

# **STANDARDS RELATED DOCUMENT**

## **AQAP-2105-SRD.1**

### **GUIDANCE ON THE USE OF AQAP-2105**

**Edition A Version 1  
NOVEMBER 2018**



**NORTH ATLANTIC TREATY ORGANIZATION**

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**NORTH ATLANTIC TREATY ORGANIZATION (NATO)**

**NATO STANDARDIZATION OFFICE (NSO)**

**NATO LETTER OF PROMULGATION**

8 November 2018

1. The enclosed Standards-Related Document, AQAP-2105-SRD.1, Edition A, Version 1, GUIDANCE ON THE USE OF AQAP-2105, which has been approved in conjunction with AQAP-2105 by the nations in the Life Cycle Management Group, is promulgated herewith.
2. AQAP-2105-SRD.1, Edition A, Version 1, is effective upon receipt and replaces the content of Annex D to AQAP-2009, Edition 3, which has been cancelled.
3. No part of this publication may be reproduced, stored in a retrieval system, used commercially, adapted, or transmitted in any form or by any means, electronic, mechanical, photo-copying, recording or otherwise, without the prior permission of the publisher. With the exception of commercial sales, this does not apply to member or partner nations, or NATO commands and bodies.
4. This publication shall be handled in accordance with C-M(2002)60.



Zoltán GULYÁS  
Brigadier General, HUNAF  
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## **Chapter 1 - INTRODUCTION**

### **1. Background**

AQAP-2105 contains NATO requirements for Quality Plans.

### **2. Purpose**

1 This document supports the establishment of a quality plan in accordance with AQAP-2105. It promotes a consistent interpretation and provides guidance to the requirements.

2 This document is for all users of the NATO contractual AQAPs: Acquirers, Suppliers and Government Quality Assurance Representatives (GQAR).

3. It should be noted that acquiring nations may issue supplementary guidance that reflects their national practice. Readers are encouraged to contact their National Quality Assurance Authority if further clarification is required. Contact details for National Authorities are contained in AQAP-4107 SRD.1.

## **Chapter 2 - Guidance for the use of AQAP 2105**

2.1 This guidance has been developed to support AQAP-2105.

2.2 Guidance to AQAP-2105 requirements are found in Table 1 on the next pages.

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**Table 1: Guidance to AQAP-2105 Requirements**

Requirement	Guidance
<p>1.1 GENERAL This publication contains the NATO requirements for Quality Plans to be used in contracts. This publication provides the process and contents of a contractual Quality Plan.</p> <p>The Suppliers Quality Plan will be evaluated according to these requirements.</p> <p>Note: This publication can be used for pre-contractual evaluation purposes.</p>	<p>AQAP-2105-SRD 1 is NATO guidance for the establishment and evaluation of Quality Plans. <i>AQAP-2105 - NATO Requirements for Quality Plans</i> is to be used in contracts or as part of pre-contractual evaluation purposes.</p> <p>This guidance provides useful information about the expectations for the Supplier and/or the Quality Plan and the explanation for the NATO Quality Plan requirements. Accordingly, this guidance clarifies the how, where and/or when the requirements of the Quality Plan should be used, required, described, defined and included in the Quality Plan.</p> <p>A Quality Plan requested for tender evaluation (pre-contract award) may be in a draft or outline Quality Plan format. During the contract tender stage, a Supplier may not have all the information available, nor should they be expected to go to the expense of producing a Quality Plan that meets all the requirements of this standard. A draft or outline Quality Plan should provide enough information for a Supplier to demonstrate:</p> <ul style="list-style-type: none"> <li>A) Management of risk;</li> <li>B) Assurance for requirements capture;</li> <li>C) Management of external providers;</li> <li>D) Assurance of externally provided products or services;</li> <li>E) Supply chain assurance;</li> <li>F) Achievement of customer satisfaction</li> </ul>

Requirement	Guidance
<p>1.2 PURPOSE This publication defines the NATO requirements for a Quality Plan in accordance with AQAP-2310, AQAP-2110 and AQAP-2210.</p> <p>The Quality Plan specifies how all contract requirements are fulfilled, including AQAP requirements required in the contract.</p> <p>The Quality Plan defines the Supplier's activities, processes, responsibilities, resources and describes how they are controlled.</p>	<p>PURPOSE describes the intent of a Quality Plan. Chapter 3 through 5 details these requirements.</p>



<b>Requirement</b>	<b>Guidance</b>
<p>1.3 APPLICABILITY This publication is intended for use in contracts between an Acquirer and a Supplier, and/or between a Supplier and its external providers. If inconsistencies exist between the contract requirements and this publication, the contract requirements shall prevail. This publication is intended for use in conjunction with AQAP-2310, AQAP-2110 and AQAP-2210.</p>	<p>This paragraph is considered self-explanatory.</p>

Requirement	Guidance
<p>1.4 REFERENCES The documents referenced in this publication are listed below:</p> <p>AQAP-2310 NATO Quality Management System Requirements for Aviation, Space and Defence Suppliers</p> <p>AQAP-2110 NATO Quality Assurance Requirements for Design, Development and Production</p> <p>AQAP-2210 NATO Supplementary Software Quality Assurance Requirements to AQAP-2110 or AQAP-2310</p> <p>ISO 9000:2015 Quality Management Systems – Fundamentals and Vocabulary</p> <p>AS 9145 Requirements for Advanced Product Quality Planning and Production Part Approval Process</p>	<p>This paragraph is considered self-explanatory.</p>

Requirement	Guidance
<p>1.5 DEFINITIONS The definitions of ISO 9000:2015, AQAP-2310, AQAP-2110 and AQAP-2210 shall apply to this publication.</p>	<p>Definitions given in AQAP-2105 apply.</p>
<p>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 AS Aerospace Standard</p>	<p>Acronyms given in AQAP-2105 apply.</p>
<p>2.1 COMPLIANCE Compliance with this publication is defined as the fulfilment of the requirements in chapters 3, 4 and 5. All requirements are applicable unless agreement otherwise as documented as part of the contract with the Acquirer.</p>	<p>Chapter 3 contains the requirements for the process for establishing a Quality Plan. Chapter 4 at section 4.1 to section 4.13.3 provides the preferred structure and content for a Quality Plan. Chapter 5 makes sure that software is covered in the Quality Plan, when a software project quality plan is required.</p>
<p>CHAPTER 3 ESTABLISHMENT</p>	<p>Chapter 3 contains guidance text aimed towards ensuring a suitable creation and implementation of a Quality Plan.</p>

Requirement	Guidance
<p>PROCESS OF THE QUALITY PLAN</p> <p>3.1 PREPARATION</p> <p>3.1.1 As a prerequisite to the preparation of the Quality Plan, the Supplier shall undertake a review of all contract requirements and perform risk identification to determine the necessary management, technical and other necessary activities that need to be planned and implemented. This review and risks identified shall be retained as documented information. Critical characteristics shall be identified and activities, which may not be part of the Supplier's usual business processes, shall be included. The appropriate operations, procedures, processes and techniques must be planned and scheduled. The means of verification and validation shall be identified. It is appropriate to adapt the Quality Plan according to:</p>	<p>Any activities that are not part of the Supplier's usual business processes may present greater risk(s); and therefore need to be focused on in the Quality Plan to demonstrate that risk(s) are being managed.</p> <p>The extent of the Quality Plan is expected to adapt to scope of the contract, product complexity, technology/processes, experience with corresponding products, duration of the project, work share between Supplier and External Providers, and the applicability of Suppliers quality management system to the contractual requirements.</p> <p>The Supplier should ensure that the Quality Plan and referenced documents are in an agreed format (i.e. hard copy or appropriate software version) that allows satisfactory accessibility for evaluation by the Acquirer and/or GQAR</p>

Requirement	Guidance
<ul style="list-style-type: none"><li data-bbox="331 268 633 339">– the extent of the contract,</li><li data-bbox="331 363 645 435">– the complexity of the product,</li><li data-bbox="331 459 618 579">– the applied techniques and processes,</li><li data-bbox="331 603 667 794">– the experiences of the Supplier from manufacturing of similar products and</li><li data-bbox="331 818 667 938">– the scope of cooperation with external providers.</li></ul>	

Requirement	Guidance
<p>3.1.2 The Quality Plan and its related process documentation shall be prepared and submitted prior to the start of any activities relating to the contract.</p> <p>Unless otherwise specified, the Supplier shall review and update the Quality Plan for the phases identified below in order to ensure the validity of the Quality Plan prior to the activities that has been specified:</p> <ul style="list-style-type: none"> <li>- Planning phase</li> <li>- Product Design and Development phase</li> <li>- Process Design and Development phase</li> <li>- Product and Process Validation phase</li> <li>- On-going Production, Use, and Post-delivery Service phases.</li> </ul> <p>Note: More information about these phases can be found in AS 9145.</p>	<p>The accepted Quality Plan shall be implemented for all activities performed by the supplier’s organization throughout all contractual activities until closing of the contract. The Quality Plan shall be continually reviewed and updated to mirror on-going activities, throughout the contract period. It is expected that the content of the Quality Plan reflects (in full detail) the activities/processes planned as part of the upcoming Phase. The Quality Plan shall reflect the output of the planning process as documented information.</p> <p>However, it is expected that all activities are well planned prior to the start of each activity. Describing the planning process itself is recommended.</p> <p>The actual duration of each phase will differ depending upon the scope and timing of the specific product and/or production development project.</p> <p>Phases may overlap, or be restarted at a later stage when needed.</p> <p>AS 9145 is used as a reference only within this standard to provide guidance to the definition of 'phases' within the context of paragraph 3.1.2.            Note: AS 9145 is not invoked as a contractual requirement of AQAP-2105            Note: ‘Phase’ is used in AQAP-2105. However, other terminologies may equally be used to determine start-, end- and scope of work, such as; milestones, gateways, deadlines or processes etc.</p>

Requirement	Guidance
3.1.3 The Quality Plan shall be clearly linked to the contract and the product, and shall be maintained as documented information.	The Quality Plan is expected to be user-friendly and shall include traceable references to product and contract applicable documented information.
3.1.4 The Quality Plan shall include or refer to the Supplier's processes and procedures within the Supplier's Quality Management System. The Quality Plan shall refer to all applicable contractual documents and plans, such as the contract, Project Management Plan, Configuration Management Plan, Risk Management Plan and their overall precedence.	The Quality Plan must be linked to a Supplier's QMS, and although contract specific, it should not be an isolated document. The Quality Plan should be developed in conjunction with other project-related planning, e.g. as a sub-set of the Project Management Plan. The Quality Plan should provide references to other applicable contractual documents and plans and should be prepared in a narrative form, supported by diagrams, activities and process flow-charts etc. as appropriate. The sequence of processes and individual activities specified within the Quality Plan should be stated unambiguously and concisely so that the intent is clear.

Requirement	Guidance
<p>3.2 APPROVAL/SUBMISSION</p> <p>3.2.1 Once the Quality Plan has been approved by the Supplier authorized personnel, it shall be submitted to the GQAR and/or Acquirer for evaluation, prior to the start of work, unless otherwise agreed.</p>	<p>Supplier authorized personnel, e.g. the Project Manager, Management Representative or Quality Manager, should be appointed to approve the Quality Plan.</p>
<p>3.2.2 The GQAR or the Acquirer reserves the right to reject the Quality Plan and any revisions if not compliant with the contract requirements or this publication.</p>	<p>It is normally not the GQARs and/or Acquirers responsibility to approve the Supplier documents; however, if the Supplier Quality Plan does not comply with AQAP-2105 and or other contractual requirements, the GQAR and/or Acquirer reserves the right to reject the Quality Plan.</p> <p>The Supplier is expected to issue a recovery schedule to correct the rejected Quality Plan to ensure compliance with the contractual requirements and the AQAP.</p> <p>If the GQAR and/or Acquirer make comments against the Quality Plan, then it is expected that the supplier implement corrections accordingly.</p>



Requirement	Guidance
<p>3.3 IMPLEMENTATION</p> <p>3.3.1 The Supplier shall ensure that all processes and content within the Quality Plan are:</p> <ul style="list-style-type: none"> <li>- Verified as being fit for purpose,</li> <li>- Available and implemented by all responsible parties,</li> <li>- Reviewed (as detailed in 3.4) to ensure suitability and compliance.</li> </ul>	<p>The applicable activities by the supplier's organization should be implemented in accordance with the approved Quality Plan through all phases, until closure of the contract.</p> <p>The Quality Plan should reflect the supplier's continual improvement process. The Supplier is expected to identify measurable indicators, analyze data and initiate corrective and/or preventive action.</p>
<p>3.3.2 Records of audit results (as detailed in 4.13.3) shall be maintained for the life of the contract and be made available to the GQAR and/or Acquirer upon request.</p>	<p>This paragraph is considered self-explanatory.</p>
<p>3.4 REVIEWS, REVISIONS AND CHANGE CONTROL</p> <p>3.4.1 The Quality Plan shall be reviewed periodically by the Supplier as a minimum at each development and production phase as detailed in 3.1.2 above through the contract life cycle.</p>	<p>The Supplier is expected to review the Quality Plan when necessary. The Quality Plan is to be amended/reissued when contractual or supplier related changes occur, especially prior to the start of activities not already included in the current version. See guidance 3.1.2 above.</p> <p>The Quality Plan is to be reviewed when new risks requiring change of plans are identified, or if identified risks substantially change the five contexts listed in 3.1.1. This requires the supplier to take mitigating action and to inform the GQAR and/or the Acquirer.</p>

Requirement	Guidance
<p>3.4.2 Revisions to the Quality Plan shall be submitted to the GQAR and/or Acquirer in accordance with 3.2 above or according to the Suppliers defined change control procedure and shall be submitted without any unnecessary delay.</p>	<p>The Supplier is encouraged to agree on reporting changes of Quality Plan submission with the GQAR and/or Acquirer.</p>
<p>3.4.3 The Supplier's procedure for the amendment and review of the Quality Plan shall be included in the Quality Plan.</p>	<p>This paragraph is considered self-explanatory.</p>
<p>3.4.4 The Supplier shall ensure that any changes related to the Quality Plan are controlled, with the identity, approval status, version and date of issue are clearly identified in the Quality Plan.</p>	<p>The Supplier is expected to ensure that revisions are properly implemented and disseminated.</p>
<p>CHAPTER 4            CONTENT OF THE QUALITY PLAN</p> <p>4.1 GENERAL            The scope of the Quality Management System shall be documented in the Quality</p>	<p>In regards to the scope of the Quality Management System, if requirements are considered not applicable, the Quality Plan should include documented information justifying any exclusion. Exclusion may be phase specific.            In regards to content of the Quality Plan, the Supplier should determine the format/layout. The overall structure may in principle be as shown in figure 1 below.</p>

Requirement	Guidance
<p>Plan as it applies to the contract. The content of the Quality Plan shall be precise and detailed enough to reflect the ongoing Supplier contractual activities specific to the contract.</p> <p>The Quality Plan shall refer to and/or include all procedures, plans and other documents applicable to the contract. The Quality Plan shall specify the activities (managerial and technical) to be implemented, either directly or by reference to procedures and documents.</p>	<p>When applicable, the Quality Plan refer to other quality related contractual documents, such as:</p> <ul style="list-style-type: none"> <li>• Purchasing/sub-supplier Management Plan</li> <li>• Software Engineering Management Plan</li> <li>• Software Project Quality Plan (SPQP)</li> <li>• Program Management Plan</li> <li>• Risk Management Plan</li> <li>• Configuration Management Plan</li> <li>• Engineering Management Plan</li> <li>• Development Plan</li> <li>• Verification Plan</li> <li>• Validation Plan</li> <li>• Acceptance Plan</li> </ul> <p>Quality Management System (Scope of QMS) and Operations</p> <p>Applicable supplier "Company-wide" processes, including who does what, when and how</p> <p>Contract specific procedures - who does what, when and how</p> <p>Product Functional and/or Technical Requirements</p> <p>Contractual Specifications, Drawings etc</p> <p>Figure 1 illustrates the levels of documentation the Quality Plan might use or reference</p>

Requirement	Guidance
<p>4.2 PROJECT DESCRIPTION</p> <p>The purpose and applicability of the project shall be briefly described.</p>	<p>An abstract of special contractual conditions, requirements, known risks, challenges and pitfalls should be provided to the GQAR and/or Acquirer. Additionally, the abstract should list the contract related external providers and the facilities where contractual activities are to be performed.</p>
<p>4.3 ACRONYMS, ABBREVIATIONS AND DEFINITIONS</p> <p>All acronyms and abbreviations used in the Quality Plan shall be listed. All definitions used in the Quality Plan shall be listed except contractual definitions.</p>	<p>This paragraph is considered self-explanatory.</p>
<p>4.4 QUALITY MANAGEMENT SYSTEM ACTIVITIES</p> <p>The planning of quality management activities, as applied to the achievement of contractual requirements, shall be described; inclusive of arrangements where work is conducted at locations external to the Supplier premises. The flow-down of requirements to the places where work is being performed shall be described.</p>	<p>The Quality Plan should describe how the requirements are flowed down to the areas where processes and activities related to fulfillment of contract requirements will be performed. See paragraph 4.5 through 4.13 and chapter 5.</p> <p>The Scope of QMS must also define the valid QMS locations (premises) and applicability of the Supplier.</p> <p>Considerations of the Scope of the Supplier's QMS will be in relation to the planned work being performed at premises external and/or outside of the Supplier's premises. These external/outside providers must remain under the Supplier's control. See 4.10.7 for flow-down of requirements-guidance.</p>

Requirement	Guidance
<p>4.4.1 PROCESSES (GENERAL REQUIREMENTS)                      The Quality Plan shall include how processes are identified along with their application, sequence and interaction.</p> <p>Criteria and methods to ensure that processes are effective shall be included, as well as resources to support and monitor their implementation. Emphasis shall be put on processes that are complex or involving significant levels of risk as well as new processes.</p> <p>The Quality Plan shall include how the Supplier will control externally provided products, processes and activities, including the avoidance, detection, mitigation and disposition of counterfeit materiel.</p> <p>The Quality Plan shall include how processes are monitored, measured,</p>	<p>Process identification is part of the planning phase and could be illustrated by using flow charts.</p> <p>Performance of the work being conducted is expected to be continuously measured and reported to the supplier’s management. Risk identification and analysis gives an important input for selecting appropriate criteria and methods of operation to be planned and executed as part of the contractual output.</p> <p>Quality metrics should be used for monitoring the effectiveness of the implementation of the Quality Management System. These quality metrics may be identified as Key Performance Indicators or Quality Performance Indicators and be contractual deliverables.</p> <p>An audit plan that covers contract specific processes and activities, including those at external provider’s, is required (see 4.13.3).</p> <p>For Counterfeit avoidance, it is important to have the controls and awareness of this issue in place, making sure anyone involved has knowledge and authority to detect, communicate and treat both counterfeit and suspect products, whenever there is a suspicion or knowledge that counterfeit material may be present.</p> <p>It is expected that measures to avoid counterfeit material is integrated into the control activities of external providers, and how the knowledge of product origins, and provenance of the supply-chain is obtained.</p> <p>The Quality Plan is required to describe specific instructions regarding counterfeit avoidance during procurement of externally provided products, and procedures for receiving inspection.</p> <p>Note: STANREC 4791 – <i>Avoidance of counterfeit material in the Defence Supply Chain</i> identifies publications that provide more information on Counterfeit issues.</p>

Requirement	Guidance
<p>analyzed and continually improved. Appropriate performance indicators shall be determined.</p>	
<p>4.4.2 DOCUMENTATION REQUIREMENTS                      The Quality Plan shall describe how documentation requirements, including quality policy, quality objectives, scope of quality management system, 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 product baselines e.g. prior to design reviews.</p>	<p>The Quality Plan shall describe the use of documented information (format, layout, content etc) and how documented information is controlled, maintained and retained.</p> <p>This paragraph is otherwise considered self-explanatory.</p>

Requirement	Guidance
<p>4.5 REFERENCED DOCUMENTS</p> <p>4.5.1 Where applicable, the Quality Plan shall refer to other quality related contractual documents and plans. The interfaces and relationships to these documents shall be described.</p> <p>4.5.2 The Quality Plan shall list contractual and other related documents that are used by the Supplier to provide assurance of product conformance.</p> <p>4.5.3 The order of precedence of referenced documents and their relationship to the contract, including the Quality Plan, shall be specified.</p>	<p>Examples of other plans and quality related contractual documents that need to be referred are:</p> <ul style="list-style-type: none"> <li>• Program Management Plan</li> <li>• Project Management Plan</li> <li>• Risk Management Plan</li> <li>• Configuration Management Plan</li> <li>• Engineering Management Plan</li> <li>• Development Plan</li> <li>• Software Project Quality Plan</li> <li>• Purchasing/sub-supplier Management Plan</li> <li>• Verification Plan</li> <li>• Validation Plan</li> <li>• Acceptance Plan</li> </ul> <p>The references to the supplier’s Quality Management System and specific processes may be either partially or fully explained, e.g. the Quality Plan should cross-reference the QMS identified processes where functions and activities are clearly described. Other internal contract specific documents should be listed, e.g. contract specific procedures/instructions. In other words, the key outputs are – who does what, when and how.</p> <p>Other relevant documents such as, related plans, interface documents, procedures and documents, including those of external providers that contribute to the delivered product as specified in the contract, are to be listed.</p> <p>The following order of precedence should always be adhered to; Contractual documents, Quality Plan, then other referenced documents. This precedence needs to be communicated in the Quality Plan to prevent any confusion on its applicability and application.</p>

Requirement	Guidance
<p>4.6 ACCESS TO SUPPLIER AND EXTERNAL PROVIDERS AND SUPPORT FOR GQA ACTIVITIES</p> <p>The Quality Plan shall describe the provisions and support to be provided to the GQAR and/or Acquirer for access to the Supplier and/or external providers.</p>	<p>It is also important to flow down access and support requirements when flowing down quality assurance requirements to External Providers.</p> <p>Note: See access requirements in the contractual AQAPs.</p>



Requirement	Guidance
<p>4.7 ORGANIZATION ROLE, RESPONSIBILITIES AND AUTHORITIES The 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 the Management Representative, shall be described. The independence of personnel designated for contract related quality responsibilities shall be clearly documented. The inter-relationships between those responsible personnel shall be explained.</p> <p>The relations to the GQAR and/or Acquirer shall be described.</p>	<p>This paragraph is considered self-explanatory.</p>

Requirement	Guidance
<p><b>4.8 RISK MANAGEMENT</b> The Quality Plan shall describe the contract specific activities for Risk Management and/or give reference to the required Risk Management Plan.</p>	<p>The Quality Plan should refer to a Risk Management Plan. The Risk Management Plan should describe how to manage risk in accordance with the principles and guidelines contained in ISO 31000.</p> <p>The Quality Plan should explain how risk management activities are coordinated with external providers.</p> <p>The Quality Plan should include how risk is managed and communicated throughout the contract phases.</p> <p>The contract may not require the development of a specific (stand-alone) risk management plan for the contract, as long as the risk management plan of the supplier covers all major risks of the contract. The supplier should demonstrate to the GQAR and/or Acquirer that any changes of the context / processes introduced by the contract have been taken into consideration in the risk management plan</p>
<p><b>4.9 SUPPORT</b> The Quality Plan shall describe how the Supplier manages resources.</p>	<p>This paragraph is considered introductory</p>
<p><b>4.9.1 RESOURCE MANAGEMENT</b> The provision of resources, human resources, infrastructure and work environment needed to implement the contract requirements shall be specified in the Quality Plan.</p>	<p>The Quality Plan is expected to specify how the Supplier ensures necessary resources (manpower, facilities, training, equipment etc.) needed for carrying out the required activities, including confirmation that these resources are available for use on the contract.</p>

Requirement	Guidance
<p>4.9.2 MONITORING AND MEASURING RESOURCES The Quality Plan shall describe the processes used to ensure that measurement processes and measuring equipment meet requirements. The measurement management system shall be described; including the metrological function, measurement processes and the metrological confirmation process. The control of monitoring and measuring equipment in order to provide evidence of product conformity to contract requirements shall be described.</p>	<p>This paragraph is considered self-explanatory.</p> <p>Note 1: Special emphasis should be made on critical measurements. Note 2: Do not mix ISO 9001:2015 7.1.5 Monitoring and measuring resources with process measurement requirement in ISO 9001:2015 4.4 Quality management system and its processes 4.4.1 c).</p>
<p>4.10 OPERATION The planning of activities derived from the requirements and risks shall be defined, but is not limited to the processes below.</p>	<p>This paragraph is considered introductory.</p>
<p>4.10.1 OPERATIONAL PLANNING AND CONTROL The Quality Plan shall describe the activities related</p>	<p>The planning activities requirements are considered self-explanatory. The output of these planning activities should lead to proven product conformance to contract requirements e.g. showing the processes that were needed, requirements for the</p>

Requirement	Guidance
<p>to how the planning process for product realization/operation will be carried out. This shall include, or be referenced to, the requirement and solution compliance matrix. It shall describe how the matrix is maintained and controlled.</p> <p>The Quality Plan shall describe how the contract specific activities for identification, management, traceability, review and validation of requirements is planned. Giving reference to related processes, documents (i.e.: system requirement specification) and test procedures.</p>	<p>product that are met, defining criteria for product acceptance and the method of inspection, verification and validation.</p> <p>If a solution compliance matrix is required (as in AQAP-2110/2310), then the matrix should achieve, through all planned phases, documented traceability between requirements and solution.</p> <p>“Matrix” should be understood as a list with more than one column. Supplier software tools and/or procedures to manage requirements are encouraged and should as a minimum provide traceability through requirements, confirmation of ability, the solution/verification plans, and references to verification records.</p> <p>The following is an example of the content of a <i>requirement and solution compliance matrix</i>:</p> <ol style="list-style-type: none"> <li>1. <i>Requirement reference (number); Requirement (text)</i></li> <li>2. <i>Compliance statement (C/PC/NC); Compliance comment</i></li> <li>3. <i>Verification method(s); Verification milestone(s)</i></li> <li>4. <i>Verification procedure reference; Verification record reference</i></li> </ol> <p>The matrix contains the columns (1) in order to ensure traceability to contract requirements; and continues with columns (2) in order to confirm the Supplier ability and intent to comply (Resulting from <i>ISO 9001 chapter 8.2.3 - Review of the requirements for products and services</i>); and further continues with columns (3) in order to plan sufficient activities; and columns (4) in order to demonstrate requirement conformance and to support provenance.</p> <p>Note:  <i>Compliance statement</i>: Should contain only “Compliant (C)”, “Partially Compliant (PC)” or “Not compliant (NC)”. After contract is agreed, only “Compliant (C)” is expected.</p>

Requirement	Guidance																			
	<p><i>Verification milestone(s):</i> Should explain when the verification method is to be performed within the design-/development- and/or production process.</p> <p>For each requirement, the compliance matrix is the link between the requirement and the Quality Plan. It clearly specifies the paragraph of the Quality Plan dealing with the said requirement. The differences noted are explained and justified.</p> <p>An example of a compliance matrix format is shown in Annex A and below:</p> <table border="1" data-bbox="701 579 1982 1386"> <thead> <tr> <th data-bbox="701 579 929 898">Title and reference of contractual requirement</th> <th data-bbox="929 579 1391 898">Description</th> <th data-bbox="1391 579 1554 898">Compliance statement: C: compliant PC: Partially Compliant NC: Non-Compliant</th> <th data-bbox="1554 579 1803 898">Comment or explanation with regard to non-compliance, partial compliance or Verification method(s)</th> <th data-bbox="1803 579 1982 898">Reference of paragraph of the quality plan</th> </tr> </thead> <tbody> <tr> <td data-bbox="701 898 929 1177">AQAP-2110 4.3</td> <td data-bbox="929 898 1391 1177"> <p>4.3 External providers</p> <p>The Supplier shall maintain the list of external providers that are used under this contract. This list is attached to the Quality Plan and systematically sent to the prescribing department after each revision.</p> </td> <td data-bbox="1391 898 1554 1177">C</td> <td data-bbox="1554 898 1803 1177"></td> <td data-bbox="1803 898 1982 1177">Annex 2 "list of external providers"</td> </tr> <tr> <td data-bbox="701 1177 929 1386"></td> <td data-bbox="929 1177 1391 1386"></td> <td data-bbox="1391 1177 1554 1386"></td> <td data-bbox="1554 1177 1803 1386"></td> <td data-bbox="1803 1177 1982 1386"></td> </tr> </tbody> </table>					Title and reference of contractual requirement	Description	Compliance statement: C: compliant PC: Partially Compliant NC: Non-Compliant	Comment or explanation with regard to non-compliance, partial compliance or Verification method(s)	Reference of paragraph of the quality plan	AQAP-2110 4.3	<p>4.3 External providers</p> <p>The Supplier shall maintain the list of external providers that are used under this contract. This list is attached to the Quality Plan and systematically sent to the prescribing department after each revision.</p>	C		Annex 2 "list of external providers"					
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Requirement	Guidance				
<p>4.10.2 CONFIGURATION MANAGEMENT The Quality Plan shall describe the contract specific activities for Configuration Management and/or give reference to the required Configuration Management Plan.</p>	<p>This paragraph is considered self-explanatory.</p>				
<p>4.10.3 CUSTOMER COMMUNICATIONS The Quality Plan shall describe the arrangements for communication with the GQAR and/or Acquirer.</p>	<p>This paragraph is considered self-explanatory.</p>				
<p>4.10.4 DETERMINING THE REQUIREMENTS RELATED TO PRODUCTS The Quality Plan shall identify and describe the activities associated with determining and reviewing requirements.</p>	<p>This paragraph is considered self-explanatory.</p>				

Requirement	Guidance
<p>4.10.5 DESIGN AND DEVELOPMENT CONTROLS                      The Quality Plan shall describe how design and development of products are performed, including processes for design and development planning, inputs, controls, reviews, evaluation, acceptance criteria, verification, validation, outputs and changes.</p>	<p>This paragraph is considered self-explanatory.</p>
<p>4.10.6 DEPENDABILITY                      The Quality Plan shall describe the contract specific activities for Dependability, if required in the contract.</p> <p>Note: Further information on NATO Dependability Management is contained within Allied Dependability Management Publications (ADMP).</p>	<p>If Dependability management, such as reliability, maintainability, availability, testability, maintenance, functional suitability, performance efficiency, compatibility, usability, security, portability or safety is required, then this requirement should be described here.</p>

Requirement	Guidance
<p>4.10.7 CONTROL OF EXTERNALLY PROVIDED PROCESSES, PRODUCTS AND SERVICES</p> <p>The Quality Plan shall describe how externally provided products are controlled through the supply chain. This shall include the flow down of requirements, the acquisition process, ensuring product conformity, Supplier evaluation and selection, quality auditing and other activities associated with externally provided products through the supply chain. Specific risks related to the supply chain products shall be identified and managed as part of Suppliers Risk Management. See 4.8 Risk Management above.</p>	<p>The supplier is expected to have full knowledge and control of the supply chain. Supply chain assurance activities shall be planned. Acceptance of products shall be accompanied by Supplier evidence/documented information arising from the assurance activities. The status/closing of corrective actions, corrections and non-conformity handling shall be controlled.</p> <p>The requirement includes how the supplier:</p> <ol style="list-style-type: none"> <li>1. controls that relevant purchasing information and requirements are flowed down to external providers.</li> <li>2. how verification that the purchased product meets the requirements.</li> <li>3. external providers' requirements are to be documented.</li> <li>4. contract specific measures for the control of the external providers are to be planned - this includes a review/audit plan.</li> <li>5. contract specific requirements for incoming inspection of products and/or services should be documented.</li> </ol> <p>Without control and full knowledge of the supply chain, there is an increased risk of counterfeit materiel entering the supply chain. Counterfeit awareness controls need to be in place and effective.</p>



Requirement	Guidance
<p>4.10.8 CONTROL OF PRODUCTION AND SERVICE PROVISION                      The Quality Plan shall describe how the production and service provisioning is carried out under controlled conditions. The process that includes all operations in sequential order from receipt of purchased products through to the storage and release of products shall be included.</p> <p>The Quality Plan shall identify all special processes implemented for the contract. For special processes not yet validated, the Quality Plan shall describe activities in order to achieve this validation.</p>	<p>The requirements include how validation of processes for production and service provision should be carried out to demonstrate their ability to achieve planned results. Procedures for identification of the product should be included. If product traceability is required, then procedures for control and record of the unique identity of the product should be defined. The procedures of exercising care with customer/government property should be documented. The methods used to preserve the conformity of the product should be described. Contract specific requirements for storage, preservation and handling should be documented.</p> <p>Note: ‘Special process’; see definition in ISO 9000:2015 3.4.1 Note 5.</p>

Requirement	Guidance
<p><b>4.11 RELEASE OF PRODUCTS</b>                      The Quality Plan shall describe how the Supplier will ensure that only acceptable products intended for delivery are released to the Acquirer. The Quality Plan shall refer to the contract specific arrangements for release authority, which may include the use of a Certificate of Conformity.                      The Quality Plan shall describe how continual improvement and corrective actions will be carried out.</p>	<p>The supplier may have to provide a Certificate of Conformity at product release. The release of conforming product is the responsibility of the Supplier. A specific format of a Certificate of Conformity may be specified in the contract. (Note: An example of a suitable form is found in AQAP-2070 Annex B, and may be used if no other format is specified.)                      GQAR involvement in providing confirmation of completed Government Quality Assurance (GQA) activities (to the Acquirer) may be required in contract. If this is required in contract, the arrangement with GQAR is to be described.</p>
<p><b>4.12 IMPROVEMENT</b>                      The Quality Plan shall identify the processes/procedures that are required for product/service improvement.                       The Quality Plan shall describe how the contract specific requirements for identification and control of non-conforming products will be carried out.</p>	<p>This paragraph is considered self-explanatory.</p>

Requirement	Guidance
<p>4.13 PERFORMANCE EVALUATION                      The planning of applicable improvement activities derived from the requirements and risks shall be defined, but is not limited, to the processes defined below</p>	<p>This paragraph is considered introductory.</p>
<p>4.13.1 CUSTOMER SATISFACTION                      The Quality Plan shall describe how the Supplier monitors, measures and improves customer satisfaction.</p>	<p>This paragraph is considered self-explanatory.</p>
<p>4.13.2 ANALYSIS AND EVALUATION                      The Quality Plan shall describe the analysis of data used in order to demonstrate the suitability and effectiveness of planned activities that lead to improvements.</p>	<p>This paragraph is considered self-explanatory.</p>

Requirement	Guidance
<p>4.13.3 INTERNAL AUDIT The Quality Plan shall describe how internal audits will be performed in order to determine whether the Quality Plan conforms to the requirements and is effectively implemented and maintained.</p>	<p>There is no requirement to develop a specific audit plan for the contract, as long as the Supplier audit plan covers activities and processes related to the scope of the contract.</p>
<p>CHAPTER 5 SOFTWARE PROJECT QUALITY PLAN</p> <p>If a Software Project Quality Plan (Ref AQAP-2210 2.2.2) is required by the contract, the software specific activities shall be covered by the requirements in chapter 4 of this publication.</p>	<p>See AQAP-2210 SRD.1 Part 1 - Paragraph 2.2.2 Software Project Quality Plan (SPQP) and Part 2 - Guidance for a Software Project Quality Plan. NOTE: Unless specified in the contract; a Software Project Quality Plan does not replace the Quality Plan produced in accordance to this standard. A Software Project Quality Plan may be required in addition to, or as part of, a Quality Plan produced in accordance to this standard.</p>

ANNEX A - Example of compliance matrix

Title and reference of contractual requirement	Description	Compliance statement: C: compliant PC: Partially Compliant NC: Non-Compliant	Comment or explanation with regard to non-compliance, partial compliance or Verification method(s)	Reference of paragraph of the quality plan
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**AQAP-2105-SRD.1(A)(1)**