASSIFIED**

**PIN 041222-000**