

ALLIED QUALITY ASSURANCE PUBLICATION

AQAP-2105 (Edition 2)

# NATO REQUIREMENTS FOR DELIVERABLE QUALITY PLANS

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# NORTH ATLANTIC TREATY ORGANIZATION NATO STANDARDIZATION AGENCY (NSA) NATO LETTER OF PROMULGATION

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- 1. AQAP-2105(Edition 2) NATO REQUIREMENTS FOR DELIVERABLE QUALITY PLANS is a non classified NATO publication. The agreement of interested nations to use this publication is recorded in STANAG 4107.
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# **Record of Changes**

Change Date	Date Entered	Effective Date	By Whom Entered

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# 1.0 General

# 1.1 Introduction

AQAP 2105 contains the NATO requirements for Deliverable Quality Plans to be used in contracts. The suppliers Deliverable Quality Plan will be evaluated according to these requirements.

The Deliverable Quality Plan shall specify how all contract related quality requirements shall be fulfilled.

# 1.2 Purpose

The purpose of this publication is to define the NATO requirements for a Deliverable Quality Plan in accordance with AQAP 2110/2120/2130 sections 5.4 and 7.1.

The Deliverable Quality Plan shall specify how all quality related contract requirements, including all requirements of AQAP 2110/2120/2130, shall be fulfilled.

The Deliverable Quality Plan defines and controls the supplier's activities, processes, responsibilities and resources.

# 1.3 Applicability

AQAP 2105 is primarily intended to supplement other contractual AQAPs used in a two-party contract by the supplier and/or derived sub-supplier(s). If inconsistencies exist between the contract requirements and this publication, the contract requirements shall prevail.

# 1.4 References

The documents referenced in this AQAP are listed below:

AQAP 2110	NATO Quality Assurance Requirements for Design, Development and Production
AQAP 2120	NATO Quality Assurance Requirements for Production
AQAP 2130	NATO Quality Assurance Requirements for Inspection and Test
ISO 9000:2005	Quality Management Systems – Fundamentals and Vocabulary

### 1.5 Definitions

The definitions of ISO 9000:2005, "Quality Management Systems – Fundamentals and Vocabulary" and definitions of paragraph 3.3 in AQAP 2110/2120/2130 shall apply to this AQAP. Additional terms used in this AQAP are defined below:

Deliverable Quality Plan A Deliverable Quality Plan is a supplier's document that specifies which procedures and associated resources shall be applied by whom and when to a specific project, product, process or contract requirement.

NOTE: A Deliverable Quality Plan is the document that meets the requirements of this AQAP and is to be delivered by the supplier to the GQAR and/or the Acquirer as required in the applicable contract

# 1.6 Acronyms

The following is a list of acronyms used throughout this AQAP.

AQAP Allied Quality Assurance Publication

ISO International Organization for Standardization

GQA Government Quality Assurance

GQAR Government Quality Assurance Representative

# 2.0 Structure of AQAP 2105

AQAP 2105 describes below the NATO requirements regarding the establishment process and the content of a Deliverable Quality Plan.

The required detail content of a Deliverable Quality Plan is provided in chapter 4.

# 3.0 Establishment process of the Deliverable Quality Plan

# 3.1 Preparation

- 3.1.1 As a prerequisite to the preparation of a Deliverable Quality Plan, the supplier shall undertake a review of all contract requirements to determine the necessary management, technical and other necessary activities that need to be planned and implemented. Special or unusual requirements shall be focused. The appropriate operations, processes and techniques must be planned and scheduled, and means for testing and proving the conformance shall be identified.
- 3.1.2 The Deliverable Quality Plan and its related process documentation, procedures, plans etc shall be prepared and submitted prior to the start of the activities they specify.
- 3.1.3 The Deliverable Quality Plan shall be clearly linked to the contract and the product, and shall be subject to document control.
- 3.1.4 As appropriate, the Deliverable Quality Plan shall either refer to the relevant processes and procedures of the supplier's Quality Management System or physically include these processes and procedures. The Deliverable Quality Plan shall refer to other applicable contractual required or related documents/plans.

# 3.2 Approval/Submission

- 3.2.1 Supplier authorized personnel shall approve the Deliverable Quality Plan prior to submittal to the GQAR and/or Acquirer for evaluation.
- 3.2.2 The GQAR or the Acquirer reserves the right to reject the Deliverable Quality Plan and its revisions if not compliant with the contract requirements or non-compliance to AQAP 2105.

# 3.3 Implementation

The supplier shall ensure that the status of each of the processes implemented under the Deliverable Quality Plan is known and fit for use. The supplier shall verify and demonstrate the efficient implementation and performance outputs. Supplier shall ensure that the Deliverable Quality Plan is available and adhered to by all parties/internal units concerned with its implementation and all employees responsible for its implementation. Supplier shall ensure proper implementation of the Deliverable Quality Plan.

The supplier shall validate that the activities are specified in accordance to contract requirements. The supplier shall review, audit, demonstrate and verify that the activities are performed in accordance with the Deliverable Quality Plan.

# 3.4 Reviews, Revisions and Change Control

- 3.4.1 The Deliverable Quality Plan shall be reviewed periodically by the supplier within the phases through the contract life cycle.
- 3.4.2 Revisions to the Deliverable Quality Plan shall be submitted to the GQAR and/or Acquirer in accordance with 3.2 above or according to a defined change control procedure and shall be submitted without any necessary delay.
- 3.4.3 The supplier's procedure for amending the Deliverable Quality Plan shall be included.
- 3.4.4 The supplier shall ensure that any changes related to the Deliverable Quality Plan are controlled, and that the identity, approval status, version and date of issue are clearly indicated.

# 4.0 Content of the Deliverable Quality Plan

# 4.1 General

The content of the Deliverable Quality Plan must be adequately precise and detailed enough to reflect the ongoing supplier activities specific for a contract. The Deliverable Quality Plan shall refer to and/or include all procedures, plans and other documents applicable to the contract. The Deliverable Quality Plan shall specify the activities (managerial and technical) to be implemented, either directly or by reference to appropriate procedures and documents.

# 4.2 Project Description

The purpose and applicability of the project shall be described in a short form.

# 4.3 Acronyms, Abbreviations and Definitions

All acronyms and abbreviations used in the Deliverable Quality Plan shall be listed. All definitions used in the Deliverable Quality Plan shall be listed except the contractual definitions.

# 4.4 Organization and Responsibilities

The Deliverable Quality Plan shall include a contract specific description of the organizational structure and identify those responsible for ensuring that the required activities are carried out. The responsibilities and authorities of responsible personnel related to quality, including management representative, shall be described. The independence of personnel designated for contract related quality responsibilities must be clearly documented. Relevant interfaces between the responsible personnel shall be explained.

The relations to the GQAR and/or Acquirer shall be described.

# 4.5 Resource Management

The provision of resources, human resources, infrastructure and work environment needed to implement the contract requirements shall be specified in the Deliverable Quality Plan.

# 4.6 Quality Management System Activities

The planning of applicable quality management activities derived from the quality related requirements and risks shall be defined, but is not limited, to the processes given in below sub-paragraphs. The Deliverable Quality Plan shall describe how the requirements are flowed down to the places where work is being performed.

# 4.6.1 Processes (General requirements)

The Deliverable Quality Plan shall include how processes are identified along with their application, their sequence and interaction.

Criteria and methods to ensure that processes are effective shall be included, as well as resources to support and monitor the implementation of them. Special emphasis shall be put on special or new processes.

The Deliverable Quality Plan shall include how the supplier will control outsourced products, processes and activities.

The Deliverable Quality Plan shall include how processes are monitored, measured, analyzed and continually improved.

# 4.6.2 Documentation requirements

The Deliverable Quality Plan shall describe how documentation requirements, including quality policy, quality objectives, quality manual, procedures, records and other documents are maintained and controlled, including retention periods. A document status list shall be available at all times, and shall be formalized during transitions between phases and/or baselines e.g. prior to design reviews.

# 4.7 Product Realization Activities

The planning of applicable product realization activities derived from the quality related requirements and risks shall be defined, but is not limited, to the processes below.

# 4.7.1 Planning of product realization

The Deliverable Quality Plan shall describe the activities related to how the planning process for product realization will be carried out.

# 4.7.2 Customer related processes

The Deliverable Quality Plan shall describe the activities associated with the process of the determination and reviewing requirements related to the product. It shall describe the arrangements for customer communication.

# 4.7.3 Design and development

The Deliverable Quality Plan shall describe the activities related to how the supplier plans and controls the design and development of the product and how interfaces are managed.

# 4.7.4 Purchasing including control of sub-suppliers

The Deliverable Quality Plan shall describe how the purchasing process will be carried out, how the supplier ensures that purchased products conforms to the specified requirements and how sub-suppliers are evaluated and selected. Specific risks related with sub-suppliers or their products shall be listed and addressed (see AQAP 2110/2120/2130 paragraph 7.4.1 and 7.4.3).

# 4.7.5 Production and service provisioning

The Deliverable Quality Plan shall describe how the production and service provisioning is carried out under controlled conditions.

# 4.7.6 Control of monitoring and measuring devices

The Deliverable Quality Plan shall describe how monitoring and measuring devices are controlled in order to provide evidence of product conformity to contract requirements. The Deliverable Quality Plan shall describe the processes used to ensure that measurement and calibration systems meet the requirements.

# 4.7.7 Configuration management

The Deliverable Quality Plan shall describe the contract specific activities for configuration management and/or give reference to the required Configuration Management Plan.

# 4.7.8 Reliability and Maintainability

The Deliverable Quality Plan shall describe the contract specific activities for Reliability & Maintainability.

# 4.8 Measurement, Analysis and Improvement Activities

The planning of applicable measurement, analysis and improvement activities derived from the quality related requirements and risks shall be defined, but is not limited, to the processes below.

### 4.8.1 Customer satisfaction

The Deliverable Quality Plan shall describe how monitoring and measurement of customer satisfaction will be carried out.

### 4.8.2 Internal audit

The Deliverable Quality Plan shall describe how internal audits will be performed in order to determine whether the Deliverable Quality Plan conforms to the requirements and is effectively implemented and maintained.

# 4.8.3 Certificate of Conformity

The Deliverable Quality Plan shall refer to the contract specific arrangements for the use of Certificate of Conformity.

# 4.8.4 Control of non-conforming product

The Deliverable Quality Plan shall describe how the contract specific requirements for identification and control of non-conformances will be carried out.

# 4.8.5 Analysis of data

The Deliverable Quality Plan shall describe how analysis of data will be performed in order to demonstrate the suitability and effectiveness of the planned activities and where improvements can be made.

# 4.8.6 Improvement

The Deliverable Quality Plan shall describe how continual improvement, corrective and preventive actions will be carried out.

# 4.9 NATO Additional Requirements

The planning of applicable NATO additional requirements activities derived from the quality related requirements and risks shall be defined, but is not limited, to the requirements below.

The Deliverable Quality Plan shall describe how the GQAR and/or acquirer access to supplier and sub-suppliers are given and how support for GQA activities will be provided.

The Deliverable Quality Plan shall describe how the supplier will ensure that only acceptable products intended for delivery are released to the acquirer.

# 4.10 Referenced Documents

# 4.10.1 Contractual documents

Where applicable, the Deliverable Quality Plan shall refer to other plans or their appropriate sections and quality related contractual documents.

The interfaces and relationships to these and other planning documents required in contracts shall be described.

# 4.10.2 Supplier internal quality related documents

Where applicable, the Deliverable Quality Plan shall refer to the supplier's Quality Management System.

# 4.10.3 Other documents

Deliverable Quality Plan shall list other relevant and contract related documents.

# 4.10.4 Order of precedence

The order of precedence of referenced documents and their relationship to the contract, including the Deliverable Quality Plan, shall be specified.