



Міністерство оборони України

ПІДТВЕРДЖУВАЛЬНЕ ПОВІДОМЛЕННЯ

Управління стандартизації, кодифікації та каталогізації

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STANAG 4107 Ed. 13 / AQAP-2110 Ed. D

**NATO QUALITY ASSURANCE REQUIREMENTS FOR DESIGN,
DEVELOPMENT AND PRODUCTION**

**ПРИЙНЯТО ЯК ВІЙСЬКОВИЙ СТАНДАРТ
МЕТОДОМ “ПІДТВЕРДЖЕННЯ”**

ВСТ 01.057.004 – 2021 (01)

**“Якість товарів, робіт і послуг оборонного призначення.
Вимоги щодо якості проектування, розробки та виробництва
(STANAG 4107 Ed. 13 / AQAP-2110 Ed. D NATO QUALITY
ASSURANCE REQUIREMENTS FOR DESIGN, DEVELOPMENT
AND PRODUCTION, IDT)”**

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Фонді військових стандартів

З наданням чинності з 22.11.2021

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кодифікації та каталогізації

М. Трігун

**STANDARDIZATION
AGREEMENT**

**ACCORD
DE NORMALISATION**

STANAG 4107

**MUTUAL ACCEPTANCE
OF GOVERNMENT QUALITY
ASSURANCE AND USAGE
OF THE ALLIED QUALITY
ASSURANCE PUBLICATIONS
(AQAP)**

**ACCEPTATION DE SERVICES
MUTUELS D'ASSURANCE
OFFICIELLE DE LA QUALITÉ
(AOQ) ET UTILISATION DES
PUBLICATIONS INTERALLIÉES
SUR L'ASSURANCE
DE LA QUALITÉ (AQAP)**

EDITION/ÉDITION 13

7 November/novembre 2023



**NORTH ATLANTIC
TREATY ORGANIZATION**

**ORGANISATION DU TRAITÉ
DE L'ATLANTIQUE NORD**

**Published by
the NATO STANDARDIZATION OFFICE
(NSO)**

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le BUREAU OTAN DE NORMALISATION
(NSO)**

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LETTER OF PROMULGATION**LETTRE DE PROMULGATION****STATEMENT**

The enclosed NATO standardization agreement (STANAG), which has been ratified by member nations, as reflected in the NATO Standardization Document Database (NSDD), is promulgated herewith.

ENACTMENT

This STANAG is effective upon receipt for use by the participating nations and NATO bodies.

ACTIONS BY NATIONS

Nations are invited to examine their ratification of the STANAG and, if they have not already done so, advise the NSO of their intention regarding its ratification and implementation.

Once implemented, Allies shall provide implementation details through the electronic reporting tool.

SECURITY CLASSIFICATION

This STANAG is a NATO non-classified document to be handled in accordance with C-M(2002)60.

RESTRICTION TO REPRODUCTION

This NATO standardization document is issued by NATO. In case of reproduction, NATO is to be acknowledged. NATO does not charge any fee for its standardization documents at any stage, which are not intended to be sold. They can be retrieved from the NATO Standardization Document Database ((<https://nso.nato.int/nso/>) or through your national standardization authorities.

DÉCLARATION

L'accord de normalisation OTAN (STANAG) ci-joint, qui a été ratifié par les pays membres dans les conditions figurant dans la Base de données des documents de normalisation OTAN (NSDD), est promulgué par la présente.

ENTRÉE EN VIGUEUR

Ce STANAG entre en vigueur dès réception aux fins d'application par les pays et les organismes OTAN participants.

MESURES À PRENDRE PAR LES PAYS

Les pays sont invités à examiner l'état d'avancement de la ratification du STANAG et à informer, s'ils ne l'ont pas encore fait, le NSO de leur intention concernant sa ratification et sa mise en application.

Dès que le STANAG est mis en application, les Alliés doivent fournir les informations y afférentes via l'outil de notification électronique.

CLASSIFICATION DE SÉCURITÉ

Ce STANAG est un document OTAN non classifié qui doit être traité conformément au C-M(2002)60.

RESTRICTION DE REPRODUCTION

Ce document de normalisation OTAN est produit par l'OTAN. Il peut être reproduit moyennant mention de la paternité de l'OTAN. L'OTAN n'exige aucune participation financière, à aucun stade, pour ses documents de normalisation, lesquels ne sont pas destinés à la vente. Ceux-ci sont disponibles dans la base de données des documents de normalisation OTAN ((<https://nso.nato.int/nso/>) ou auprès de l'organisme national de normalisation.

ADDITIONAL INFORMATION

This Edition of STANAG 4107 reflects the ratification of AQAP-2000, Edition D, which has been reviewed and updated.

All other covered AQAPs remain unchanged and in effect.

Nations are asked to note that the nature of the agreement for mutual Government Quality Assurance and the use of AQAPs has not changed.

INFORMATIONS SUPPLÉMENTAIRES

Cette édition du STANAG 4107 tient compte de la révision et de la mise à jour de l'AQAP-2000, dont l'édition D a été ratifiée.

Toutes les autres AQAP couvertes par ce STANAG demeurent inchangées et restent en application.

Les pays sont invités à noter que la nature de l'accord concernant les services mutuels d'assurance officielle de la qualité et l'utilisation des AQAP n'a pas changé.



Dimitrios SIGOULAKIS
Lieutenant General, GRC (A)
Director, NATO Standardization Office

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STANAG 4107 Edition/Édition 13

MUTUAL ACCEPTANCE OF GOVERNMENT QUALITY ASSURANCE AND USAGE OF THE ALLIED QUALITY ASSURANCE PUBLICATIONS (AQAP)

ACCEPTATION DE SERVICES MUTUELS D'ASSURANCE OFFICIELLE DE LA QUALITÉ (AOQ) ET UTILISATION DES PUBLICATIONS INTERALLIÉES SUR L'ASSURANCE DE LA QUALITÉ (AQAP)

AIM

The aim of this NATO standardization agreement (STANAG) is to respond to the following interoperability requirements.

INTEROPERABILITY REQUIREMENTS

To set forth the process, procedures, terms and conditions under which Mutual Government Quality Assurance of defence products is to be performed by the appropriate national authority of one NATO member nation, at the request of another NATO member nation or NATO organization; and to standardize the development, updating and application of AQAP on the basis of the concept of quality assurance in the procurement of defence products.

AGREEMENT

Participating nations agree to implement the following standards.

STANDARDS

- AQAP-2000, Edition D
- AQAP-2070, Edition B
- AQAP-2105, Edition C
- AQAP-2110, Edition D
- AQAP-2131, Edition C
- AQAP-2210, Edition B
- AQAP-2310, Edition B
- AQAP-4107, Edition A

OTHER RELATED DOCUMENTS

None.

SUPERSEDED DOCUMENTS

This STANAG supersedes the following document:

STANAG 4107, Edition 12, dated 29 August 2022

BUT

Le présent accord de normalisation OTAN (STANAG) a pour but de répondre aux exigences d'interopérabilité suivantes.

EXIGENCES D'INTEROPÉRABILITÉ

Définir les processus, procédures, modalités et conditions régissant l'exercice mutuel de l'assurance officielle de la qualité des produits de défense par les autorités nationales compétentes d'un pays de l'OTAN, à la requête d'un autre pays de l'OTAN ou d'une organisation de l'OTAN; et normaliser l'élaboration, la mise à jour et la mise en application des AQAP, à partir du concept d'assurance de la qualité applicable à l'acquisition des produits de défense.

ACCORD

Les pays participants conviennent de mettre en application les normes suivantes.

NORMES

- AQAP-2000, Édition D
- AQAP-2070, Édition B
- AQAP-2105, Édition C
- AQAP-2110, Édition D
- AQAP-2131, Édition C
- AQAP-2210, Édition B
- AQAP-2310, Édition B
- AQAP-4107, Édition A

AUTRES DOCUMENTS CONNEXES

Aucun.

DOCUMENTS ANNULÉS ET REMPLACÉS

Le présent STANAG annule et remplace le document suivant :

STANAG 4107, Édition 12, du 29 août 2022

NATIONAL RATIFICATION RESPONSE

National responses are recorded in the NATO Standardization Document Database (NSDD).

Allies shall provide ratification details through the electronic reporting tool (e-Reporting).

IMPLEMENTATION OF THE AGREEMENT

The implementation of STANAG 4107 requires nations to:

- have adequate infrastructure and processes to support their National Quality Assurance Authority's role,
- appoint a GQA focal point,
- establish competent GQA Representative resource with supporting processes and implement AQAP-2070,
- monitor and continually improve delivery of GQA Surveillance services,
- promote the use of contractual AQAPs for acquisition,
- proactively support NATO AC/327 Working Group 2.

NATO organizations shall:

- have the processes and resources to support the conduct of quality assurance activities across all stages of the lifecycle acquisition process.
- appoint a focal point for quality who shall ensure that this publication is applied to the organisation and engage as appropriate with nations for the provision of mutual GQA.
- promote the use of AQAPs for acquisition throughout the supply chain and proactively support NATO AC327 Working Group 2.

Partner Nations are invited to implement this STANAG noting that the provision of mutual GQA is reserved for NATO nations and agencies.

RÉPONSES NATIONALES AUX DEMANDES DE RATIFICATION

Les réponses nationales sont consignées dans la Base de données des documents de normalisation OTAN (NSDD).

Les Alliés doivent rendre compte de leurs ratifications via l'outil de notification électronique (e-Reporting).

MISE EN APPLICATION DE L'ACCORD

Les pays qui entendent mettre en application le STANAG 4107 doivent :

- disposer des infrastructures et des processus nécessaires, afin que l'autorité nationale pour l'assurance de la qualité puisse remplir ses fonctions ;
- désigner un point focal AOQ ;
- mettre en place un représentant pour l'AOQ aux compétences appropriées et les processus correspondants, et appliquer l'AQAP-2070 ;
- contrôler et améliorer continuellement la prestation de services de surveillance d'AOQ ;
- favoriser l'utilisation des AQAP de type contractuel pour les acquisitions ;
- soutenir de façon proactive le Groupe de travail 2 de l'AC/327 de l'OTAN.

Les organisations de l'OTAN doivent :

- disposer des processus et des ressources requises pour conduire les activités d'assurance de la qualité à toutes les étapes du processus d'acquisition ;
- désigner un point focal pour la qualité, qui veillera à ce que les dispositions de la présente publication soient appliquées au sein de l'organisation et qui, au besoin, se mettra en contact avec les pays pour la fourniture de services mutuels d'AOQ ;
- promouvoir l'utilisation des AQAP pour les acquisitions sur l'ensemble de la chaîne d'approvisionnement, et soutenir de façon proactive le Groupe de travail 2 de l'AC/327 de l'OTAN.

Les pays partenaires sont invités à appliquer le présent STANAG, étant entendu que la prestation de services mutuels d'AOQ est réservée aux pays membres et aux agences de l'OTAN.

This Edition of STANAG 4107 covers the release of AQAP 2000, Ed. D, *NATO policy for quality using an integrated systems approach through the life cycle*. Nations and NATO organizations are requested to use this publication to inform their national policies for quality.

Allies and NATO bodies shall provide implementation details through the electronic reporting tool (e-Reporting).

Partner nations are invited to provide their implementation details through the electronic reporting tool (e-Reporting).

NATO EFFECTIVE DATE (NED)

Not applicable.

REVIEW

This STANAG is to be reviewed in accordance with AAP-03. The result of the review is to be recorded within the NSDD.

TASKING AUTHORITY

This STANAG is supervised under the authority of:

CNAD LIFE CYCLE MANAGEMENT GROUP/
GROUPE DE LA CDNA SUR LA GESTION DU CYCLE DE VIE
(AC/327)

WORKING GROUP 2 ON QUALITY/
GROUPE DE TRAVAIL 2 SUR LA QUALITÉ
(WG/2)

FEEDBACK

Any comments concerning this STANAG shall be directed to:

**NATO Standardization Office
(NSO)**

**Boulevard Léopold III
1110 BRUXELLES – Belgique**

La présente édition du STANAG 4107 couvre l'Édition D de l'AQAP-2000, qui traite de la politique OTAN utilisant une approche système intégrée de la qualité pour tout le cycle de vie. Les pays et les organisations de l'OTAN sont invités à utiliser cette publication pour éclairer leurs politiques nationales en matière de qualité.

Les Alliés et les organismes OTAN doivent rendre compte de leur mise en application via l'outil de notification électronique (e-Reporting).

Les pays partenaires sont invités à rendre compte de leur mise en application via l'outil de notification électronique (e-Reporting).

DATE D'ENTRÉE EN VIGUEUR OTAN (NED)

Sans objet.

RÉEXAMEN

Le présent STANAG doit être réexaminé conformément à l'AAP-03. Le résultat de ce réexamen doit être consigné dans la NSDD.

AUTORITÉ DE TUTELLE

Le présent STANAG est sous la responsabilité du :

INFORMATIONS EN RETOUR

Tous les commentaires concernant le présent STANAG doivent être adressés au :

**Bureau OTAN de normalisation
(NSO)**

NATO STANDARD

AQAP-2110

NATO QUALITY ASSURANCE REQUIREMENTS FOR DESIGN, DEVELOPMENT AND PRODUCTION

**Edition D Version 1
JUNE 2016**



NORTH ATLANTIC TREATY ORGANIZATION

ALLIED QUALITY ASSURANCE PUBLICATION

**Published by the
NATO STANDARDIZATION OFFICE (NSO)
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NORTH ATLANTIC TREATY ORGANIZATION (NATO)

NATO STANDARDIZATION OFFICE (NSO)

NATO LETTER OF PROMULGATION

24 June 2016

1. The enclosed Allied Quality Assurance Publication AQAP-2110, NATO QUALITY ASSURANCE REQUIREMENTS FOR DESIGN, DEVELOPMENT AND PRODUCTION, Edition D, Version 1, which has been approved by the nations in the Life Cycle Management Group (AC/327), is promulgated herewith. The agreement of nations to use this publication is recorded in STANAG 4107.
2. AQAP-2110, Edition D, Version 1 is effective upon receipt and on completion of a transition, ending 21 September 2018, will supersede AQAP-2110 Edition 3, AQAP-2120 Edition 3 and AQAP-2130 Edition 3 all of which which should be destroyed in accordance with local procedures for the destruction of documents.
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.



Dieter Schmaglowski
Deputy Director NSO
Branch Head P&C

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Major General, LTUAF
Director, NATO Standardization Office

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RECORD OF RESERVATIONS

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RECORD OF SPECIFIC RESERVATIONS

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CHAPTER 1 INTRODUCTION

1.1 General

This publication contains the NATO requirements for Quality. A Quality Management System shall be established, documented, applied, maintained, assessed and improved, and evaluated, in accordance with requirements contained in this publication.

1.2 Purpose

This publication contains requirements, which, if applied appropriately, provide confidence in the Supplier's capability to deliver products that conform to Acquirer contract requirements.

1.3 Applicability

1. This publication is primarily intended for use in a contract between two or more parties.
2. When referenced in a contract, this publication shall apply to all of the processes necessary for the Supplier to fulfil the contractual requirements.
3. This publication may also be used internally by a Supplier or a potential Supplier to cover the Quality aspects of the Management System (MS).
4. Where identified by the Acquirer other appropriate standards can be used in conjunction with this publication to identify MS process requirements.
5. If inconsistencies exist between the contract requirements and this publication, the contract requirements shall prevail.

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CHAPTER 2 COMPLIANCE WITH THIS PUBLICATION
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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 is documented as part of the contract with the Acquirer.

2.2 Notes and Guidance

In this publication 'Notes' are not contractual requirements; they are for guidance or clarifying the associated requirement.

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CHAPTER 3 COMPOSITION OF REQUIREMENTS IN AQAP 2110
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3.1 Composition

1. A requirement in this publication is composed as follows:
 - a. Chapter 4, General QMS Requirements, establishes the applicability of the requirements of ISO 9001:2015.
 - b. Chapter 5, NATO Specific QMS Requirements, establishes additional NATO specific requirements for the Supplier.
2. Whenever the ISO 9001 requirement refers to “this international standard” it shall be read as “this publication”.

3.2 References

3.2.1 Normative References

- | | | |
|----|----------------|---|
| 1. | ISO 9001:2015 | Quality Management Systems – Requirements |
| 2. | ISO 9000:2015 | Quality Management Systems – Fundamentals and Vocabulary |
| 3. | ACMP 2100 | Configuration Management Contractual Requirements |
| 4. | ISO 10012:2003 | Measurement Management Systems – requirements for measurement processes and measuring equipment |
| 5. | ISO 31000:2009 | Risk Management – Principles and Guidelines |

3.2.2 Informative References

- | | | |
|----|----------------|---|
| 1. | AQAP 2000 | NATO Policy on an Integrated Systems Approach to Quality Through the Life Cycle |
| 2. | AQAP 2009 | NATO Guidance on the use of the AQAP 2000 series |
| 3. | AQAP 2105 | NATO Requirements for Deliverable Quality Plans |
| 4. | AQAP 2070 | NATO Mutual Government Quality Assurance (GQA) Process |
| 5. | ISO 10007:2003 | Quality Management Systems – Guidelines for Configuration Management |
| 6. | ADMP | Allied Dependability Management Publications |

3.3 Definitions

Unless stated otherwise, ISO 9000:2015 definitions shall apply.

3.3.1 Acquirer

Governmental and/or NATO Organisations, that enter into a contractual relationship with a Supplier, defining the product and quality requirements

3.3.2 Supplier

Organisation that acts in a contract as the provider of products to the Acquirer.

3.3.3 Certificate of Conformity

A document, signed by the Supplier, which states that the product conforms with contractual requirements

3.3.4 Dependability

The ability to perform as and when required.

Notes:

1. Dependability includes availability, reliability, recoverability, maintainability and maintenance support performance, and, in some cases, other characteristics such as durability, safety, and security.
2. Dependability is used as a collective term for the time-related quality characteristic of an item

3.3.5 Government Quality Assurance

The process by which the appropriate National Authorities establish confidence that the contractual requirements relating to quality are met

3.3.6 Government Quality Assurance Representative

The Personnel with responsibility for Government Quality Assurance (GQA), acting on behalf of the Acquirer

3.3.7 GQAR and/or Acquirer

The term “GQAR and/or Acquirer” has been used in this document to enable the Acquirer to be the default in situations in which there is either no GQAR associated with the contract or where the appointed GQAR has not been delegated the authority to conduct particular activities

3.3.8 Product

The result of activities, processes and tasks. A product may include service, hardware, processed materials, software or a combination thereof. A product can be tangible (e.g. assemblies or processed materials) or intangible (e.g. knowledge or concepts), or a combination thereof.

3.3.9 Quality Plan

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

3.3.10 Root Cause Analysis

A collective term that describes a wide range of approaches, tools and techniques used to identify causes of nonconformity.

3.3.11 Key or Critical Product Characteristics or Processes

Processes or Product elements or features which, if not properly controlled, can have an adverse impact on the product delivery, cost and performance.

3.3.12 Counterfeit Material

Materiel whose origin, age, composition, configuration, certification status or other characteristic (including whether or not the materiel has been used previously) has been falsely represented by:

- A) misleading marking of the materiel, labelling or packaging;
 - B) misleading documentation; or
 - C) any other means, including failing to disclose information;
- except where it has been demonstrated that the misrepresentation was not the result of dishonesty by a Supplier or External Provider within the supply chain.

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CHAPTER 4 GENERAL QMS REQUIREMENTS
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4.1 Applicability of ISO 9001:2015 REQUIREMENTS

The Supplier shall establish, document, implement, assess and improve an effective and economical Quality Management System in accordance with this publication which includes the requirements of ISO 9001:2015 as necessary to satisfy the contract requirements.

4.2 Quality Management System and its Processes

The Acquirer and/or Government Quality Assurance Representative (GQAR) reserve the right to reject the Supplier's Quality Management System as it applies to the contract. The Supplier's documented Scope of their System, records from internal audit, self-assessments and other objective evidence that this system is compliant with this Publication and is effective, shall be readily available to the GQAR and/or Acquirer.

In instances where the Acquirer and/or GQAR rejects the Quality Management System, the Supplier shall make proposals for corrective actions and revisions within an agreed timescale and contractual penalties will be applied as defined in the contract

4.3 Access to Supplier and External Providers and Support For GQA Activities

The Supplier and/or External Providers shall provide the GQAR and/or Acquirer:

1. The right of access to facilities where the contracted activities are being performed.
2. Information pertaining to the fulfillment of requirements in the contract.
3. Unrestricted opportunity to evaluate Supplier compliance with this Publication.
4. Unrestricted opportunity to evaluate External Providers compliance with this Publication. The Supplier will be informed before the evaluation takes place.
5. Unrestricted opportunity to conduct verification of product conformity with the contract requirements.
6. Required assistance for evaluation, verification, validation, testing, inspection or release of the product for the accomplishment of GQA to contract requirements.
7. Accommodation and facilities for performing GQA.
8. The necessary equipment available for reasonable use for performing GQA.

9. Supplier and/or External Providers personnel for operation of such equipment as required.
10. Access to information and communication facilities.
11. The necessary Supplier documentation to confirm product conformance to specification.
12. Copies of necessary documents, including those on electronic media.

CHAPTER 5 NATO SPECIFIC QMS REQUIREMENTS
--

Note: The paragraph number of ISO 9001:2015 mentioned in brackets at the end of the paragraph title is only for information purposes.

5.1 Leadership

5.1.1 Organizational roles, responsibilities and authorities [5.3]

1. Top management shall appoint a management representative for GQA issues from the organization's management who, irrespective of other responsibilities shall have the necessary organisational authority and freedom to resolve matters pertaining to quality. The management representative shall report directly to top management.
2. The management representative shall have responsibility and authority that includes ensuring that processes needed for the quality management system are established, implemented and maintained and shall include liaison with the GQAR and/or Acquirer on matters related to quality.
3. The management representative shall have the appropriate competence related to Quality Management.

5.2 Planning

5.2.1 Risk Management [6.1]

1. The Supplier and External Provider shall provide objective evidence that risks, including External Provider risks, are considered during planning, including but not limited to Risk Identification, Risk Analysis, Risk Control and Risk Mitigation. The planning shall start with risk identification during contract review and be updated thereafter in a timely manner.
2. Unless otherwise stated in the contract, the Risk Management applied shall meet the principles and guidelines of ISO 31000:2009. The Risk Management Plan shall be made available to the GQAR and/or Acquirer.
3. The Acquirer and/or GQAR reserve the right to reject Risk Plans and their revisions.

5.3 Support

5.3.1 Infrastructure [7.1.3]

The infrastructure shall include an area to segregate nonconforming product (see paragraph 5.4.12 of this publication).

5.3.2 Monitoring and measuring resources [7.1.5]

1. The measurement and calibration system applied to the contract shall meet the requirement of ISO 10012:2003.
2. When an item of measuring equipment fails calibration the Supplier shall advise the GQAR and/or Acquirer of the impact of the failure on previous measuring results where this affects delivered products or verification, validation and acceptance results. The GQAR and/or Acquirer may request that measurements taken shall be repeated with calibrated equipment.

5.3.3 Competence [7.2]

The Supplier shall establish and maintain a process for identifying training needs and achieving competence of all personnel performing activities affecting product quality.

5.3.4 Awareness [7.3]

Persons involved with the contract, including External Providers, shall be aware of the specific arrangements contained in the quality plan that are applicable to their activities / area of responsibility.

5.3.5 Documented information [7.5]

The Supplier shall provide the GQAR and/or the Acquirer with the necessary access to the documented information pertinent to the contract, in a format agreed with the GQAR and/or Acquirer.

5.4 Operation

5.4.1 Operational planning and control [8.1]

1. The Supplier shall identify the documented information, including acceptance criteria and configuration information that will be used as objective evidence of product conformance with requirements. This information shall be acceptable to the Acquirer and/or GQAR and made available prior to acceptance of the product.
2. The supplier shall maintain and retain documented information for product approval and production process approval. These approvals shall also be applied to External Providers.

5.4.1.1 Quality Plan

1. The Supplier shall submit an acceptable Quality Plan (QP) which addresses the contractual requirements to the GQAR and/or the Acquirer in a mutually agreed

timescale but prior to the start of work which can be defined as a project or contract initiation meeting or as otherwise stated in the contract or purchase order. The QP shall be a clearly identified discrete document or part of another document that is prepared under the contract.

2. The QP shall:

- a. Describe and document the quality management system requirements "contract-specific" necessary to satisfy the contract requirements (making reference, where applicable, to the "company-wide" quality management system);
- b. Describe and document the planning of the product realisation in terms of quality requirements for the product, needed resources, required control activities (verification, validation, monitoring, inspection, testing), and acceptance criteria. This shall include specific arrangements and communication requirements where work is to be conducted at locations external to the Suppliers premises.
- c. Document, and maintain traceability of requirements from the planning process by including a requirement and solution compliance matrix, justifying fulfilment of all contractual requirements (making reference where applicable).

3. The Acquirer and/or GQAR reserve the right to reject QPs and their revisions.

NOTE:

Contractual requirement for the content of the Quality Plan is established in AQAP 2105 "NATO requirements for Deliverable Quality Plans."

Requirement and solution compliance matrix can be a part of Quality Plan or a separate document as an annex to it. This matrix can be prepared and annexed to the Quality Plan after the initial issue, within a timescale mutually agreed with GQAR and/or Acquirer by taking into account the content of the Contract or Purchase Order.

5.4.1.2 Configuration Management

5.4.1.2.1 Configuration Management (CM) requirements

The Supplier shall manage configuration through the implementation of Configuration Management Planning, Configuration Identification, Change Control, Configuration Status Accounting and Configuration Audit in accordance with the requirements of ACMP 2100 and any additional CM clauses in the contract or a nationally recognised equivalent.

5.4.1.2.2 Configuration Management Plan (CMP)

The Supplier shall prepare a Configuration Management Plan (CMP) which describes the application of CM to the contract in accordance with ACMP 2100 and any additional CM clauses in the contract or nationally recognised equivalent. The CMP may form part of another plan if appropriate.

NOTE:

Further information on NATO Configuration Management Policy and Requirements are contained within Allied Configuration Management Publications (ACMP) ACMP 2000 and ACMP 2009.

5.4.2 Customer communications [8.2.1]

1. If requested by the Acquirer and/or GQAR, the Supplier and/or External Providers shall attend a Post Award GQA meeting focused on the contract arrangements for Quality Assurance of the product and/or GQA practicalities.
2. The Supplier shall ensure that lines of communication are established with the GQAR and/or Acquirer. The designated management representative shall ensure that the adequate level of information is supplied to satisfy the GQAR and/or Acquirer.
3. The Supplier shall notify the GQAR and/or Acquirer of changes to its organisation that affect product quality or the Quality Management System.

5.4.3 Determining the requirements related to products [8.2.2]

The Supplier shall identify product requirements and functions that relate to critical characteristics such as health, safety, performance, and dependability.

5.4.4 Design and development controls [8.3.4]

Unless otherwise stated in the contract, the Supplier shall determine the verification and validation methods required and demonstrate conformity with the corresponding requirements at appropriate stages up to and including the final product.

5.4.5 Dependability

If stated in the contract, the Supplier shall ensure that Dependability issues and related documents, including those from associated External Providers, are controlled.

NOTE:

Further information on NATO Dependability Management is contained within Allied Dependability Management Publications (ADMP).

5.4.6 Control of externally provided processes, products and services [8.4]

The Supplier shall retain documented information of verification and/or validation of purchased products. The documented information shall be made available to the GQAR and/or Acquirer.

5.4.6.1 General

1. Where the Supplier has decided to externally source a critical item, significant work content, design, immature technical solutions or a configuration item then the Supplier shall establish and maintain knowledge of the supply chain and External Provider quality assurance activities.
2. The Supplier shall flow down the applicable contractual requirements to External Providers by referencing the stated contractual requirement, including relevant AQAP(s). The Supplier shall insert the following in all purchasing documents: "All requirements of this contract may be subject to GQA. You will be notified of any GQA activity to be performed."
3. Suppliers shall conduct a formal review of purchasing documents to verify that the correct contractual requirements have been flowed down. The Supplier shall retain documented information of this review.
4. The Supplier shall document their arrangements for these requirements at the planning stage (see paragraph 5.4.1. of this publication) and identify their proposed quality assurance activities for specific sub-contracts or orders that meet the above criteria.

5.4.6.2 Type and extent of control [8.4.2]

1. It is the Supplier's responsibility to ensure that the procedures and processes required to fulfil contract requirements are fully implemented at the External Provider's facilities.
2. The Supplier shall establish and implement a process for the avoidance, detection, mitigation, and disposition of Counterfeit Materiel.
3. Only the Supplier placing the purchasing documents with an External Provider will issue contractual instructions to that External Provider.
4. GQA activities at External Provider's facilities do not relieve the Supplier from any contractual quality responsibilities.

NOTE:

Conduct of GQA and associated GQAR and/or Acquirer access rights, at External Provider's facilities can only be requested by the GQAR and/or Acquirer.

5.4.6.3 Communication

1. The Supplier shall on request provide the GQAR and/or Acquirer with a copy of any subcontracts, orders, related contractual documents and their modifications, for products related to the contract.
2. The Supplier shall notify the GQAR and/or Acquirer if a subcontract or order has been identified involving a critical item, significant work content, design, immature technical solutions or where External Provider performance is unknown or causes concern.
3. The Supplier shall notify the GQAR and/or Acquirer if an externally provided product is rejected, reworked, or repaired which has been identified as involving risk or supplied by an External Provider whose selection or subsequent performance has been identified as involving risk.

5.4.7 Control of Production and Service Provision [8.5.1]

1. The Supplier shall develop and maintain instructions for the conduct of activities related to the control of production of material, part, component, subsystem and system level for the product supplied to ensure that the specified requirements are met.
2. The Supplier shall establish and maintain criteria for workmanship in the clearest practical manner (e.g. written standards, representative samples or illustrations).

5.4.8 Identification and traceability [8.5.2]

Where the failure of an item or component could lead to the loss of equipment, performance or life then it is mandatory to maintain traceability.

5.4.9 Property belonging to customers or External Providers [8.5.3]

1. If products provided by the Acquirer are lost, damaged or otherwise found to be unsuitable for their intended use in accordance with the contract, the Supplier shall immediately inform the Acquirer and GQAR and retain documented information.
2. When the Supplier establishes that an acquirer supplied product is unsuitable for its intended use, they shall immediately report to and coordinate with the Acquirer the remedial actions to be taken. The Supplier shall also inform the GQAR.

5.4.10 Preservation [8.5.4]

1. Products with limited shelf life shall be subject to control of their expiry dates.
2. If applicable, the control of expiry date/shelf life shall be applied during maintenance, servicing, storage or when fitted.
3. Remaining shelf-life shall be identified and communicated to the GQAR and/or Acquirer prior to delivery.

5.4.11 Release of products [8.6]

1. The Supplier shall ensure that only acceptable products, intended for delivery, are released. The GQAR and/or Acquirer reserve the right to reject nonconforming products.
2. The Supplier shall provide a Certificate of Conformity at release of product to the GQAR and/or Acquirer unless otherwise instructed.
3. The Supplier is solely responsible for the conformance to requirements, of products provided to the Acquirer.
4. Where the GQAR/and or Acquirer is required to perform any final inspection or formal acceptance activities, the Supplier shall provide the GQAR/and or Acquirer with a minimum of 10 working days notification of the event unless otherwise stated in the contract.

5.4.12 Control of nonconforming products [8.7]

1. The Supplier shall issue and implement documented procedures which identify, control and segregate all nonconforming products. Product with unidentified or unknown status shall be classified as nonconforming product.
2. Documented procedures for the identification, control, and segregation of nonconforming product are subject to disapproval by the GQAR and/or Acquirer when it can be shown that they do not provide the necessary controls.
3. The Supplier shall notify the GQAR and/or Acquirer of non-conformities and corrective actions required, unless otherwise agreed with the GQAR and/or Acquirer. The GQAR and/or Acquirer reserve the right to reject all rework, repair and use as is dispositions.
4. Where the Supplier proposes to raise a concession for the use, release or acceptance of a nonconforming product appropriate authorisations shall be obtained from the GQAR and/or Acquirer unless otherwise agreed.

5. The Acquirer requirements for concessions apply equally to outsourced processes or purchased products. The Supplier shall review any request from External Providers before submission to the GQAR and/or Acquirer.

6. The Supplier shall retain documented information of quantity authorized and/or expiration date for concessions or deviation permits. The Supplier shall ensure compliance with the contract requirements when the authorization expires.

7. The Supplier shall notify the GQAR and/or the Acquirer of nonconforming product received from an External Provider that has been subject to Government Quality Assurance.

5.5 Performance Evaluation

5.5.1 Customer satisfaction [9.1.2]

1. Any complaints or deficiencies relevant to the contract, reported by the GQAR and/or Acquirer, shall be recorded as customer complaints.

2. The Supplier shall provide a response to the originator of the complaint or deficiency that shall include information on root cause analysis and corrective action.

Note: Customer complaints could be in the form of quality non-conformance, deficiency or occurrence reports or another format but regardless will be identified by the GQAR and/or Acquirer as 'customer complaints'.

5.5.2 Internal audit [9.2]

1. During the planning of internal audits the Supplier shall ensure that their audit programme covers all contract related critical processes and activities on an annual basis and includes contractual requirements and NATO supplements. The Supplier shall also consider the output from the actions to address risk and opportunities assessment.

2. Unless otherwise agreed, the Supplier shall inform the GQAR and/or Acquirer of deficiencies or findings identified during internal audit.

3. The Supplier shall retain documented information that demonstrates auditor training and experience.

5.5.3 Management review [9.3]

5.5.3.1 Management Review Input [9.3.2]

Documented information of review input, related to the contract, shall be available to the GQAR and/or Acquirer.

5.5.3.2 Management Review Output [9.3.3]

1. Documented information of the review output, related to the contract, shall be available to the GQAR and/or Acquirer.
2. The Supplier shall notify the GQAR and/or Acquirer of proposed action, resulting from Review Output that will affect compliance with contractual requirements. Review output shall, where action item(s) are identified, specify the responsible person/function and due date of the action item(s).

5.6 Improvement

5.6.1 Nonconformity and corrective action [10.2]

The Supplier shall define their process, including tools and techniques, used to support root cause analysis for nonconformities.

AQAP-2110 (D)(1)

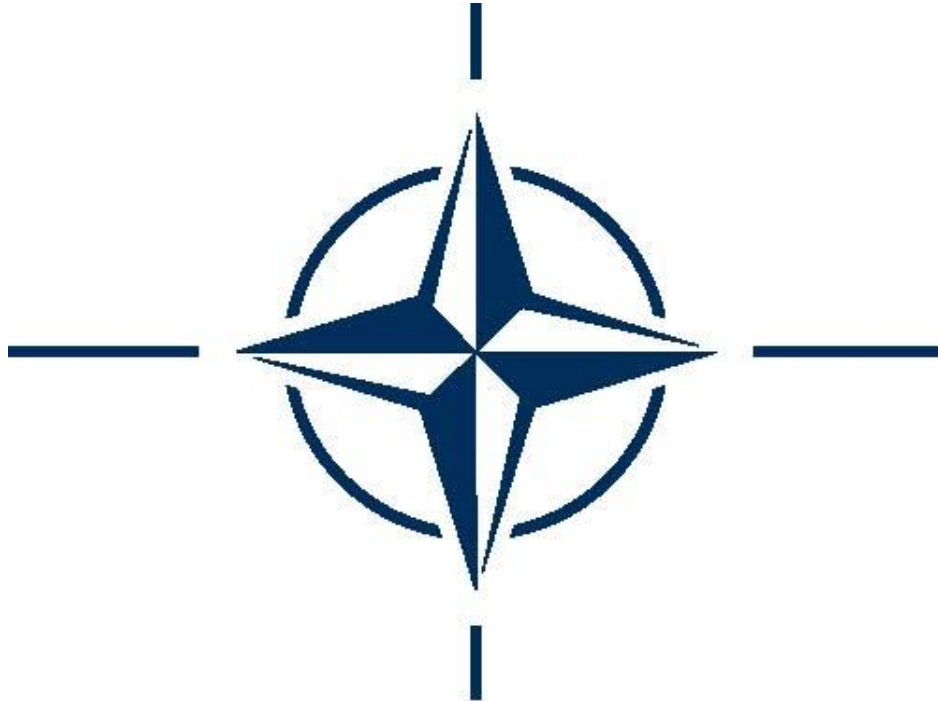
STANDARDS RELATED DOCUMENT

AQAP-2110-SRD.1

GUIDANCE ON THE USE OF AQAP-2110 EDITION D

Edition B Version 1

JANUARY 2020



NORTH ATLANTIC TREATY ORGANIZATION

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NATO LETTER OF PROMULGATION

24 January 2020

1. The enclosed Standards Related Document, AQAP-2110-SRD.1, Edition B, Version 1, GUIDANCE ON THE USE OF AQAP-2110 EDITION D, which has been approved in conjunction with AQAP-2110 by the nations in the Life Cycle Management Group, is promulgated herewith.
2. AQAP-2110-SRD.1, Edition B, Version 1, is effective upon receipt and supersedes AQAP-2110-SRD.1, Edition A, Version 1 which shall be destroyed in accordance with the local procedure for the destruction of documents.
3. This NATO standardization document is issued by NATO. In case of reproduction, NATO is to be acknowledged. NATO does not charge any fee for its standardization documents at any stage, which are not intended to be sold. They can be retrieved from the NATO Standardization Document Database (<https://nso.nato.int/nso/>) or through your national standardization authorities..
4. This publication shall be handled in accordance with C-M(2002)60.



Zoltán GULYÁS
Brigadier General, HUNAF
Director, NATO Standardization Office

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Annex D - Template for GQA Arrangements

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Chapter 1 - INTRODUCTION

1. Background

1. AQAP-2110 Ed D complies with the NATO policy of recognising civil standards wherever possible by invoking the requirements of ISO 9001:2015 which are supplemented by a minimum level of NATO specific requirements.
2. ISO 9001:2015 sets out the requirements for a Quality Management System (QMS) which is a way of defining processes that enable an organization to meet the requirements of its customers and other stakeholders. This version of the standard remains customer focused but sees an increased focus on risk-based thinking and leadership engagement.
3. ISO 9001:2015 requires organizations to define their objectives relating to quality and meeting customer needs and then to continually improve their processes in order to reach them. This places increased importance on organizations understanding the context in which they operate and their customer's requirements.
4. AQAP-2110 contains contractual requirements for Suppliers involved in the Defence supply chain and details NATO's requirements for quality.
5. This version of AQAP-2110:
 - (1) maintains a focus on risk management and quality planning and extends these concepts to the supply chain. This is particularly relevant given the potential complexity of defence equipment and the integration of engineering / technical solutions from multiple design authorities/Intellectual Property Right (IPR) owners where there is a requirement to develop long term relationships to support the equipment in service.
 - (2) introduces an increased focus on requirements, identifying how they are to be achieved and what evidence will be presented to support release of product. There is also a requirement for the Supplier to identify what assurance activities are to be conducted in the supply chain. These requirements will inform the earlier discussion between the Supplier and Acquirer/GQAR.
 - (3) recognises the importance of root cause analysis and introduces a specific requirement for Suppliers to define their process.
 - (4) highlights the importance of counterfeit avoidance within the acquisition and support of defence products, particularly because of the challenges posed by obsolescence and the operational environment.
6. Figure 1 illustrates the NATO requirements in relation to ISO 9001:2015.

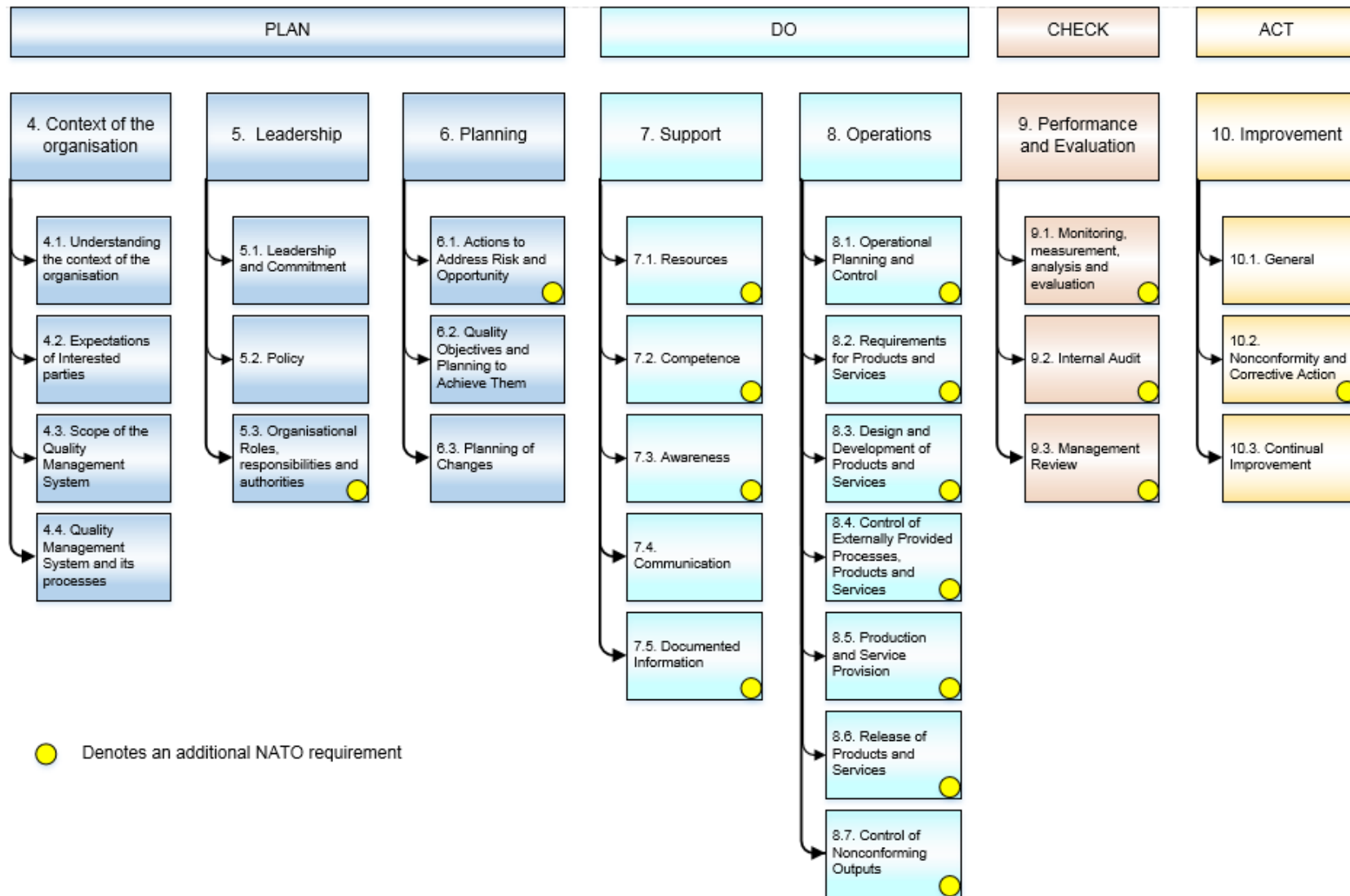


Figure 1: Illustration of the NATO requirements in relation to ISO 9001:2015.

2. Purpose

1. This guidance document has been published to promote a consistent interpretation of the AQAP-2110 requirements.
2. This guidance 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 use supplementary contractual requirements and 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.

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Chapter 2 – GUIDANCE FOR THE USE OF AQAP-2110 Ed D

1. Introduction

1. AQAP-2110 Ed D contains a number of modified requirements that were contained in previous versions and introduces new requirements. Some of these new requirements are in response to changes introduced by the 2015 version of ISO 9001; others are based on Acquirer and GQAR experience of contracting with the previous version of AQAP-2110.

2. Table 1 (below) provides guidance on the requirements within AQAP-2110 Edition D. This guidance is intended to promote a consistent interpretation and implementation of AQAP-2110 requirements.

3. In order to provide assistance to the Acquirer and/or GQAR, annexes A, B and C to this SRD have been published to provide a comparison of the requirements requesting documented information for AQAP-2110 and the alignment with requirements in ISO 9001, ISO 10012 and ACMP 2100/ISO 10007 respectively. These annexes are supported by a template for GQA arrangements at annex D which can be used for the Post contract award GQA meeting.

Table 1: Guidance to AQAP-2110 Requirements

Requirements	Guidance
1.1 General This publication contains the NATO requirements for Quality. A QMS shall be established, documented, applied, maintained, assessed and improved, and evaluated, in accordance with requirements contained in this publication.	This paragraph is considered self-explanatory.
1.2 Purpose This publication contains requirements, which, if applied appropriately, provide confidence in the Supplier's capability to deliver products that conform to Acquirer contract requirements.	This paragraph is considered self-explanatory.
1.3 Applicability 1. This publication is primarily intended for use in a contract between two or more parties. 2. When referenced in a contract, this publication shall apply to all of the processes necessary for the Supplier to fulfil the contractual requirements. 3. This publication may also be used internally by a Supplier or a potential Supplier to cover the Quality aspects of the Management System (MS). 4. Where identified by the Acquirer other appropriate standards can be used in conjunction with this publication to identify MS process requirements. 5. If inconsistencies exist between the contract requirements and this publication, the contract requirements shall prevail.	This paragraph is considered self-explanatory.
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 is documented as part of the contract with the Acquirer.	Confirmation of compliance with the AQAP requirements should be documented as part of Quality Planning.
2.2 Notes and Guidance In this publication 'Notes' are not contractual requirements; they are for guidance or clarifying the associated requirement.	This paragraph is considered self-explanatory.
3.1 Composition 1. A requirement in this publication is composed as follows: a. Chapter 4, General QMS Requirements, establishes the applicability of the requirements of ISO 9001:2015. b. Chapter 5, NATO Specific QMS Requirements, establishes additional NATO specific requirements for the Supplier.	This paragraph is considered self-explanatory.
2. Whenever the ISO 9001 requirement refers to "this international standard" it shall be read as "this publication".	This paragraph is considered self-explanatory.
3.2 References 3.2.1 Normative References 1. ISO 9001:2015 Quality Management Systems – Requirements 2. ISO 9000:2015 Quality Management Systems – Fundamentals and Vocabulary	It is noted that ISO 10012 and 31000 have been updated.

Requirements	Guidance
<p>3. ACMP 2100 Configuration Management Contractual Requirements</p> <p>4. ISO 10012:2003 Measurement Management Systems – requirements for measurement processes and measuring equipment</p> <p>5. ISO 31000:2009 Risk Management – Principles and Guidelines</p>	
<p>3.2.2 Informative References</p> <p>1. AQAP 2000 NATO Policy on an Integrated Systems Approach to Quality Through the Life Cycle</p> <p>2. AQAP 2009 NATO Guidance on the use of the AQAP 2000 series</p> <p>3. AQAP 2105 NATO Requirements for Deliverable Quality Plans</p> <p>4. AQAP 2070 NATO Mutual Government Quality Assurance (GQA) Process</p> <p>5. ISO 10007:2003 Quality Management Systems – Guidelines for Configuration Management</p> <p>6. ADMP Allied Dependability Management Publications</p>	<p>It is noted that AQAP 2009 NATO Guidance on the use of the AQAP 2000 series has been withdrawn and ISO 10007 has been updated.</p>
<p>3.3 Definitions</p> <p>Unless stated otherwise, ISO 9000:2015 definitions shall apply.</p>	<p>Definitions given in AQAP-2110 apply.</p>
<p>4.1 Applicability of ISO 9001:2015 REQUIREMENTS</p> <p>The Supplier shall establish, document, implement, assess and improve an effective and economical Quality Management System in accordance with this publication which includes the requirements of ISO 9001:2015 as necessary to satisfy the contract requirements.</p>	<p>This establishes the applicability of ISO9001, however, it does not require Suppliers to have a certified QMS to ISO 9001. The key element of this paragraph is the final phrase 'as necessary to satisfy contractual requirements' which establishes the context of the QMS in relation to AQAP requirements and the contract. This reinforces the importance of having an effective and efficient QMS that supports the achievement of contractual requirements to minimise cost. The AQAP require that the QMS shall be established, documented, assessed and improved.</p> <p>.</p> <p>The QMS then should collectively enable the following:</p> <p>To "establish" means to set up on a permanent basis for the duration of the Contract;</p> <p>To "document" means to describe the elements of the QMS in writing in sufficient detail that it is comprehensible to the personnel controlling and operating it. The document may be in hard copy or stored electronically;</p> <p>To "assess" means that the System, necessary to satisfy the contract requirements, is audited on a regular basis, in a controlled way;</p> <p>To "improve" means those experiences gained are reflected in updates of the System;</p> <p>An "effective" System provides confidence in the Supplier's capability that only an acceptable product is delivered to the Acquirer in a timely manner. It includes the planning, establishment and implementation of the activities and controls required to achieve this end at all stages of the work from preliminary design through manufacture and acceptance to the provision of any required after-delivery services;</p> <p>The AQAP also recognises that most functions of management affect quality in some manner and to some degree, each function is analysed to identify the factors that affect quality and to ensure that these factors are controlled. An appreciation of the effectiveness of the implementation of the System can be obtained in many ways, such as:</p> <ul style="list-style-type: none"> • Demonstration of top management commitment;

Requirements	Guidance
	<ul style="list-style-type: none"> • Self-assessment of the effectiveness to deliver the product and contractual requirements; • Continual improvement; • User/Acquirer feedback customer complaints; • Evaluation of the severity of non-conformities detected at the Supplier's facility; • Trend analysis. <p>An "economical" System has as its goal, not only the effective use of resources but also, the minimising of repair, rework, scrap and failure costs. To achieve this, a prime objective of the System is the prevention of non-conformities, especially during the design and development stages. The cost of preventing non-conformities is normally much less than the cost of failures, rework and corrective action.</p> <p>Excessive amounts of non-conforming products are symptomatic of an out of control situation. Non-conforming products may also be a hidden factor in the cost of the product to the Acquirer.</p> <p>AQAPs stipulate, in objective terms, the requirements a Supplier shall meet to control quality. They do not stipulate the exact procedures or methods to be used by the Supplier for this purpose. The procedures employed, however, are subject to evaluation by the GQAR and/or Acquirer.</p>
<p>4.2 Quality Management System and its Processes</p> <p>The Acquirer and/or Government Quality Assurance Representative (GQAR) reserve the right to reject the Supplier's Quality Management System as it applies to the contract. The Supplier's documented Scope of their System, records from internal audit, self-assessments and other objective evidence that this system is compliant with this Publication and is effective, shall be readily available to the GQAR and/or Acquirer.</p> <p>In instances where the Acquirer and/or GQAR rejects the Quality Management System, the Supplier shall make proposals for corrective actions and revisions within an agreed timescale and contractual penalties will be applied as defined in the contract</p>	<p>The GQAR and/or Acquirer should check that the Scope of the supplier's QMS is relevant to the contract.</p> <p>The Scope of the Supplier's QMS must be held as documented information and be made available. Acquirers and/or GQAR must pay attention to the scope as this will record any ISO 9001:2015 clauses that are not addressed by the supplier's QMS.</p> <p>Where a Supplier offers 3rd party certification of their QMS to ISO 9001:2015 as evidence of compliance it should be noted that this will not necessarily demonstrate compliance with AQAP-2110 Chapter. The scope recorded on the certificate should be checked to ensure it reflects the Supplier's QMS which is being applied to the contract. It should be noted that the QMS may be tailored to reflect the processes in place within the Supplier's management system. The scope should identify any exclusions to ISO 9001 requirements.</p>

Requirements	Guidance
	<p>The rejection of the QMS, as it applies to the contract, should only be considered by the Acquirer and/or GQAR where there is evidence of systematic failures and/or significant issues that clearly impact the Supplier's ability to meet the contractual requirement.</p> <p>The AQAP requires that the QMS shall be established, documented, assessed and improved as detailed in the guidance in 4.1 and therefore this is the most likely area of rejection. However, the effectiveness of the QMS should also be considered as related to elements such as a number of Major corrective action requests coming from second/third party audits, Customer satisfaction improvement, evidence of non-conformances product escaping through the Supplier's final inspection, Quality Objectives being met, etc. It should be defined as a breach of contract. Acquiring nations would have to determine their own contractual penalties. For mutual GQA tasks, GQAR would have to articulate their concerns to the delegator. This rejection is in relation to contract execution.</p>
<p>4.3 Access to Supplier and External Providers and Support For GQA Activities</p> <p>The Supplier and/or External Providers shall provide the GQAR and/or Acquirer:</p> <ol style="list-style-type: none"> 1. The right of access to facilities where the contracted activities are being performed. 2. Information pertaining to the fulfilment of requirements in the contract. 3. Unrestricted opportunity to evaluate Supplier compliance with this Publication. 4. Unrestricted opportunity to evaluate External Providers compliance with this Publication. The Supplier will be informed before the evaluation takes place. 5. Unrestricted opportunity to conduct verification of product conformity with the contract requirements. 6. Required assistance for evaluation, verification, validation, testing, inspection or release of the product for the accomplishment of GQA to contract requirements. 7. Accommodation and facilities for performing GQA. 8. The necessary equipment available for reasonable use for performing GQA. 9. Supplier and/or External Providers personnel for operation of such equipment as required. 10. Access to information and communication facilities. 11. The necessary Supplier documentation to confirm product conformance to specification. 12. Copies of necessary documents, including those on electronic media. 	<p>This requirement is intended to focus Supplier QA resource on risk areas through the supply chain and to ensure the availability of appropriate information for the GQAR and/or Acquirer so they can consider performing GQA at External Providers". Also consider adding the ability to redact commercially sensitive information.</p> <p>The requirements emphasise the Supplier's responsibility to provide unrestricted access and assistance for the GQAR where part of the contracted work is being performed. The Supplier is solely responsible for the conformance to requirements, of products provided to the Acquirer.</p> <p>The Supplier should ensure that the GQAR and/or Acquirer is provided with suitable office space for administrative purposes and with adequate workspace, with availability of inspection and test resources, when required for verification purposes.</p> <p>Facilities and assistance include, but are not limited to:</p> <ul style="list-style-type: none"> - Access by the GQAR and/or Acquirer to those areas where, and at the time when, the contract work is in progress; - Assistance in the documentation, audit and release of materiel and services where appropriate; - Information necessary for the proper conduct of Government Quality Assurance. <p>It is expected that necessary documents are submitted in accordance with agreements around restricted documents and national practices.</p>
<p>5.1 Leadership</p> <p>5.1.1 Organizational roles, responsibilities and authorities [5.3]</p> <ol style="list-style-type: none"> 1. Top management shall appoint a management representative for GQA issues from the organization's management who, irrespective of other responsibilities shall have the necessary organisational authority and freedom to resolve matters pertaining to quality. The management representative shall report directly to top management. 	<p>The GQAR/Acquirer will have a single point of contact for GQA in the context of the contract.</p>

Requirements	Guidance
2. The management representative shall have responsibility and authority that includes ensuring that processes needed for the quality management system are established, implemented and maintained and shall include liaison with the GQAR and/or Acquirer on matters related to quality.	The Supplier should have defined the actions and decisions for which the management representative is to be responsible, define the competency needed, identify a person with the necessary abilities and ensure the management representative has the necessary authority.
3. The management representative shall have the appropriate competence related to Quality Management.	It is reasonable to confirm that the management representative is suitably qualified and experienced regarding Quality Management. The currency of the management representative's Quality Management knowledge should be maintained through training and professional development.
5.2 Planning	
5.2.1 Risk management [6.1] Risk management plan 1. The Supplier and External Provider shall provide objective evidence that risks, including External Provider risks, are considered during planning; including but not limited to Risk Identification, Risk Analysis, Risk Control and Risk Mitigation. The planning shall start with risk identification during contract review and be updated thereafter in a timely manner.	A structured approach to risk management ensures that risk based thinking is applied throughout the duration of the contract and encourages all parties to have a common understanding of risk. The inclusion of an External Provider's risk encourages organisations to recognise that they have to be aware of external influences and engage with their supply chain. The risk information/plan can be included in another document but the risks must be relevant to the contract and there should be evidence that they are being actively reviewed and, where appropriate, mitigation actions are being pursued and are effective. There should be evidence that senior managers use risk information as part of their decision making process and during their QMS review. There should also be evidence that the Supplier and Acquirer are sharing risk information. AQAP-2110 aligns this requirement with ISO 9001 para 6.1 which requires organisations to consider risk and opportunity when planning for the QMS. AQAP-2110 para 4.1 requires the QMS which includes risk and opportunity to be considered in the context of the contract. Therefore, system level risk and technical / contract specific risk should be considered during planning.
2. Unless otherwise stated in the contract, the Risk Management applied shall meet the principles and guidelines of ISO 31000:2009. The Risk Management Plan shall be made available to the GQAR and/or Acquirer.	This paragraph is considered self-explanatory.
3. The Acquirer and/or GQAR reserve the right to reject Risk Plans and their revisions.	This paragraph is considered self-explanatory.
5.3 Support	

Requirements	Guidance
<p>5.3.1 Infrastructure [7.1.3] Segregation – infrastructure</p> <p>The infrastructure shall include traceability] (see paragraph 5.4.12 of this publication).</p>	<p>Wherever possible there should be an area set aside for nonconforming parts and the level of control/access for this area should be appropriate for the type of product. This will help prevent the unintentional use of nonconforming product.</p> <p>There will be situations where nonconforming parts cannot be segregated or where it would not be cost effective to do so (e.g. major assemblies or temporary work locations). In these situations, positive material control and identification should be confirmed both in stock management systems and through physical identification or 'locking'.</p>
<p>5.3.2 Monitoring and measuring resources [7.1.5]</p> <p>1. The measurement and calibration system applied to the contract shall meet the requirement of ISO 10012:2003.</p>	<p>ISO 10012 provides the requirements for the monitoring, measurement system and acknowledges the ISO/IEC 17025:2017, General requirements for the competence of testing and calibration laboratories. Through a Measurement Management System, the Supplier is expected to establish:</p> <ol style="list-style-type: none"> 1. Identification within the QMS all documented information regarding the Measurement Management System, and how the management system ensures that Metrological Requirements are met? 2. That all documented information regarding the Metrological Function (function with administrative and technical responsibility) including who performs this management has been maintained? 3. Measurement Processes that are defined, performed, maintained and managed. The resulting documentation shall ensure that information related to the previously identified Measurement Processes is addressed – including samples of Documented Information of Measurement Processes and information regarding where and how this data is retained? 4. A description of the Metrological Confirmation Process – including examples of Documented Information of the Metrological Confirmation process, including where and how this data is maintained? 5. How quantities are influenced in the measuring design how the measurement process has been identified? 6. How Measurement Process uncertainty is estimated? 7. By describing in the procedure for the determination, and redetermination, of the suitable intervals for Metrological Confirmation (calibration periodicity). 8. How to ensure that the product can be measured including the uncertainty of measurement calculations, the environment in which the measurement takes place, the measuring device used and the reliability of measurement impacted by the environment and the operator? 9. The Documented Information records kept and the traceability to the national standard. <p>The guidance in ISO 10012 enables the Supplier to understand the Measurement Management System that needs to be in place to ensure the product or service meets the design requirements. The Supplier when re-evaluating the contract outputs will have to take into account the environment, the uncertainty of measurement, the degree of measurement (tolerance) and the level of training or automation required to measure the dimension.</p>

Requirements	Guidance
2. When an item of measuring equipment fails calibration the Supplier shall advise the GQAR and/or Acquirer of the impact of the failure on previous measuring results where this affects delivered products or verification, validation and acceptance results. The GQAR and/or Acquirer may request that measurements taken shall be repeated with calibrated equipment.	The Supplier is expected to be able to demonstrate traceability in the event of failure of calibration. For additional information consult ISO 10012 - 8.3 Control of nonconformities.
5.3.3 Competence [7.2] The Supplier shall establish and maintain a process for identifying training needs and achieving competence of all personnel performing activities affecting product quality.	This paragraph is considered self-explanatory.
5.3.4 Awareness [7.3] Persons involved with the contract, including External Providers, shall be aware of the specific arrangements contained in the quality plan that are applicable to their activities / area of responsibility.	This requirement includes people doing work that are not under the control of the organisation i.e. sub-contractors. All persons doing work under the Supplier's control should be aware of the arrangements for quality. Examples include an awareness of the quality policy, relevant quality objectives, their contribution to the effectiveness of the QMS, the benefits of improvement in performance and the implications of not conforming with the QMS requirements. This is not restricted to the Supplier alone but importantly extends to the External Provider.
5.3.5 Documented information [7.5] The Supplier shall provide the GQAR and/or the Acquirer with the necessary access to the documented information pertinent to the contract, in a format agreed with the GQAR and/or Acquirer.	The Supplier is unilaterally responsible for ensuring that all requirements, including requirements and expectations relating to quality are met. The Supplier is expected to identify those requirements and prepare information on how they will be confirmed. If product characteristics cannot be confirmed at final inspection, inspection and test activities should be performed during the product realisation. It is also necessary to consider inspection and testing carried out by External Providers. The compliance of the product with the requirements of the contract is to be documented by the Supplier. Such documentation could be based on their own controls or by supervising the inspections and tests carried out by External Providers. All documented information is expected to be retained and available to the GQAR and/or Acquirer. Requirements relating to quality: The Acquirer expects the Supplier to be able to perform sufficient quality controls necessary to produce readily available documentation that shows conformance of each and every item to be delivered. This expectation is often not expressed directly or in writing but is expected and is required nonetheless.
5.4 Operation	
5.4.1 Operational planning and control [8.1] 1. The Supplier shall identify the documented information, including acceptance criteria and configuration information that will be used as objective evidence of product conformance with requirements. This information shall be acceptable to the Acquirer and/or GQAR and made available prior to acceptance of the product.	The Supplier should establish product goals and the ability to reach these goals. The Supplier should be able to provide evidence to the Acquirer and/or GQAR how the Supplier will ensure that the deliverables meet the contractual requirements. This will include how the Supplier has planned, implemented and controlled the processes needed to meet the requirements for the provision of the product. The Supplier should also identify the criteria for processes and product acceptance.

Requirements	Guidance
<p>2. The supplier shall maintain and retain documented information for product approval and production process approval. These approvals shall also be applied to External Providers.</p>	<p>The Supplier will also be able to demonstrate how reliability, configuration management as well as control and assurance activities will be addressed. Some of the evidence provided by the Supplier could be sourced from External Providers, i.e. specialist processes or software.</p>
<p>5.4.1.1 Quality Plan 1. The Supplier shall submit an acceptable Quality Plan (QP) which addresses the contractual requirements to the GQAR and/or the Acquirer in a mutually agreed timescale but prior to the start of work which can be defined as a project or contract initiation meeting or as otherwise stated in the contract or purchase order. The QP shall be a clearly identified discrete document or part of another document that is prepared under the contract.</p>	<p>The Quality Plan should be developed in conjunction with other project-related planning, e.g. as a sub-set of the Project Management Plan. Where functions and processes are clearly defined in the Supplier's QMS, a cross-reference is recommended.</p>
<p>2. The QP shall:</p> <p>a. Describe and document the quality management system requirements "contract-specific" necessary to satisfy the contract requirements (making reference, where applicable, to the "company-wide" quality management system);</p> <p>b. Describe and document the planning of the product realisation in terms of quality requirements for the product, needed resources, required control activities (verification, validation, monitoring, inspection, testing), and acceptance criteria. This shall include specific arrangements and communication requirements where work is to be conducted at locations external to the Suppliers premises.</p> <p>c. Document, and maintain traceability of requirements from the planning process by including a requirement and solution compliance matrix, justifying fulfilment of all contractual requirements (making reference where applicable).</p>	<p>AQAP-2110 (para 4.1) establishes the applicability of ISO 9001 requirements:</p> <p>The key element of this paragraph is the final phrase 'as necessary to satisfy contractual requirements.' This establishes the context of the QMS in relation to AQAP requirements.</p> <p>ISO 9001: 2015 imposes a requirement to implement and maintain a QMS (4.4.1) and then to 'the extent necessary' maintain documented information (4.4.2). ISO 9001:2015 imposes a requirement at 5.1.2 for customer requirements to be considered. This establishes that the Supplier is required to maintain and implement a QMS that is related to the contract and reflects customer requirements. It is up to the supplier to determine how this is done – if the majority of their work is defence related then it could well be that their entire QMS is geared up for AQAP-2110 in which case their quality planning would need to only address the contract specific aspects. If however, their QMS is not geared up for defence work then their quality planning would have to reflect the customer's requirements which include AQAP-2110.</p> <p>As ISO 9001:2015 imposes requirements for a QMS that reflects customer requirements. It is appropriate for the acquirer to be told how this is to be achieved without charge. Although the format of this 'quality plan' is not defined, its acceptability is subject to acquirer/GQAR agreement. If the acquirer requires specific assurance regarding quality planning, then they should consider invoking AQAP-2105.</p> <p>The Supplier should consider:</p> <ul style="list-style-type: none"> - An analysis of the requirements for products and services; - Identification of risks including Supplier's management risks; - Functional analysis of needs, classification, weighting; - Restrictions in use, ergonomics, maintenance, interoperability, and training; - Research of needs (customer expectations, perceived customer needs and expressed customer needs; - Detecting unnecessary and expensive constraints; - Detecting pitfalls, process and technological dead-ends; - Allocation of resources; - Minimise any harmful and detrimental effect on the environment. <p>Any special or unusual requirements should be identified. When such requirements are found, there is a need for study, planning and scheduling to provide appropriate operations, processes and techniques and the means for testing and proving conformance with the requirement.</p>

Requirements	Guidance
	<p>If an activity is being undertaken outside the scope of the Supplier's QMS or the usual location, then the QP should detail how activity is to be controlled. The plan should also consider how the Supplier will interface with other organisations. An example of this would be where a Supplier is performing work at another Supplier's location or on a military site and does not have access to their normal infrastructure for tool control, storage of consumables, etc.</p>
<p>3. The Acquirer and/or GQAR reserve the right to reject QPs and their revisions.</p> <p>NOTE: Contractual requirement for the content of the Quality Plan is established in AQAP 2105 "NATO requirements for Deliverable Quality Plans."</p>	<p>This paragraph is considered self-explanatory.</p>
<p>Requirement and solution compliance matrix can be a part of Quality Plan or a separate document as an annex to it. This matrix can be prepared and annexed to the Quality Plan after the initial issue, within a timescale mutually agreed with GQAR and/or Acquirer by taking into account the content of the Contract or Purchase Order.</p>	<p>The traceability of requirements throughout the contract life will provide confidence that requirements have been identified, incorporated into design solutions and subsequently verified and validated. The traceability of requirements can be included in another document or for complex products the Supplier can refer to a requirements management software tool.</p>
<p>5.4.1.2.1 Configuration Management (CM) requirements</p> <p>The Supplier shall manage configuration through the implementation of Configuration Management (CM) Planning, Configuration Identification, Change Control, Configuration Status Accounting and Configuration Audit in accordance with the requirements of ACMP 2100 and any additional CM clauses in the contract or a Nationally recognised equivalent.</p>	<p>The Supplier's CM approach should be appropriate for the complexity and life cycle stage of the product. Ideally the CMP should address the 5 CM principles:</p> <ul style="list-style-type: none"> Configuration Identification; Configuration Management and Planning; Configuration Change Management (Control); Configuration Status Accounting (which contain CM records); Configuration Audit – Functional and Physical. <p>The linkage between configuration audits (functional and physical) and product acceptance should be encouraged to minimise duplication of assurance activities.</p> <p>The requirement for CM is similar to 2110:2009 version. CM remains an essential engineering discipline which underpins the safety and supportability of the product in service.</p> <p>The AQAP requirement recognises that Suppliers may have developed their own configuration management systems and does not seek to impose a particular approach although by referencing ACMP2000 and ACMP 2009, recognises the good practice that is captured in ISO 10007 or other nationally recognised equivalent standards.</p>
<p>5.4.1.2.2 Configuration Management (CM) other standard</p>	<p>This paragraph is considered self-explanatory.</p>

Requirements	Guidance
<p>The Supplier shall prepare a Configuration Management Plan (CMP) which describes the application of CM to the contract in accordance with ACMP 2100 and any additional CM clauses in the contract or Nationally recognised equivalent. The CMP may form part of another plan if appropriate.</p> <p>NOTE: Further information on NATO Configuration Management Policy and Requirements are contained within Allied Configuration Management Publications (ACMP) ACMP-2000 and ACMP-2009.</p>	
<p>5.4.2 Customer communications</p> <p>1. If requested by the Acquirer and/or GQAR, the Supplier and/or External Providers shall attend a Post Award GQA meeting focused on the contract arrangements for Quality Assurance of the product and/or GQA practicalities.</p> <p>2. The Supplier shall ensure that lines of communication are established with the GQAR and/or Acquirer. The designated management representative shall ensure that the adequate level of information is supplied to satisfy the GQAR and/or Acquirer.</p>	<p>The Post Award GQA meeting provides an opportunity for the Supplier (and/or External Providers) and Acquirer and/or GQAR to establish lines of communication, how the GQAR will interface with the Supplier during the contract including sharing and transmission of information and what QA activities are planned for the product and the supply chain.</p> <p>Appointing the points of contact for GQA; Agreeing of the composition of evidence and elements of evidence; Planning the provision of evidence and elements of evidence; Defining conditions for the Acquirer and/or GQAR to get visibility over processes.</p> <p>Note: "Evidence" is the documented information required by the Acquirer and referred to in the terms and conditions of the contract. The "Element" of the Evidence is the documented information drawn up to support the Evidence release.</p> <p>To prepare for the Post Award GQA meeting, the Acquirer and/or GQAR can produce a proforma table for distribution prior to the meeting, (see Annex D). This may include (but not be limited to):</p> <p>Description of the GQA Action; Title and/or reference of contractual requirement; Ref. and description of the evidence; Ref. and description of the element of evidence; Supplier interlocutor; Type of support (Paper, file, CD Rom (if needed mention the types and versions of files); Nature of the disposal (consultation or diffusion); Date of disposal for GQAR (Schedule and/or regarding the contractual timetable).</p> <p>The parties would agree and complete the table during the Post Award GQA meeting.</p> <p>Level of information should be determined between GQAR and/or Acquirer and Supplier. As AQAPs give the framework for contractual quality assurance requirements, it is essential that the GQAR and/or Acquirer and the Supplier establish a relationship, based on the contract and the Supplier's normal "way of doing business", in order to ensure that the necessary information is received by the GQAR and/or Acquirer in a timely manner.</p>
<p>3. The Supplier shall notify the GQAR and/or Acquirer of changes to its organisation that affect product quality or the Quality Management System.</p>	<p>This paragraph is considered self-explanatory.</p>
<p>5.4.3 Determining the requirements related to products [8.2.2]</p>	<p>The Supplier should have an understanding of how the product relates to the critical characteristics. This understanding will ensure that resources are used appropriately and that decisions affecting product conformity are made by the right people in the organisation. An</p>

Requirements	Guidance
The Supplier shall identify product requirements and functions that relate to critical characteristics such as health, safety, performance, and dependability.	example would be that a repair scheme or concession for the acceptance of a piece of aircraft structure that affects the airworthiness of an aircraft is signed off by qualified engineers. The clear benefit of requirements definition will ensure both Acquirer and Supplier have the same understanding of critical characteristics of the product or service.
5.4.4 Design and development controls [8.3.4] Unless otherwise stated in the contract, the Supplier shall determine the verification and validation methods required and demonstrate conformity with the corresponding requirements at appropriate stages up to and including the final product.	This paragraph is considered self-explanatory.
5.4.5 Dependability If stated in the contract, the Supplier shall ensure that Dependability issues and related documents, including those from associated External Providers, are controlled. NOTE: Further information on NATO Dependability Management is contained within Allied Dependability Management Publications (ADMP).	This paragraph is considered self-explanatory.
5.4.6 Control of externally provided processes, products and services [8.4] The Supplier shall retain documented information of verification and/or validation of purchased products. The documented information shall be made available to the GQAR and/or Acquirer.	The Supplier should be able to demonstrate to the GQAR and/or Acquirer that the resulting products and services meet the requirements for the specified application or intended use. This includes evidence of traceability and corrective action e.g. inspection and test records and results of the activities.
5.4.6.1 General Supply chain information 1. Where the Supplier has decided to externally source a critical item, significant work content, design, immature technical solutions or a configuration item then the Supplier shall establish and maintain knowledge of the supply chain and External Provider quality assurance activities.	The Supplier should focus quality assurance resource and base their Supplier controls on the level of risk as it applies to the contract. Traditionally External Providers controls are influenced by historical performance information. This requirement seeks to extend these controls to reflect the criticality of the Supplier in relation to the product/contract and deliberately focuses on areas of potential risk such as design, etc. The criteria in this requirement informs the Supplier's risk-based thinking. The acquisition and support of defence capability may depend on an extended supply chain. All external sourcing activity involves risk and this requirement identifies specific risk areas where the Supplier is to understand their supply chain. The Supplier will be able to use this knowledge to manage supply chain risk and establish a view of quality assurance activities in the supply chain which can prevent duplication of assurance effort.
2. The Supplier shall flow down the applicable contractual requirements to External Providers by referencing the stated contractual requirement, including relevant AQAP(s). The Supplier shall insert the following in all purchasing documents: "All requirements of this contract may be subject to GQA. You will be notified of any GQA activity to be performed."	The Supplier is expected to flow down applicable contractual requirements, inclusive of those within this AQAP, which are relevant for the work activities conducted and appropriate to the scope of the contract and risk assessment. For significant work content, design and other purchase orders constituting risk it could be appropriate to cascade the entire AQAP requirements, providing clarification that the term 'acquirer' also refers to the Supplier issuing

Requirements	Guidance
	<p>the order. It would also be acceptable to exclude specific AQAP requirements that are not relevant to the contract to reflect the complexity and risk of the purchase but noting that acquirer/GQAR right of access is mandatory as established by clause 4.3 of AQAP-2110.</p> <p>Where Suppliers are contracting with organisations that do not have an established QMS, such as small to medium enterprises then they should identify how they will establish confidence in the Supplier and monitor performance.</p> <p>The flow down of requirements within the supply chain should extend to all tiers/levels to the extent necessary to provide the necessary assurance.</p>
<p>3. Suppliers shall conduct a formal review of purchasing documents to verify that the correct contractual requirements have been flowed down. The supplier shall retain documented information of this review.</p>	<p>To facilitate the formal review process, it is important that the Supplier clearly identifies the process and criteria to be applied to assess whether contractual conditions are 'flowed down' to the supply chain and whether the purchasing documentation fully identifies the product and applicable contractual conditions.</p> <p>The process must offer assurance that a consistent rationale is applied and any associated supply chain risks are documented and addressed. For example, if during initial contact or tender an External Provider declared it was unable to fulfil a contracted requirement, then this shortfall should be documented, and the mitigating action implemented by the Supplier.</p> <p>The introduction of a formal review of purchasing documents, against defined criteria, prior to issue will benefit through:</p> <ul style="list-style-type: none"> a. Assuring all customer requirements are suitably assessed for flow-down to the sub-supply chain; b. Identifying and Documenting instances where full flow down of contractual requirements is not appropriate, offer the rationale for this, and as a result define actions or controls to be applied internally by the Supplier; c. Aiding identification and capture of supply chain related risks. <p>The introduction of the requirement to retain documented information to support the completion of the review will improve traceability of the rationale applied; for decisions made and it provides objective evidence for both internal and external Audit purposes.</p>
<p>4. The Supplier shall document their arrangements for these requirements at the planning stage (see paragraph 5.4.1. of this publication) and identify their proposed quality assurance activities for specific sub-contracts or orders that meet the above criteria.</p>	<p>At the Quality Planning stage, Suppliers should understand the supply chain and including what QA activities they are performing. This helps Acquirers and GQAR(s) identify where RGQA(s) (as defined in AQAP 2070) across the supply chain is required. See 5.4.1 Operational planning and control.</p>
<p>5.4.6.2 Type and extent of control [8.4.2]</p> <p>1. It is the Supplier's responsibility to ensure that the procedures and processes required to fulfil contract requirements are fully implemented at the External Provider's facilities.</p>	<p>Suppliers can monitor process at External Providers and use external/supplier audits as a comprehensive way to control External Providers. An annual audit programme could be established, based on the output from risk assessments.</p>
<p>2. The Supplier shall establish and implement a process for the avoidance, detection, mitigation, and disposition of Counterfeit Materiel.</p>	<p>See Annex E, counterfeit risk identification table.</p>

Requirements	Guidance
3. Only the Supplier placing the purchasing documents with an External Provider will issue contractual instructions to that External Provider.	It is the role of the Supplier to establish contractual arrangements with their supply chain. The establishment of commercial arrangements and purchasing documents is essential to describe or determine elements of the procurement or the procedure, including the conditions of contract and specific contractual instructions and in ensuring that these instructions are understood by the External Provider. Productive relationships must be upheld at all levels of the supply chain.
4. GQA activities at External Provider's facilities do not relieve the Supplier from any contractual quality responsibilities. Note - Conduct of GQA and associated GQAR and/or Acquirer access rights, at External Provider's facilities can only be requested by the GQAR and/or Acquirer.	This paragraph is considered self-explanatory.
5.4.6.3 Communication 1. The Supplier shall on request provide the GQAR and/or Acquirer with a copy of any subcontracts, orders, related contractual documents and their modifications, for products related to the contract.	This requirement makes it clear when the Supplier has to notify the GQAR and/or Acquirer of subcontracts. This will identify at an early stage where there is potential risk within the supply chain and will inform discussions between the Supplier and Acquirer/GQAR regarding assurance activities within the supply chain.
2. The Supplier shall notify the GQAR and/or Acquirer if a subcontract or order has been identified involving a critical item, significant work content, design, immature technical solutions or where External Provider performance is unknown or causes concern.	This requirement focuses attention on specific characteristics/risk areas that the Supplier has decided to subcontract which will enable the GQAR and/or Acquirer to determine appropriate levels of GQA activity. The Supplier should determine and implement effective arrangements for communicating with the GQAR and/or Acquirer around aspects such as product technical and Supplier process risk, noting that part of the defence supply chain and may be relevant to other contracts.
3. The Supplier shall notify the GQAR and/or Acquirer if an externally provided product is rejected, reworked, or repaired which has been identified as involving risk or supplied by an External Provider whose selection or subsequent performance has been identified as involving risk.	This paragraph is considered self-explanatory.
5.4.7 Control of Production and Service Provision [8.5.1] 1. The Supplier shall develop and maintain instructions for the conduct of activities related to the control of production of material, part, component, subsystem and system level for the product supplied to ensure that the specified requirements are met.	The GQAR and the Acquirer should be aware of what processes the Supplier might outsource and how such outsourcing is managed. Outsourcing agreements may not always be contract specific and might be used at short notice by the Supplier. When the Supplier determines that work has to be sub-contracted to an External Provider, the Supplier should make such information available to the GQAR and/or Acquirer as early as possible. This enables the GQAR and Acquirer to consider the need for GQA at the External Provider's facility at an early stage.
2. The Supplier shall establish and maintain criteria for workmanship in the clearest practical manner (e.g. written standards, representative samples or illustrations).	

Requirements	Guidance
<p>5.4.8 Identification and traceability [8.5.2]</p> <p>Where the failure of an item or component could lead to the loss of equipment, performance or life then it is mandatory to maintain traceability.</p>	<p>Requirements for traceability placed on the Supplier may help to minimize the impact of non-conforming material on product in production, at inspection or already delivered.</p> <p>This requires Suppliers to maintain build records during manufacture where components and materials have been used. Examples of this could include O seals, welding consumables and other material that are batch controlled. Such records should be able to support product recall in the event that material is subsequently found to be suspect or nonconforming. Benefits of managing traceability are realised through reduced recall size for delivered units shown to contain errors. It improves traceability back to origin, which will reduce the likelihood of counterfeit material entering the supply chain. Successful process and product improvements, through better management of the process, enables applied traceability to inform users when making decisions on the risk of continued use of non-conforming products in defence operations.</p> <p>The Supplier should identify outputs to ensure traceability through the supply chain, including the status of outputs in relation to monitoring and measurement requirements throughout production and service provision.</p> <p>This is linked to critical characteristics and should be relatively straightforward for Design Authorities/Organisations. GQARs should pay particular attention to ensure this clause is satisfied especially in manufacturing organisations.</p>
<p>5.4.9 Property belonging to customers or External Providers [8.5.3]</p> <p>1. If products provided by the Acquirer are lost, damaged or otherwise found to be unsuitable for their intended use in accordance with the contract, the Supplier shall immediately inform the Acquirer and GQAR and retain documented information.</p> <p>2. When the Supplier establishes that an acquirer supplied product is unsuitable for its intended use, they shall immediately report to and coordinate with the Acquirer the remedial actions to be taken. The Supplier shall also inform the GQAR.</p>	<p>This paragraph is considered self-explanatory.</p>
<p>5.4.10 Preservation [8.5.4]</p> <p>1. Products with limited shelf life shall be subject to control of their expiry dates.</p> <p>2. If applicable, the control of expiry date/shelf life shall be applied during maintenance, servicing, storage or when fitted.</p> <p>3. Remaining shelf-life shall be identified and communicated to the GQAR and/or Acquirer prior to delivery.</p>	<p>The Supplier should preserve their products, including sub-assemblies and components, during production and service provision. Product must be preserved to the extent necessary to ensure conformity to requirements. The controls applied should be relevant to the application and longevity of the product.</p> <p>Preservation of product extends from manufacturing processes, through to installation, in service and storage of the product, including identification, handling, contamination control, packaging, transportation and protection.</p> <p>This paragraph is considered self-explanatory.</p>

Requirements	Guidance
5.4.11 Release of products [8.6] 1. The Supplier shall ensure that only acceptable products, intended for delivery, are released. The GQAR and/or Acquirer reserve the right to reject nonconforming products.	The Supplier is to ensure that only acceptable products are delivered to the Acquirer. The Supplier is to ensure they have the appropriate processes in place to verify the conformance to contractual requirements, including the identification and resolution of nonconforming products, prior to release/delivery to the acquirer. The Acquirer is to ensure the appropriate acceptance criteria is defined and communicated to the Supplier to ensure requirements are fully understood.
2. The Supplier shall provide a Certificate of Conformity at release of product to the GQAR and/or Acquirer unless otherwise instructed.	The Certificate of Conformity (CoC) is a document, signed by the Supplier, which states that, the product conforms to the contractual requirements. The recommended minimum information required for a CoC is detailed at Annex F. The Supplier is asked to note that the contract may identify a specific CoC form and/or define contract specific information that should be included in the CoC. If the contract requires the GQAR to provide a statement of GQA then a signature block may be added to the CoC. Further information is provided at Annex F.
3. The Supplier is solely responsible for the conformance to requirements, of products provided to the Acquirer.	This paragraph is considered self-explanatory.
4. Where the GQAR/and or Acquirer is required to perform any final inspection or formal acceptance activities, the Supplier shall provide the GQAR/and or Acquirer with a minimum of 10 working days notification of the event unless otherwise stated in the contract.	Suitable notification of the requirements to conduct any GQAR / Acquirer activities should be considered, scheduled and agreed.
5.4.12 Control of nonconforming products [8.7] 1. The Supplier shall issue and implement documented procedures which identify, control and segregate all nonconforming products. Product with unidentified or unknown status shall be classified as nonconforming product.	Acquirers will need to have their own internal processes for the control of non-conforming product and also concession against contract requirement. These processes should identify how the organization reacts to nonconformity, take action to control and correct it and deal with its consequences, evaluating and addressing the root cause. For the Supplier to meet this requirement in a consistent and controlled manner it is reasonable to expect there to be established processes in place to ensure segregation, containment and identification of nonconforming product(s). Appropriate actions should be in place to determine and communicate its status to prevent nonconforming product entering the supply chain.
2. Documented procedures for the identification, control, and segregation of nonconforming product are subject to disapproval by the GQAR and/or Acquirer when it can be shown that they do not provide the necessary controls.	The GQAR and/or Acquirer may reject the Supplier's documented procedure for the control of product if it considers it not suitably robust enough to give the GQAR and/or Acquirer confidence in the necessary controls.

Requirements	Guidance
<p>3. The Supplier shall notify the GQAR and/or Acquirer of non-conformities and corrective actions required, unless otherwise agreed with the GQAR and/or Acquirer. The GQAR and/or Acquirer reserves the right to reject all rework, repair and use as is dispositions.</p>	<p>Consider adding the following AQAP 2131 para 2.6:</p> <p>This requirement establishes the right of the Acquirer/GQAR to reject the Supplier's dispositions of nonconforming product. This is required for proposals that will have a detrimental effect on the product or higher assemblies. Inclusive of through life usage (e.g. a repair during manufacture may eliminate the possibility of future repairs during service life).</p> <p>Nonconformities and their associated corrective actions are to be communicated to the GQAR and/or Acquirer who will make an assessment on the rework and its acceptability.</p> <p>The retained information is required to be made available to the GQAR and/or Acquirer to enable a considered evaluation of any potential impact on related products or systems; it is possible that the Supplier may not be aware of these.</p> <p>For example, "use as is" dispositions, which effectively mean the Acquirer is taking receipt of nonconforming material, there is a possibility that this may have a negative impact on related systems.</p>
<p>4. Where the Supplier proposes to raise a concession for the use, release or acceptance of a nonconforming product then appropriate authorisations shall be obtained from the GQAR and/or Acquirer unless otherwise agreed.</p>	<p>The Supplier should be able to demonstrate control over concessions, including authorization of life-limited concessions.</p> <p>It must be noted that the cumulative effect of concessions has to be considered at system level. The retained information is required to be made available to the GQAR and/or Acquirer to enable a considered evaluation of any potential impact on related products or systems; it is possible that the Supplier may not be aware of these.</p> <p>Acquirers must ensure that the contractual requirements for dealing with concessions are clearly stated in the contract. Acquirers should be aware that national practice of the country placing the contract and the nation where the contract will be performed may be different with respect to handling concessions and should therefore clearly set out the required actions.</p>
<p>5. The Acquirer requirements for concessions apply equally to outsourced processes or purchased products. The Supplier shall review any request from External Providers before submission to the GQAR and/or Acquirer.</p>	<p>Control over outsourced and purchased products is necessary to give confidence that non-conforming product is managed throughout the supply chain. This includes the communication of instances of non-conforming product prior to submission.</p>
<p>6. The Supplier shall retain documented information of quantity authorized and/or expiration date for concessions or deviation permits. The Supplier shall ensure compliance with the contract requirements when the authorization expires.</p>	<p>The Supplier should be able to demonstrate control over concessions, including authorization of life-limited concessions.</p>

Requirements	Guidance
7. The Supplier shall notify the GQAR and/or the Acquirer of nonconforming product received from an External Provider that has been subject to Government Quality Assurance.	This requirement establishes the right of the Acquirer/GQAR to reject the Supplier's dispositions. This is to be exercised for such proposals where it will have a detrimental effect on the product and its through life usage (e.g. a repair during manufacture may eliminate the possibility of future repairs during service life). Also for "use as is" dispositions, which effectively mean the Acquirer is taking receipt of nonconforming material, there is a possibility that this will have a negative impact on related systems (e.g. reduced flow rate of a pump preventing the correct level of cooling or lubrication). The cumulative effect of concessions has to be considered at system level.
5.5 Performance Evaluation	
5.5.1 Customer satisfaction [9.1.2]	GQARs / Acquirers must highlight that they are submitting a customer complaint (Customer complaints is as defined in ISO 9000).
1. Any complaints or deficiencies relevant to the contract, reported by the GQAR and/or Acquirer, shall be recorded as customer complaints.	A complaint is an expression of dissatisfaction made to the Supplier related to its product or service, where a response is explicitly or implicitly expected.
2. The Supplier shall provide a response to the originator of the complaint or deficiency that shall include information on root cause analysis and corrective action. Note: Customer complaints could be in the form of quality non-conformance, deficiency or occurrence reports or another format but regardless will be identified by the GQAR and/or Acquirer as 'customer complaints'.	Supplier responses to complaints should be available to demonstrate how the Supplier has reacted to take control of the cause of the complaint and how it has dealt with the following: determining the cause of the complaint, implementation of the correction and corrective action, review of the effectiveness of the corrective action taken and any resultant changes to the QMS and overall improvements. There is an expectation that customer complaints will be visible to 3 rd Party certification bodies.
5.5.2 internal audit [9.2]	The Supplier should also conduct internal audits that provide contract specific assurance against contract and NATO requirements. The audit programme should be centred around critical processes, changes affecting the organization and the results of previous audits.
1. During the planning of internal audits the Supplier shall ensure that their audit programme covers all contract related critical processes and activities on an annual basis and includes contractual requirements and NATO supplements. The Supplier shall also consider the output from the actions to address risk and opportunities assessment.	
2. Unless otherwise agreed, the Supplier shall inform the GQAR and/or Acquirer of deficiencies or findings identified during internal audit.	Audit findings, including deficiencies should be made available to the GQAR and/or Acquirer.
3. The Supplier shall retain documented information that demonstrates auditor training and experience.	The Supplier should be able to demonstrate auditor training and experience. This may be in the form of training records and auditor logs.
5.5.3.1 Management Review Input [9.3.2]	The Supplier is to review the organization's QMS, at planned intervals, to ensure its continuing suitability, adequacy, effectiveness and alignment with the strategic direction of the organization. Examples of documented information that should be available to the GQAR and/or Acquirer could include:
Documented information of review input, related to the contract, shall be available to the GQAR and/or Acquirer.	Changes to the Supplier's QMS that may impact the contract; Information on the Supplier's QMS performance in relation to the contract; Effectiveness of actions to address contract risk and / or opportunities; Opportunities for improvement.

Requirements	Guidance
5.5.3.2 Management Review Output [9.3.3] 1. Documented information of the review output, related to the contract, shall be available to the GQAR and/or Acquirer.	This paragraph is considered self-explanatory.
2. The Supplier shall notify the GQAR and/or Acquirer of proposed action, resulting from Review Output that will affect compliance with contractual requirements. Review output shall, where action item(s) are identified, specify the responsible person/function and due date of the action item(s).	The outcomes of the management review should cause beneficial change in performance. Outputs from the Management review should focus on improvements to products, processes and the performance in relation to the contract. Outputs could be demonstrated as product improvement actions. Actions may focus on the quality of the design, improvements to conformity of product, the quality of use leading to improved reliability, maintainability, durability and performance.
5.6 Improvement	
5.6.1 Nonconformity and Corrective Action The Supplier shall define their process, including tools and techniques, used to support root cause analysis for nonconformities.	Root cause analysis is a critical activity for the prevention of nonconformities and as such should be controlled as a process. Root Cause analysis will facilitate: Improved identification of symptoms and causes of nonconformities; Improved ability to define and implement corrective actions; Reduced recurrence of nonconformities; Availability of information to provide the customer and other interested parties with increased assurance that corrective actions proposed will prevent future nonconformities. 1. Suppliers will adopt tools and techniques that are appropriate for the nature and complexity of their business and be able to manage root cause analysis as a business process. 2. The root cause analysis process, tools and techniques applied to the contract shall be included in, or referred to, the contract quality plan and be made available to the GQAR and/or Acquirer. 3. There are many recognised root cause analysis methodologies, tools and techniques. Examples of common root cause analysis methodologies and techniques are: Failure Modes (or cause) Effect And Criticality Analysis (FMECA) Ishikawa diagrams (Herring bone diagram) Why-Why analysis. 4. It would be reasonable to expect the Supplier to have competent personnel (resource) to support the techniques identified in their process.

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ANNEX A

List of documented information requested by AQAP-2110 Edition D, Version 1 and ISO 9001:2015

The below list identifies documented information requested by the AQAP-2110 Edition D, Version 1 and ISO 9001:2015.

When those standards are contractual and/or the Supplier is certified according to those standards, the Supplier shall release that documented information in order to provide confidence that contractual requirements are fulfilled and/or the Quality Management System is correctly implemented.

This list can help the GQAR and the Supplier to:

- prepare the Post Award GQA meeting focused on the contract arrangements for Quality Assurance of the product and/or GQA practicalities (see para. 5.4.2)
- complete the template for GQA Arrangements (see annex D).

The meaning of icons used concerning the type of documented information in the list below is:






Maintain documented information (See ISO 9001:2015 Annex A, Paragraph A.6 for detail)
















Retain documented information (See ISO 9001:2015 Annex A, Paragraph A.6 for detail)








The Supplier may maintain or retain contract related documented Information against these requirements

§ AQAP 2110	§ ISO 9001:2015				Description of Documented information requested
4.1		x	x		Quality Management System in accordance with AQAP-2110 which includes the requirements of ISO 9001:2015 as necessary to satisfy the contract requirements.
	4.3	x			Scope of the organization's quality management system.
4.1	4.4.2 a)	x			To support the operation of its processes.
4.1	4.4.2 b)		x		To support the operation of its processes.
	5.2.2	x			Quality policy.

§ AQAP 2110	§ ISO 9001:2015				Description of Documented information requested
5.2.1		x			Risk plan.
	6.2.1	x			Quality objectives.
	7.1.5.1		x		As evidence of fitness for purpose of the monitoring and measurement resources.
	7.1.5.2		x	x	The basis used for calibration or verification ( when no international or national measurement standards exist).
	7.2		x		Evidence of competence.
5.3.3		x			A process for identifying training needs and achieving competence of all personnel performing activities affecting product quality.
	7.5.1 b)	x	x		Documented information determined by the organization as being necessary for the effectiveness of QMS.
	8.1 e)	x	x	x	Documented information on operational planning and control ( <i>determined by the organization to be necessary</i>).
5.4.1 (1)			x		Identify documented information including acceptance criteria and configuration information that will be used as objective evidence of product conformance with requirements.
5.4.1 (2)		x	x		For product approval and production process approval. These approvals shall also be applied to External Providers.
5.4.1.1		x			Quality plan.
5.4.1.1		x			Requirement and solution compliance matrix can be a part of Quality Plan or a separate document as an annex to it.
5.4.1.2. 2		x			Configuration Management Plan.
	8.2.3.1		x	x	Customer's requirements shall be confirmed by the organization before acceptance ( <i>when the customer does not provide a documented statement of their requirements</i>).
	8.2.3.2		x	x	Results of the review of the requirements for products and services; ( <i>as applicable</i>) on any new requirements for the products and services.
	8.3.2		x		Needed to demonstrate that design and development requirements have been met (<i>note: regarding design and development planning</i>).

§ AQAP 2110	§ ISO 9001:2015				Description of Documented information requested
	8.3.3		x		Design and development inputs.
	8.3.4		x		Design and development controls (results to be achieved ; reviews ; verification activities ; validation activities ; any necessary actions are taken on problems during those activities).
	8.3.5		x		Design and development outputs.
	8.3.6		x		Design and development changes and the results of reviews (<i>note: regarding Design and development changes</i>).
	8.4.1		x		Evaluation, selection, monitoring of performance, and re-evaluation of external providers, and any necessary actions arising from the evaluations.
5.4.6			x		Verification and/or validation of purchased products.
5.4.6.1			x		Review of purchasing documents to verify that the correct contractual requirements have been flowed down.
5.4.6.2 (2)		x			A process for the avoidance, detection, mitigation, and disposition of Counterfeit Materiel.
5.4.7 (1)		x			The instructions for the control of production activities to ensure that requirements are met.
5.4.7 (2)		x			Criteria for workmanship in the clearest practical manner (e.g. written standards, representative samples or illustrations).
5.4.8	8.5.2		x	x	Unique identification of the outputs ( ISO when traceability is a requirement  AQAP when failure of an item or component could lead to loss of equipment, performance or life).
5.4.9	8.5.3		x	x	Report on property of a customer or External Provider ( When the property of a customer or External Provider is lost, damaged or otherwise found to be unsuitable for use).
	8.5.6		x		Results of the review of changes, the person(s) authorizing the change, and any necessary actions arising from the review (<i>note: regarding production and service provision</i>).
	8.6		x		Release of products and services including evidence of conformity with the acceptance criteria; traceability to the person(s) authorizing the release.

§ AQAP 2110	§ ISO 9001:2015				Description of Documented information requested
5.4.11 (2)			x	x	Certificate of Conformity at release of product  unless otherwise instructed.
5.4.11 (4)			x	x	Provide minimum of 10 working days notification of the event unless otherwise stated in the contract ( Where the GQAR/and or Acquirer is required to perform any final inspection or formal acceptance activities).
	8.7.2		x		Description of the nonconformity; the actions taken; any concessions obtained; identifies the authority deciding the action in respect of the nonconformity.
5.4.12 (1)		x			To identify, control and segregate all nonconforming products.
5.4.12 (6)			x		Of quantity authorized and/or expiration date for concessions or deviation permits.
	9.1.1		x		Results of the evaluation of the performance and the effectiveness of the quality management system.
5.5.1			x		Any complaints or deficiencies reported by the GQAR and/or Acquirer shall be recorded as customer complaints.
	9.2.2		x		Results of the implementation of the audit program and the audit results.
5.5.2			x		Auditor training and experience.
5.5.3.1			x		Review input related to the contract.
5.5.3.2	9.3.3		x		Results of management reviews (related to the contract for AQAP).
	10.2.2		x		Nature of the nonconformities and any subsequent actions taken; the results of any corrective action.

ANNEX B

List of documented information requested by AQAP-2110 Edition D, Version 1 and ISO 10012.

The below list identifies documented information requested by the AQAP-2110 Edition D, Version 1 and ISO 10012.

When those standards are contractual and/or the Supplier is certified according to those standards, the Supplier shall release that documented information in order to provide confidence that contractual requirements are fulfilled and/or the Quality Management System is correctly implemented.

This list can help the GQAR and the Supplier to:

- prepare the Post Award GQA meeting focused on the contract arrangements for Quality Assurance of the product and/or GQA practicalities (see para. 5.4.2)
- complete the template for GQA Arrangements (see annex D).



The meaning of icons used concerning the type of documented information in the list below is:





Maintain documented information.



Retain documented information.

§ AQAP 2110	§ ISO 10012			Description of Documented information requested
	5.1	x		Measurement management system.
	6.1.1	x		Responsibilities of all personnel assigned to the measurement management system.
	6.1.2		x	Training activities and effectiveness of the training
	6.2.3		x	Containing information required for the operation of the measurement management system.
	6.2.3	x		To ensure the identification, storage, protection, retrieval, retention time and disposition of records.
	6.3.1	x		Documented procedures for receiving, handling, transporting, storing and dispatching measuring equipment
	6.4		x	Criteria for selection, monitoring and evaluation of <i>External Providers</i> ¹ . Of the products or services provided by <i>External Providers</i> .
	7.1.2	x		The methods used to determine or change the intervals between metrological confirmation.

¹ Outside suppliers used in ISO 10012 have been replaced by External Providers used in ISO 9001:2015

§ AQAP 2110	§ ISO 10012			Description of Documented information requested
	7.1.4		x	Metrological confirmation process.
	7.2.1	x		Measurement processes.
	7.2.2	x		The measurement processes designed to meet these specified requirements.
	7.2.4		x	To demonstrate compliance with the requirements of the measurement process.
	7.3.1	x		All known sources of measurement variability.
	7.3.2		x	Records of traceability of measurement results shall be maintained for as long as required by the measurement management system, the customer, or by statutory and regulatory requirements.
	8.2.4	x		To monitoring measurement management system and at established intervals
	8.2.4		x	Results of monitoring of the measurement and confirmation processes and any resulting corrective actions.
	8.4.2		x	The criteria for taking corrective action shall be documented.
	8.4.3	x		For preventive actions to define requirements

ANNEX C

List of documented information requested by AQAP-2110 Edition D Version 1, ACMP 2100 Edition A Version 2 and ISO 10007.

The below list identifies documented information requested by the AQAP-2110 Edition D, Version 1 and ISO 10007.

When those standards are contractual and/or the Supplier is certified according to those standards, the Supplier shall release that documented information in order to provide confidence that contractual requirements are fulfilled and/or the Quality Management System is correctly implemented.

This list can help the GQAR and the Supplier to:

- prepare the Post Award GQA meeting focused on the contract arrangements for Quality Assurance of the product and/or GQA practicalities (see para. 5.4.2)
- complete the template for GQA Arrangements (see annex D).



The meaning of icons used concerning the type of documented information in the list below is:





Maintain documented information.



Retain documented information.

§ AQAP-2110 § ACMP 2100	§ ISO 10007			Description of Documented information requested
ACMP 2100 § 1 & 4		x		Configuration Management system
	4.2		x	Documentation of the change.
AQAP-2110 § 5.4.1.2.2	5.2	x		Configuration management plan.
ACMP 2100 § 3	5.3.2	x		Product configuration information.
	5.4.1		x	To control the change.
	5.4.2		x	All change proposals.
	5.4.4		x	Disposition of the change.
	5.4.5		x	Verification of the change.

§ AQAP-2110 § ACMP 2100	§ ISO 10007			Description of Documented information requested
	5.5.1		x	Configuration status accounting activity results.
	5.5.2.1		x	Configuration identification and change control activities, configuration status accounting.
	5.5.2.2		x	Evolving product configuration information.
	5.4.3.1		x	Evaluations concerning the proposed change.
	5.6	x		Configuration audits.

ANNEX D**Template for GQA Arrangements** per AQAP-2110 paragraph 5.4.2

GQA Action (risk based)	Title and/or reference of contractual requirement	Ref. and description of the evidence	Ref. and description of the element of evidence	Supplier Representative	Type of support	Access to Information	Date of disposal for GQAR	Comments / Observations
				<i>People, department who provides the evidence or the element of evidence</i>	<i>Paper, file, CD Rom (if needed mention the types and versions of files)</i>	<i>consultation or diffusion restricted distribution</i>	<i>Schedule and/or regarding the contractual timetable</i>	
<i>Perform the Final Inspection of the Electric Primary Pump (EPP)</i>	<i>AQAP-2110 § 5.4.11 Release of products and Technical Specification 51252 § 12.4</i>	<i>CoC of the EPP, FAT procedure accepted by the Acquirer, FAT report and DTR quality file for the EPP</i>	<i>DTR quality file of Electric Motor.</i>	<i>Quality engineer (Name of person)</i>	<i>Paper, file, CD Rom (if needed mention the types and versions of files)</i>	<i>consultation or diffusion; restricted distribution.</i>	<i>minimum of 10 working days notification. 15 April 2019</i>	<i>Final Inspection will be performed in the NG production plant.</i>

In preparation for the Post Award GQA meeting, ensuring focus on the contract arrangements for Quality Assurance of the product and/or GQA practicalities (see para. 5.4.2), the GQAR and/or the Acquirer should complete this table for the Supplier by completing all the headings except “Supplier Representative”.

Prior to the Post Award GQA meeting (allowing suitable time for the Supplier to complete the template but recommended to be not less than 10 days), the completed template should be sent to the Supplier with the content for the “Ref. and description of the element of evidence” column omitted.

Note: Omitting the content of the “Ref. and description of the element of evidence” column enables the GQAR and/or Acquirer to negotiate some elements of evidence which may not have been previously considered.

The Supplier should prepare for the meeting by reviewing this template and completing the blank columns; “Ref. and description of the element of evidence” and “Supplier Representative”.

During the Post Award GQA meeting, the completed template should be reviewed and agreed by both the Supplier and the GQAR and/or Acquirer.

The release of the approved table, attached to the meeting minutes, forms a commitment between the Supplier and the GQAR and/or Acquirer.

Further follow-up meetings may be required to:

- specify the GQAR engagement at the Supplier's premises, involved in the contract execution, and/or External Providers;
- specify or adjust the dates of availability of the agreed evidence according to the contract milestones or the complexity of industrial supplies.

ANNEX E

Counterfeit Avoidance Guidance for AQAP-2110

AQAP-2110 Ed.D Requirement

1. The AQAP-2110 requirement for the avoidance of counterfeit materiel can be found in section 5.4.6.2 'Type and extent of control' sub-section 2:

The Supplier shall establish and implement a process for the avoidance, detection, mitigation, and disposition of counterfeit materiel.

Guidance

2. Counterfeit materiel is by its nature nonconforming (i.e. there is a characteristic that does not fully comply with the specification or history of the materiel). This could include but not limited to raw material, manufacturing methods, lifetime of parts or false certification. What makes the nonconforming materiel counterfeit is the act of false misrepresentation.

3. Counterfeit materiel is undesirable in defence equipment as it may have unpredictable performance and failure modes which could compromise capability and equipment safety. Below in Fig 2 is a diagram showing the most common counterfeiting modes and their representation

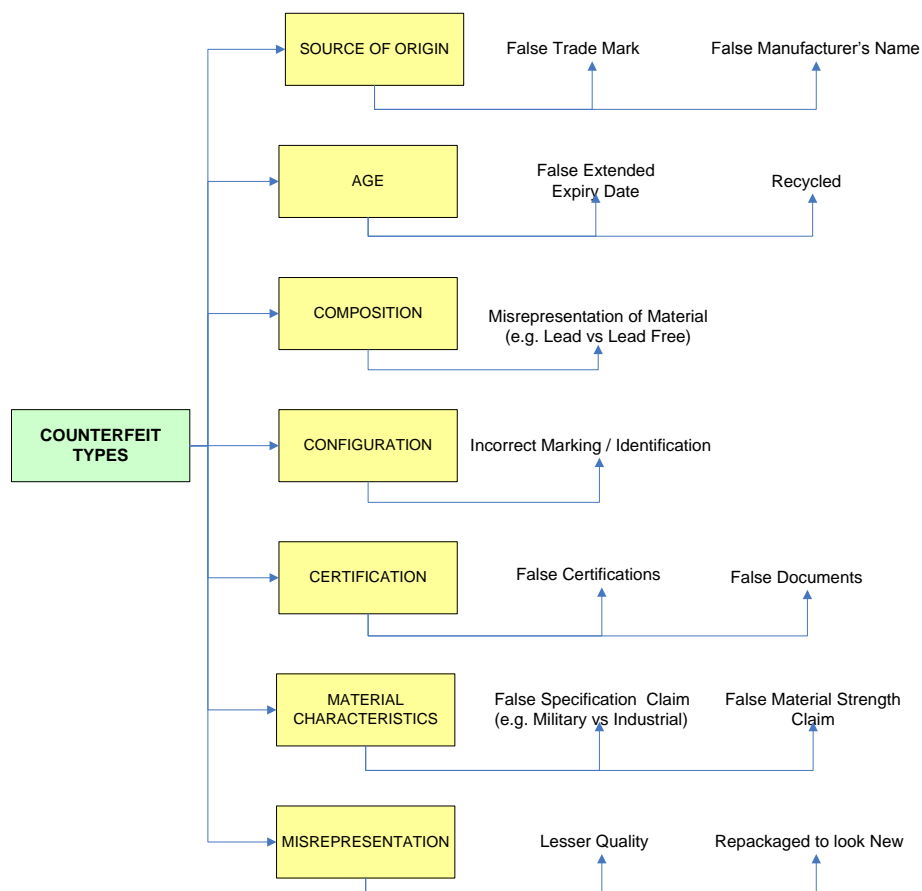


Figure 2: Diagram showing the counterfeiting modes

4. There is an increased probability of counterfeit materiel where:
 - a. the components or raw materials are of a type that are known to be vulnerable to counterfeiting,
 - b. the design requires the sourcing of parts that are obsolescent, or are foreseen to become obsolescent during the lifecycle of the equipment,
 - c. there are likely to be multiple tiers in the supply chain,
 - d. traceability of the materiel is not otherwise mandated,
 - e. the design includes Electrical, Electronic and Electro-mechanical (EEE) parts.
 - f. where counterfeiting of test results enables the product to be accepted by an organisation.
 - g. Where counterfeiting of certificates enables an organisation to benefit from that certification without achieving the required standard or output.
5. There are recognised national standards already in existence, some specific to certain product domains, for example electronics is covered by AS5553.
6. Other guidance may be identified in:
 - STANREC 4791
 - BSI PD IEC/TS 62668-1 Process management for avionics - Counterfeit prevention. Part 1: Avoiding the use of counterfeit, fraudulent and recycled electronic components;
 - SAE AS6174 Counterfeit Materiel; Assuring Acquisition of Authentic and Conforming Materiel.
7. The Supplier's process should reflect the counterfeit types and the level of risk. The diagram at Fig 3 reflects the risks described in the text in relation to counterfeit materiel in the supply chain and risk in final products.

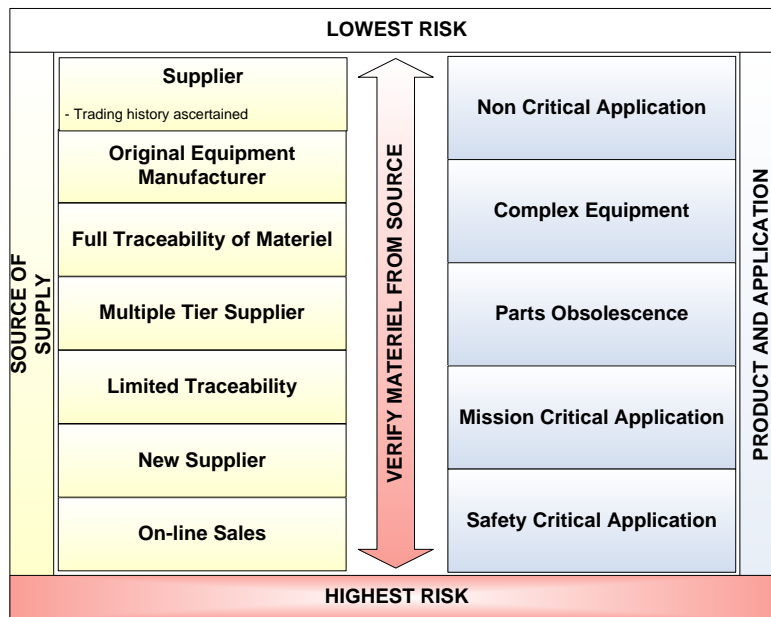


Figure 3: Counterfeit risk assessment diagram

Counterfeit Avoidance Strategy and Policy Statement

8. A Supplier who holds a counterfeit avoidance policy indicates a level of maturity in its approach to counterfeit avoidance. The benefits of having a counterfeit Avoidance strategy and the implementation of the strategy through a policy statement, this will enable the organisation;

- a. To Understand what potential risks of counterfeit material are in the supply chain
- b. By the organisation using the counterfeit avoidance policy as the first steps in developing the controls, awareness, the resource requirements and identifying the organisations intent to address the issue.

Impact of Counterfeit Material

9. Counterfeit materiel is undesirable in defence equipment as it may have unpredictable performance and failure modes which could compromise capability and equipment safety.

10. To manage the supply chain, understand the risks of supply and assure the providence of critical items will enable the Acquirer and Supplier to reduce the risk of:

- a. Premature failure and expensive repairs and investigation;
- b. Loss of confidence in the system or product;
- c. Rework and loss of capability;
- d. Legal action and loss of reputation.

11. By the Supplier actively planning and managing the risk of counterfeit materiel in their supply chain and formalising their process for identification and control of counterfeit parts, the supplier offers:

- a. Improved awareness and controls of their supply chain;
- b. Assurance to the customer that the provenance and quality aspects of both the product and any sub-components are known;
- c. Assurance that a system is in place to assure early detection of counterfeit parts within the supply chain;
- d. Processes are in place and to be adhered to if counterfeit parts are detected; and
- e. The correct remedial action is taken which includes containment, investigation and action.

ANNEX F

Minimum Certificate of Conformity (CoC) Content

A CoC should contain the following information as a minimum

- 1) Supplier name and address;
- 2) Product;
 - a. Name,
 - b. Type number or model name/number,
 - c. Serial number/batch number,
 - d. Other data which specific for product to allow identification (i.e. batch quantity),
 - e. Any concessions;
- 3) A Supplier's statement; that the product conforms to all requirements of the technical specification/Contract;
- 4) Document contained technical specification (contract) and its identification;
- 5) Date and place of issuing CoC;
- 6) Name, signature and position in the company of the authorized person issuing the CoC.

Notes:

1. Additions could be added to the minimum requirements for the CoC in line with the contract requirement.
2. If the supplier is not the Original Equipment Manufacturer (OEM) then the CoC must contain OEM certification details. This enables future traceability and logistic support.
3. If the contract requires the GQAR to provide a statement of GQA then a signature block may be added to the CoC. This should include the statement:

“Government Quality Assurance Representative Statement of GQA:
With reference to this CoC, this is to attest that within the provisions of STANAG 4107, AQAP 2070 and the RGQA, the planned Government Quality Assurance has been performed”.

AQAP-2110-SRD.1(B)(1)

STANDARDS RELATED DOCUMENT

AQAP-2110-SRD.2

GUIDANCE ON THE APPLICATION OF AQAP-2110 EDITION D WITHIN AN AS9100 QUALITY MANAGEMENT SYSTEM

**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-2110-SRD.2, Edition A, Version 1, GUIDANCE ON THE APPLICATION OF AQAP 2110 EDITION D WITHIN AN AS9100 QUALITY MANAGEMENT SYSTEM, which has been approved in conjunction with AQAP-2110 by the nations in the Life Cycle Management Group, is promulgated herewith.
2. AQAP-2110-SRD.2, Edition A, Version 1, is effective upon receipt and replaces the content of Annex F 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
Director, NATO Standardization Office

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CHAPTER 1 - INTRODUCTION

1.1 This document has been prepared and issued to provide information and guidance on the application of AQAP-2110 when the Supplier adheres to the provisions of AS9100. This publication is published as an AQAP-2110-SRD.2 and AS9137. It was jointly developed by NATO and industry representatives for use by NATO and industry to facilitate the use and understanding of the relationship between the AQAP-2110 and AS9100. AQAPs may be required when an Acquiring nation use Foreign Military Sales (FMS) as procuring method.

1.2 This publication aims to contribute to commonality of interpretation of the AQAP-2110 requirements by the Acquirer and their AS9100 Supplier.

1.3 This publication's content has no legal or contractual status nor does it supersede, add to, or cancel any of the AQAP-2110 or AS9100 requirements.

1.4 Because of the multiplicity of conditions that can exist (dependent on such factors as the type of work or process, the devices used, and the skill of personnel involved), this guidance should not be considered as all-encompassing nor should it be considered as imposing specific means or methods for meeting contract requirements. Stakeholders should be aware that other means or methods could be used to meet these requirements.

1.5 Users of this guidance should keep in mind that the requirements of AQAP-2110 as cited in the contract are mandatory on Suppliers and External Providers.

CHAPTER 2 - REFERENCES

The following documents are important references for the application guidance provided in this publication. Only the edition cited applies for dated references. The latest edition of the referenced document (including any amendments) applies for undated references.

AS/EN/JISQ 9100:2016 Quality Management Systems – Requirements for Aviation, Space and Defense (AS9100)

AQAP-2110 NATO Quality Assurance Requirements for Design, Development and Production

AQAP-2310 – NATO Quality Assurance Requirements for Aviation, Space and Defence Suppliers". Note: NATO have published AQAP-2310 to contractually invoke the requirements of AS/EN 9100, with additional NATO requirements. Consideration for the use of AQAP 2310 should be made in accordance with the 'AQAP Selection SRD'.

ISO 9001:2015 Quality management systems – Requirements

ISO 10012:2003 Measurement management systems – Requirements for measurement processes and measuring equipment

CHAPTER 3 - GENERAL GUIDANCE

3.1 In an AS9100 certificated organization, the entire content of both standards is within the purview of Government Quality Assurance (GQA).

3.2 When reviewing the two documents (i.e. AQAP-2110, AS9100) it is helpful to note the differences in wording used to describe the stakeholders. The following equivalence (see Table 1) is offered as a workable translation. The contract will normally define the points of contact, outlining their role and authority.

TABLE 1 – AQAP 2110 AND AS9100 STAKEHOLDER TERMS

AQAP-2110	AS9100
Acquirer	Customer, only if it is the Acquiring government.
Government Quality Assurance Representative (GQAR)	A Customer's Quality Representative.
Supplier	Organization with a direct contract with the government.
External Provider	Supplier or Organization without a direct contract with the government.

3.3 AS9100 is complementary (not alternative) to contractual and applicable law and regulatory requirements. It includes ISO 9001:2015 Quality Management System (QMS) requirements and specifies additional requirements for a quality management system for the aviation, space and defence industries.

3.4 The common ISO 9001:2015 baseline inherently makes AS9100 and AQAP-2110 appear almost identical in requirements. However, four features differentiate the two documents:

- a) AQAP-2110 defines contractual requirements; while AS9100 defines organizational provisions to be addressed within the scope of certification;
- b) AQAP-2110 reflects the agreement between NATO members to contract using the mandatory QMS clauses that enables reciprocal GQA; while industry conformance to AS9100 may be voluntary, but is normally contractual;
- c) The additions to ISO 9001:2015 of both documents add higher level quality management functions. AQAP-2110 also includes additional requirements related to communication and GQAR access to contract pertinent facilities, information and processes;
- d) AQAP-2110 format has been changed from previous editions. The format no longer implements the requirements of ISO 9001:2015 paragraph by paragraph. Instead the requirements of ISO 9001:2015 in total have been required, "as necessary to satisfy the contractual requirements", by a single paragraph within AQAP 2110 Edition D Version 1 section 4 with General QMS Requirements. NATO specific requirements are then included in section 5.

CHAPTER 4 - DETAILED GUIDANCE

Detailed guidance is provided only where there is either the need for clarification or the potential for conflict or misunderstanding exists. Each paragraph and subparagraph of the standards (i.e., AS9100, AQAP-2110) are listed below in Table 2 – AS9100 AND AQAP-2110 DETAILED HARMONIZATION GUIDANCE. Where either standard contains additional requirements or notes to the base standard (i.e. ISO 9001:2015), the clause heading text is bolded.

TABLE 2 – AS9100 AND AQAP 2110 DETAILED HARMONIZATION GUIDANCE

AS9100 CLAUSE	AQAP-2110 CLAUSE	DETAILED HARMONIZATION GUIDANCE
	4.1 Applicability of ISO 9001:2015 requirements	<p>AQAP-2110 implements all of ISO 9001:2015 with a single requirement.</p> <p>This is a document structure difference with AS9100.</p>
	4.2 Quality Management System and its Processes	<p>If a Supplier QMS is based on AS9100:</p> <p>With respect to the NATO specific requirements: AS9100 highlights the need to include customer and applicable statutory and regulatory requirements in the scope of the QMS in addition to the ISO 9001:2015 provisions relating to the product (see clause 7.2.1).</p> <p>The Acquirer and/or GQAR have the right to review and verify that the QMS meets the AQAP-2110 requirements and contractual requirements. Where objective evidence of non-compliance is presented, the Supplier is obliged to take corrective action. If corrective action is not taken or is shown to be persistently ineffective then ultimately the QMS might be rejected, but this is neither a desired or common outcome. Regardless of an existing EN9100 certification, the Acquirer/GQAR has the right to reject the QMS and/or non-conforming products.</p> <p>Shared AS9100 certification results from the Online Aerospace Supplier Information System (OASIS) and audit reports provides ongoing evidence of how the system is meeting the certification requirements and may reduce the need for the Acquirer/GQAR to conduct additional audits.</p>

AS9100 CLAUSE	AQAP-2110 CLAUSE	DETAILED HARMONIZATION GUIDANCE
	4.3 Access to Supplier and External Providers and Support for GQA Activities	Unrestricted access is within the limitations of the national laws within the acquisition process. Any limitations must be fully justified and documented (in the tender, contract documentation and/or QP) and brought to the attention of the GQAR.
4. CONTEXT OF THE ORGANIZATION		
4.1 Understanding the Organization and its Context		Paragraph is self-explanatory.
4.2 Understanding the Needs and Expectations of Interested Parties		Paragraph is self-explanatory.
4.3 Determining the Scope of the Quality Management System		
4.4 Quality Management System and Its Processes	4.2 Quality Management System and its Processes	With reference to AQAP-2110 clause 5.4.1.1. it is permissible to detail any international clarifications or specific application of AQAP requirements in the QP.
5. LEADERSHIP		
5.1 Leadership and Commitment		Paragraph is self-explanatory.
5.1.1 General		
5.1.2 Customer Focus		Paragraph is self-explanatory.
5.2 Policy		
5.2.1 Establishing the Quality Policy		Paragraph is self-explanatory.
5.2.2 Communicating the Quality Policy		Paragraph is self-explanatory.

AS9100 CLAUSE	AQAP-2110 CLAUSE	DETAILED HARMONIZATION GUIDANCE
5.3 Organizational Roles, Responsibilities, and Authorities	5.1.1 Organizational roles, responsibilities and authorities	<p>AQAP-2110 requires that the management representative reports directly to top management. AS9100 requires that the management representative has unrestricted access to top management.</p> <p>The key aspect is that AQAP-2110 requires the management representative to have the necessary organizational authority and freedom to resolve matters pertaining to the QMS and product quality. In that respect, the standards are considered to be in harmony.</p>
6. Planning		
6.1 Actions to Address Risks and Opportunities	5.2.1 Risk Management	Paragraph is self-explanatory.
6.2 Quality Objectives and Planning to Achieve Them		Paragraph is self-explanatory.
6.3 Planning of Changes		Paragraph is self-explanatory.
7. Support		
7.1 Resources		Paragraph is self-explanatory.
7.1.1 General		
7.1.2 People		Paragraph is self-explanatory.
7.1.3 Infrastructure	5.3.1 Infrastructure	Paragraph is self-explanatory.
7.1.4 Environment for the Operation of Processes		Paragraph is self-explanatory.
7.1.5 Monitoring and Measuring Resources	5.3.2 Monitoring and measuring resources	With respect to the NATO specific requirement to implement ISO 10012, the QP should identify uncertainties in regards to measuring processes, and what requirements of ISO 10012 are appropriate to the contract.
7.1.5.1 General		
7.1.5.2 Measurement Traceability		Paragraph is self-explanatory.
7.1.6 Organizational Knowledge		Paragraph is self-explanatory.
7.2 Competence	5.3.3 Competence	Paragraph is self-explanatory.
7.3 Awareness	5.3.4 Awareness	Paragraph is self-explanatory.

AS9100 CLAUSE	AQAP-2110 CLAUSE	DETAILED HARMONIZATION GUIDANCE
7.4 Communication		The NATO specific requirement for communication found in paragraphs 5.4.2, and 5.4.6.3 of AQAP-2110 should be considered as part of AS9100 clause 7.4 Communication.
7.5 Documented Information	5.3.5 Documented information	Paragraph is self-explanatory.
7.5.1 General		Paragraph is self-explanatory.
7.5.2 Creating and Updating		Paragraph is self-explanatory.
7.5.3 Control of Documented Information		Paragraph is self-explanatory.
8. OPERATION		
8.1 Operational Planning and Control	5.4.1 Operational planning and control 5.4.1.1 Quality Plan	Both AS9100 and AQAP-2110 require planning for quality to be undertaken and recorded, describing how the product will be realized. AQAP-2110 requires a contract specific QP to be documented and provided to the Acquirer so that it may be reviewed against the contractual requirements. The QP describes the application of the QMS to fulfil the contract requirements; describing what the Supplier will actually do (e.g. what requirements apply or how they are interpreted). To be compliant, QPs should address clause 5.4.1.1 of AQAP-2110 and section 8 of ISO 9001 and AS9100. QPs should be developed in conjunction with other project related planning.
8.1.1 Operational Risk Management		Paragraph is self-explanatory.
8.1.2 Configuration Management	5.4.1.2 Configuration Management	For specific Configuration Management (CM) requirements refer to the contractual conditions. Either NATO, International or National standards may be acceptable.
8.1.3 Product Safety		Paragraph is self-explanatory.
8.1.4 Prevention of Counterfeit Parts	5.4.6.2 Type and extent of control	Paragraph is self-explanatory.
8.2 Requirements for Products and Services		Paragraph is self-explanatory.

AS9100 CLAUSE	AQAP-2110 CLAUSE	DETAILED HARMONIZATION GUIDANCE
8.2.1 Customer Communication	5.4.2 Customer communications	The NATO specific requirement for communication should be considered as part of AS9100 clause 8.2.1 Customer Communication.
8.2.2 Determining the Requirements for Products and Services	5.4.3 Determining the requirements related to products	Paragraph is self-explanatory.
8.2.3 Review of the Requirements for Products and Services		Paragraph is self-explanatory.
8.2.4 Changes to Requirements of Products and Services		Paragraph is self-explanatory.
8.3 Design and Development of Products and Services		Paragraph is self-explanatory.
8.3.1 General		
8.3.2 Design and Development Planning		Paragraph is self-explanatory.
8.3.3 Design and Development Inputs		Paragraph is self-explanatory.
8.3.4 Design and Development Controls	5.4.4 Design and development controls	Paragraph is self-explanatory.
8.3.5 Design and Development Outputs		Paragraph is self-explanatory.
8.3.6 Design and Development Changes		Paragraph is self-explanatory.
	5.4.5 Dependability	

AS9100 CLAUSE	AQAP-2110 CLAUSE	DETAILED HARMONIZATION GUIDANCE
8.4 Control of Externally Provided Processes, Products, and Services	5.4.6 Control of externally provided processes, products and services	<p>With respect to the NATO specific requirement to provide copies of subcontracts or orders for products, those documents may obscure or exclude pricing information.</p> <p>With respect to the NATO Specific requirement for notification of risks in subcontracts or orders; the Acquirer and/or GQAR, need to be aware of risks in the supply chain so that appropriate GQA activities can be planned. The Supplier (AQAP definition) will be informed of any GQA activities to be planned and performed in the Supplier chain.</p>
8.4.1 General	5.4.6.1 General	<p>Flowing down the relevant contractual requirements, not necessarily the full AQAP-2110 or AS9100 is the key aspect of the NATO specific requirement.</p> <p>This means that flowing down standard Supplier requirements for the supply chain, which cover the relevant contractual requirements, is compliant with this clause of AQAP-2110 but should be detailed in the QP.</p> <p>The NATO specific requirement states the text to be included on purchasing information to ensure that rights of access to perform GQA are provided.</p> <p>The text may be amended, if agreed through the QP provided that rights to conduct GQA, through the supply chain are preserved.</p>
8.4.2 Type and Extent of Control	5.4.6.2 Type and extent of control	Paragraph is self-explanatory.
8.4.3 Information for External Providers		Paragraph is self-explanatory.
	5.4.6.3 Communication	The NATO specific requirement for communication related to external providers should be considered as part of AS9100 clause 8.4 Control of Externally Provided Processes, Products, and Services.
8.5 Production and Service Provision		
8.5.1 Control of Production and Service Provision	5.4.7 Control of production and service provision	Paragraph is self-explanatory.

AS9100 CLAUSE	AQAP-2110 CLAUSE	DETAILED HARMONIZATION GUIDANCE
8.5.1.1 Control of Equipment, Tools, and Software Programs		Paragraph is self-explanatory.
8.5.1.2 Validation and Control of Special Processes		Paragraph is self-explanatory.
8.5.1.3 Production Process Verification		Paragraph is self-explanatory.
8.5.2 Identification and Traceability	5.4.8 Identification and traceability	Paragraph is self-explanatory.
8.5.3 Property Belonging to Customers or External Providers	5.4.9 Property belonging to customers or External Providers	Paragraph is self-explanatory.
8.5.4 Preservation	5.4.10 Preservation	Paragraph is self-explanatory.
8.5.5 Post-Delivery Activities		Paragraph is self-explanatory.
8.5.6 Control of Changes		Paragraph is self-explanatory.
8.6 Release of Products and Services	5.4.11 Release of products	Paragraph is self-explanatory.
8.7 Control of Nonconforming Outputs	5.4.12 Control of nonconforming products	AQAP-2110 does not allow the delivery of nonconforming product, unless by Concessions/waiver or Deviation Permit (C/DP). There is no AQAP-2110 clause defining how to apply for C/DP, therefore, the process to be applied to C/DP should be covered by separate contractual arrangements and/or addressed in the QP.
9. PERFORMANCE EVALUATION		
9.1 Monitoring, Measurement, Analysis, and Evaluation		Paragraph is self-explanatory.
9.1.1 General		Paragraph is self-explanatory.
9.1.2 Customer Satisfaction	5.5.1 Customer satisfaction	Paragraph is self-explanatory.

AS9100 CLAUSE	AQAP-2110 CLAUSE	DETAILED HARMONIZATION GUIDANCE
9.1.3 Analysis and Evaluation		Paragraph is self-explanatory.
9.2 Internal Audit	5.5.2 Internal audit	Traceability is the key aspect of the NATO specific requirement and is related to 'planned arrangements' defined in the AS9100 note. Internal audits themselves do not need to reference the AQAP. They need only demonstrate traceability to AQAP-2110 requirements.
9.3 Management Review	5.5.3 Management review	
9.3.1 General		Paragraph is self-explanatory.
9.3.2 Management Review Inputs	5.5.3.1 Management review input	Paragraph is self-explanatory.
9.3.3 Management Review Outputs	5.5.3.2 Management review output	Paragraph is self-explanatory.
10 IMPROVEMENT		
10.1 General		Paragraph is self-explanatory.
10.2 Nonconformity and Corrective Action	5.6.1 Nonconformity and corrective action	Paragraph is self-explanatory.
10.3 Continual Improvement		Paragraph is self-explanatory.

Notes

Note 1: For the purposes of this guidance, the terms within AQAP 2110 have been used. (see Chapter 3, General Guidance 3.2 Table 1)

AQAP-2110-SRD.2(A)(1)

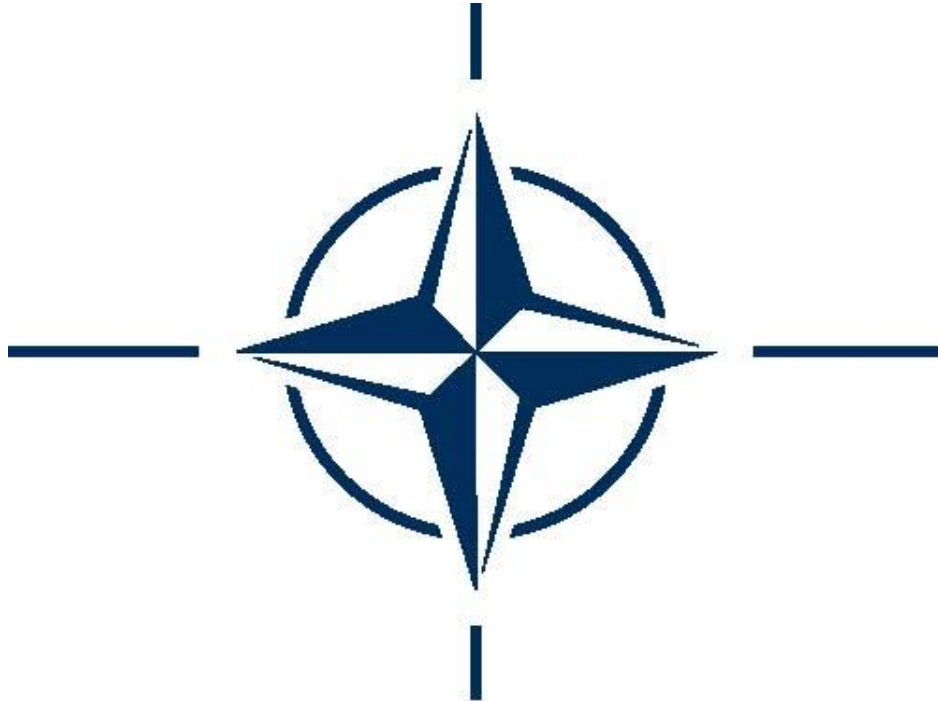
STANDARDS RELATED DOCUMENT

AQAP-2110-SRD.3

TRAINING MATERIAL TO SUPPORT AQAP-2110 EDITION D

Edition A Version 1

NOVEMBER 2020



NORTH ATLANTIC TREATY ORGANIZATION

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NATO LETTER OF PROMULGATION

16 November 2020

1. The enclosed Standards Related Document, AQAP-2110-SRD.3, Edition A, Version 1, TRAINING MATERIAL TO SUPPORT AQAP-2110 EDITION D, which has been approved in conjunction with AQAP-2110 by the nations in the Life Cycle Management Group, is promulgated herewith.
2. AQAP-2110-SRD.3, Edition A, Version 1, is effective upon receipt.
3. This NATO standardization document is issued by NATO. In case of reproduction, NATO is to be acknowledged. NATO does not charge any fee for its standardization documents at any stage, which are not intended to be sold. They can be retrieved from the NATO Standardization Document Database (<https://nso.nato.int/nso/>) or through your national standardization authorities..
4. This publication shall be handled in accordance with C-M(2002)60.

for 

Zoltán GULYÁS
Brigadier General, HUNAF
Director NATO Standardization Office

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Annex A - Comparison of AQAP 2110 Edition 3 and AQAP-2110 Edition D, Version 1

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CHAPTER 1 - INTRODUCTION

1. Background

1. AQAP-2110 contains NATO quality assurance requirements for design, development and production. Compliance with AQAP-2110 provides confidence in the Supplier's capability to deliver products that conform to Acquirer contract requirements.
2. The materials relating to this SRD can be used to support Acquirer and Government Quality Assurance Practitioner understanding of the requirements of AQAP-2110.

2. Purpose

1. This guidance document has been published to promote the consistent application of the AQAP-2110 requirements through the use of a common set of training materials.
2. This guidance document is for all users of the NATO contractual AQAPs: Acquirers, Suppliers and Government Quality Assurance Representatives (GQAR).

3. Associated documents

1. AQAP-2110-SRD.3.1 Training slide pack.

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CHAPTER 2 – GUIDANCE FOR THE USE OF AQAP-2110-SRD.3

1. General

1. There are two options for delivery of the AQAP-2110 training:
 - a. The training can be delivered as a stand-alone module of 1 day duration.
 - b. The training can be delivered in conjunction with AQAP-2131 training (AQAP-2131-SRD.2) with 1.5 days total duration.
2. If option a. is selected then all AQAP-2110 slides should be delivered.
3. If option b. is selected then AQAP-2110 training should be delivered first and introduction slides 10-22 removed from the AQAP-2131-SRD.2 slide pack to avoid duplication.
4. This SRD is the covering document for the AQAP-2110 training material comprising the following:
 - a. AQAP-2110-SRD.3.1 contains the main training slide pack including training presentation, speaker notes and hints to support delivery. The pack also includes an introduction section on the use of AQAPs.
5. The training material has been developed for delivery by an experienced Quality Practitioner with background in using AQAPs and particularly AQAP-2110.
6. AQAP-2110-SRD.3.1 contains a number of generic examples which can be used to reinforce specific requirements. Individual nations and trainers are encouraged to develop real life examples which are more specific to their own procurement practices and acquisition programmes.

2. Delivery considerations

1. The training is ideally suited to delivery to 10-15 delegates.
2. It is recommended that trainers and delegates have a basic understanding of ISO 9001:2015 prior to undertaking AQAP-2110 training.
3. Seating in small groups will facilitate discussions and group work more easily.
4. Access to flipcharts, pens and other stationery resources will be required.
5. Access to breakout areas would be beneficial, but not essential.
6. Provide copies of slide pack, AQAP-2110, AQAP-2110-SRD.1 and AQAP-2110-SRD.2 for each delegate.
7. Individual nations are encouraged to develop specific quizzes, tests, syndicate exercises to reflect national practice.
8. Answers to existing exercises are contained in the speaker notes for reference.
9. Annex A of this SRD contains a table providing a direct comparison of AQAP 2110 Edition 3 and Edition D Version 1. Trainers may wish to provide the comparison table as a handout during training to illustrate the changes to Edition D.

3. Acronyms

AQAP:	Allied Quality Assurance Publication
GQA:	Government Quality Assurance
GQAR:	Government Quality Assurance Representative
SRD:	Standards Related Document

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ANNEX A**Comparison of AQAP 2110 Edition 3 and AQAP-2110 Edition D, Version 1**

The table below provides a direct comparison of AQAP 2110 Edition 3 and Edition D Version 1. Requirements in Edition D have been categorised as existing, modified or new requirements. New requirements or modified text are shown in blue font.

AQAP 2110 Ed 3			AQAP 2110 Ed D Version 1			
Para	Paragraph Title	Requirement	Para	Paragraph Title	Requirement	Comments
3.3	Definitions	N/A	3.3.4	Dependability	Definition of Dependability added	New Definition
3.3	Definitions	N/A	3.3.10	Root Cause Analysis	Definition of Root Cause Analysis added	New Definition
3.3	Definitions	N/A	3.3.11	Key Characteristics	Definition of Key Characteristics added	New Definition
3.3	Definitions	N/A	3.3.12	Counterfeit Material	Definition of Counterfeit Material added	New Definition
ALL	ALL	All statements contained within AQAP 2110 Ed 3 to the effect of ISO 9001:2008 Para "X" requirements shall apply.	4.1	Applicability of ISO 9001:2015 REQUIREMENTS	The Supplier shall establish, document, implement, assess and improve an effective and economical Quality Management System in accordance with this publication which includes the requirements of ISO 9001:2015 as necessary to satisfy the contract requirements.	Modified requirement: change to reference standard.
4.1	General requirements	The Supplier shall establish, document, implement, assess and improve an effective and economical system in accordance with this document, which includes the requirements of ISO 9001:2008 as necessary to satisfy the contract requirements.	4.1	Applicability of ISO 9001:2015 REQUIREMENTS	The Supplier shall establish, document, implement, assess and improve an effective and economical Quality Management System in accordance with this publication which includes the requirements of ISO 9001:2015 as necessary to satisfy the contract requirements.	Modified requirement: change to reference standard.
4.1	General requirements	The Acquirer and/or Government Quality Assurance Representative (GQAR) reserves the right to reject this system as it applies to the contract.	4.2	Quality Management System and its Processes	The Acquirer and/or Government Quality Assurance Representative (GQAR) reserve the right to reject the Supplier's Quality Management System as it applies to the contract.	Existing requirement

AQAP 2110 Ed 3			AQAP 2110 Ed D Version 1			
Para	Paragraph Title	Requirement	Para	Paragraph Title	Requirement	Comments
4.1	General requirements	Objective evidence, which may include documentation from first, second and/or third party assessment/certification processes that this system is compliant with this Publication and is effective shall be readily available to the GQAR and/or Acquirer.	4.2	Quality Management System and its Processes	The Supplier's documented Scope of their System, records from internal audit, self-assessments and other objective evidence that this system is compliant with this Publication and is effective, shall be readily available to the GQAR and/or Acquirer.	Modified requirement.
4.1	General requirements	N/A	4.2	Quality Management System and its Processes	In instances where the Acquirer and/or GQAR rejects the Quality Management System, the Supplier shall make proposals for corrective actions and revisions within an agreed timescale and contractual penalties will be applied as defined in the contract.	New requirement
4.2.2	Quality manual	NATO specific requirement: Delete: Last part of the sentence a): "including details of and justification for any exclusions (see 1.2)".	N/A	N/A	N/A	
4.2.4	Control of records	The Supplier shall provide the GQAR and/or the Acquirer with the necessary access to the records pertinent to the contract, in a format agreed with the GQAR and/or Acquirer.	5.3.5	Documented Information [7.5]	The Supplier shall provide the GQAR and/or the Acquirer with the necessary access to the records pertinent to the contract, in a format agreed with the GQAR and/or Acquirer.	Existing requirement
5.4	Planning	The Supplier and Sub-supplier shall provide objective evidence, that risks are considered during planning, including but not limited to Risk Identification, Risk analysis, Risk Control and Risk Mitigation. The planning shall start with risk identification during contract review and updated thereafter in a timely manner.	5.2.1	Risk Management [6.1]	1. The Supplier and External Provider shall provide objective evidence that risks, including External Provider risks, are considered during planning, including but not limited to Risk Identification, Risk Analysis, Risk Control and Risk Mitigation. The planning shall start with risk identification during contract review and be updated thereafter in a timely manner.	Modified requirement.
5.4	Planning	N/A	5.2.1	Risk Management [6.1]	2. Unless otherwise stated in the contract, the Risk Management applied shall meet the principles and guidelines of ISO 31000:2009. The Risk Management Plan shall be made available to the GQAR and/or Acquirer.	New requirement.

AQAP 2110 Ed 3			AQAP 2110 Ed D Version 1			
Para	Paragraph Title	Requirement	Para	Paragraph Title	Requirement	Comments
5.4	Planning	The Acquirer and/or GQAR reserve the right to reject QPs, Risk Plans and their revisions.	5.2.1	Risk Management [6.1]	3. The Acquirer and/or GQAR reserve the right to reject Risk Plans and their revisions.	Existing requirement.
5.4	Planning	N/A	5.4.1	Operational planning and control [8.1]	1. The Supplier shall identify the documented information, including acceptance criteria and configuration information that will be used as objective evidence of product conformance with requirements. This information shall be acceptable to the Acquirer and/or GQAR and made available prior to acceptance of the product.	New requirement.
5.4	Planning	N/A	5.4.1	Operational planning and control [8.1]	2. The supplier shall maintain and retain documented information for product approval and production process approval. These approvals shall also be applied to External Providers.	New requirement.
5.4	Planning	The Supplier shall submit a Quality Plan (QP) which addresses the contractual requirements to the GQAR and/or the Acquirer prior to the start of the activities unless otherwise directed. The QP shall be a clearly identified discrete document or part of another document that is prepared under the contract.	5.4.1.1	Quality Plan	1. The Supplier shall submit an acceptable Quality Plan (QP) which addresses the contractual requirements to the GQAR and/or the Acquirer in a mutually agreed timescale but prior to the start of work which can be defined as a project or contract initiation meeting or as otherwise stated in the contract or purchase order. The QP shall be a clearly identified discrete document or part of another document that is prepared under the contract.	Modified requirement.
5.4	Planning	The QP shall play two complementary roles: 1. Describe and document the quality management system requirements "contract-specific" necessary to satisfy the contract requirements (making reference, where applicable, to the "company-wide" quality management system); 2. Describe and document the planning of the product realisation, in terms of quality	5.4.1.1	Quality Plan	2. The QP shall: a. Describe and document the quality management system requirements "contract-specific" necessary to satisfy the contract requirements (making reference, where applicable, to the "company-wide" quality management system); b. Describe and document the planning of the product realisation in terms of quality	Modified requirement plus inclusion of new requirement at ©.

AQAP 2110 Ed 3			AQAP 2110 Ed D Version 1			
Para	Paragraph Title	Requirement	Para	Paragraph Title	Requirement	Comments
		requirements for the product, needed resources, required control activities (verification, validation, monitoring, inspection, testing), and acceptance criteria. NOTE: The QP requirements for role 1 relate to clause 5.4, while the QP requirements for role 2 relate to clause 7.1.			requirements for the product, needed resources, required control activities (verification, validation, monitoring, inspection, testing), and acceptance criteria. <i>This shall include specific arrangements and communication requirements where work is to be conducted at locations external to the Suppliers premises.</i> c. Document, and maintain traceability of requirements from the planning process by including a requirement and solution compliance matrix, justifying fulfilment of all contractual requirements (making reference where applicable).	
5.4	Planning	The Acquirer and/or GQAR reserve the right to reject QPs, Risk Plans and their revisions.	5.4.1.1	Quality Plan	3. The Acquirer and/or GQAR reserve the right to reject QPs and their revisions.	Existing requirement.
5.4	Planning	NOTE: Contractual requirement for the content of the Quality Plan is established in AQAP 2105 “NATO requirements for Deliverable Quality Plans.”	5.4.1.1	Quality Plan	NOTE: Contractual requirement for the content of the Quality Plan is established in AQAP 2105 “NATO requirements for Deliverable Quality Plans.”	Existing note.
5.4	Planning	N/A	5.4.1.1	Quality Plan	NOTE: Requirement and solution compliance matrix can be a part of Quality Plan or a separate document as an annex to it. This matrix can be prepared and annexed to the Quality Plan after the initial issue, within a timescale mutually agreed with GQAR and/or Acquirer by taking into account the content of the Contract or Purchase Order.	New note.
5.5.2	Management representative	The management representative shall have the necessary organisational authority and freedom to resolve matters pertaining to quality. The management representative shall report directly to top management.	5.1.1	Organizational roles, responsibilities and authorities [5.3]	1. Top management shall appoint a management representative <i>for GQA issues from the organization's management who, irrespective of other responsibilities</i> shall have the necessary organisational authority and freedom to resolve matters pertaining to quality. The management	Modified requirement.

AQAP 2110 Ed 3			AQAP 2110 Ed D Version 1			
Para	Paragraph Title	Requirement	Para	Paragraph Title	Requirement	Comments
					representative shall report directly to top management.	
5.5.2	Management representative	The responsibility of the Management Representative shall include liaison with the GQAR and/or Acquirer on matters related to quality.	5.1.1	Organizational roles, responsibilities and authorities [5.3]	2. The management representative shall have responsibility and authority that includes ensuring that processes needed for the quality management system are established, implemented and maintained and shall include liaison with the GQAR and/or Acquirer on matters related to quality.	Modified requirement.
5.5.2	Management representative	N/A	5.1.1	Organizational roles, responsibilities and authorities [5.3]	3. The management representative shall have the appropriate competence related to Quality Management.	New requirement.
5.5.3	Internal Communication	The Supplier shall ensure that lines of communication are established with the GQAR and/or Acquirer.	5.4.2	Customer communications [8.2.1]	2. The Supplier shall ensure that lines of communication are established with the GQAR and/or Acquirer. The designated management representative shall ensure that the adequate level of information is supplied to satisfy the GQAR and/or Acquirer.	Modified requirement.
5.6.2	Review input	Records of review input, related to the contract, shall be available to the GQAR and/or Acquirer	5.5.3.1	Management Review Input	Documented information of review input, related to the contract, shall be available to the GQAR and/or Acquirer	Modified requirement.
5.6.3	Review output	Records of the review output, related to the contract, shall be available to the GQAR and/or Acquirer.	5.5.3.2	Management Review Output	1. Documented information of the review output, related to the contract, shall be available to the GQAR and/or Acquirer.	Modified requirement.

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Para	Paragraph Title	Requirement	Para	Paragraph Title	Requirement	Comments
5.6.3	Review output	The Supplier shall notify the GQAR and/or Acquirer of proposed action, resulting from Review Output that will affect compliance with contractual requirements. Review output shall, where action item(s) are identified, specify the responsible person/function and due date of the action item(s).	5.5.3.2	Management Review Output	2. The Supplier shall notify the GQAR and/or Acquirer of proposed action, resulting from Review Output that will affect compliance with contractual requirements. Review output shall, where action item(s) are identified, specify the responsible person/function and due date of the action item(s).	Existing requirement.
6.2.2	Competence, training and awareness	N/A	5.3.3	Competence [7.2]	The Supplier shall establish and maintain a process for identifying training needs and achieving competence of all personnel performing activities affecting product quality.	New requirement.
6.2.2	Competence, training and awareness	N/A	5.3.4	Awareness [7.3]	Persons involved with the contract, including External Providers, shall be aware of the specific arrangements contained in the quality plan that are applicable to their activities / area of responsibility.	New requirement.
6.3	Infrastructure	N/A	5.3.1	Infrastructure [7.1.3]	The infrastructure shall include an area to segregate nonconforming product (see paragraph 5.4.12 of this publication).	New requirement.
7.1	Planning of product realisation	For details, see this publication clause 5.4.	N/A	N/A	N/A	
7.2.1	Determination of requirements related to the product.	N/A	5.4.3	Determining the requirements related to products [8.2.2]	The Supplier shall identify product requirements and functions that relate to critical characteristics such as health, safety, performance, and dependability.	New requirement.
7.2.3	Customer communication	N/A	5.4.2	Customer communications [8.2.1]	1. If requested by the Acquirer and/or GQAR, the Supplier and/or External Providers shall attend a Post Award GQA meeting focused on the contract arrangements for Quality Assurance of the product and/or GQA practicalities.	New requirement.

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Para	Paragraph Title	Requirement	Para	Paragraph Title	Requirement	Comments
7.2.3	Customer communication	The Supplier shall ensure that lines of communication are established with the GQAR and/or Acquirer.	5.4.2	Customer communications [8.2.1]	2. The Supplier shall ensure that lines of communication are established with the GQAR and/or Acquirer. <i>The designated management representative shall ensure that the adequate level of information is supplied to satisfy the GQAR and/or Acquirer.</i>	Modified requirement.
7.2.3	Customer communication	The Supplier shall notify the GQAR and/or Acquirer upon changes to its organisation that affect product quality or the Quality Management System.	5.4.2	Customer communications [8.2.1]	3. The Supplier shall notify the GQAR and/or Acquirer of changes to its organisation that affect product quality or the Quality Management System.	Existing requirement.
7.3.5	Design and development verification	Unless invoked in the contract, the Supplier shall determine the test methods required and perform the tests to demonstrate conformity with the corresponding requirements at appropriate stages up to and including the final product.	5.4.4	Design and development controls [8.3.4]	Unless otherwise stated in the contract, the Supplier shall determine the <i>verification and validation</i> methods required and demonstrate conformity with the corresponding requirements at appropriate stages up to and including the final product.	Modified requirement.
7.4.1	Purchasing process	N/A	5.4.6.1	General	<i>1. Where the Supplier has decided to externally source a critical item, significant work content, design, immature technical solutions or a configuration item then the Supplier shall establish and maintain knowledge of the supply chain and External Provider quality assurance activities.</i>	New requirement
7.4.1	Purchasing process	The Supplier shall on request provide the GQAR and/or Acquirer with a copy of any subcontracts or orders for products related to the contract.	5.4.6.3	Communication	1. The Supplier shall on request provide the GQAR and/or Acquirer with a copy of any subcontracts, orders, <i>related contractual documents and their modifications</i> , for products related to the contract.	Modified requirement.
7.4.1	Purchasing process	The Supplier shall notify the GQAR and/or Acquirer if a subcontract or order has been identified as constituting or involving risk. This shall be documented in accordance with 5.4 of this publication.	5.4.6.3	Communication	<i>2. The Supplier shall notify the GQAR and/or Acquirer if a subcontract or order has been identified involving a critical item, significant work content, design, immature technical solutions or where External Provider performance is unknown or causes concern.</i>	New requirement

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Para	Paragraph Title	Requirement	Para	Paragraph Title	Requirement	Comments
7.4.2	Purchasing information	The Supplier shall flow down the applicable contractual requirements to Subsuppliers by referencing the stated contractual requirement, including relevant AQAP(s). The Supplier shall insert the following in all purchasing documents: "All requirements of this contract may be subject to GQA. You will be notified of any GQA activity to be performed."	5.4.6.1	General	2. The Supplier shall flow down the applicable contractual requirements to External Providers by referencing the stated contractual requirement, including relevant AQAP(s). The Supplier shall insert the following in all purchasing documents: "All requirements of this contract may be subject to GQA. You will be notified of any GQA activity to be performed."	Modified requirement.
7.4.2	Purchasing information	Only the Supplier placing the purchasing documents with a Sub-supplier will issue consequential instructions to that Sub-supplier.	5.4.6.2	Type and extent of control	3. Only the Supplier placing the purchasing documents with an External Provider will issue contractual instructions to that External Provider .	Modified requirement.
7.4.2	Purchasing information	It is the Supplier's responsibility to ensure that the procedures and processes required to fulfil contract requirements are fully implemented at the Sub-supplier's facilities.	5.4.6.2	Type and extent of control	1. It is the Supplier's responsibility to ensure that the procedures and processes required to fulfil contract requirements are fully implemented at the External Provider's facilities.	Modified requirement.
7.4.2	Purchasing information	GQA activities at Sub-supplier's facilities do not relieve the Supplier from any contractual quality responsibilities. NOTE: Conduct of GQA and associated GQAR and/or Acquirer access rights, at Subsupplier's facilities can only be requested by the GQAR and/or Acquirer.	5.4.6.2	Type and extent of control	4. GQA activities at External Provider's facilities do not relieve the Supplier from any contractual quality responsibilities. NOTE: Conduct of GQA and associated GQAR and/or Acquirer access rights, at External Provider's facilities can only be requested by the GQAR and/or Acquirer.	Modified requirement.
7.4.2	Purchasing information	N/A	5.4.6.2	Type and extent of control	2. The Supplier shall establish and implement a process for the avoidance, detection, mitigation, and disposition of Counterfeit Materiel.	New requirement
7.4.2	Purchasing information	N/A	5.4.6.1	General	3. Suppliers shall conduct a formal review of purchasing documents to verify that the correct contractual requirements have been flowed down. The Supplier shall retain documented information of this review.	New requirement

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Para	Paragraph Title	Requirement	Para	Paragraph Title	Requirement	Comments
7.4.2	Purchasing information	N/A	5.4.6.1	General	4. The Supplier shall document their arrangements for these requirements at the planning stage (see paragraph 5.4.1. of this publication) and identify their proposed quality assurance activities for specific sub-contracts or orders that meet the above criteria.	New requirement
7.4.3	Verification of purchased product	N/A	5.4.6	Control of externally provided processes, products and services [8.4]	The Supplier shall retain documented information of verification and/or validation of purchased products. The documented information shall be made available to the GQAR and/or Acquirer.	New requirement
7.4.3	Verification of purchased product	Suppliers shall notify the GQAR and/or Acquirer if a sub-supplied product is rejected or repaired which has been identified as involving risk or supplied by a Sub-supplier whose selection or subsequent performance has been identified as involving risk.	5.4.6.3	Communication	3. The Supplier shall notify the GQAR and/or Acquirer if an externally provided product is rejected, <i>reworked</i> , or repaired which has been identified as involving risk or supplied by an <i>External Provider</i> whose selection or subsequent performance has been identified as involving risk.	Modified requirement.
7.5.1	Control of production and service provision	N/A	5.4.7	Control of Production and Service Provision [8.5.1]	1. The Supplier shall develop and maintain instructions for the conduct of activities related to the control of production of material, part, component, subsystem and system level for the product supplied to ensure that the specified requirements are met. 2. The Supplier shall establish and maintain criteria for workmanship in the clearest practical manner (e.g. written standards, representative samples or illustrations).	New requirement
7.5.3	Identification and traceability	N/A	5.4.8	Identification and traceability [8.5.2]	Where the failure of an item or component could lead to the loss of equipment, performance or life then it is mandatory to maintain traceability.	New requirement

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Para	Paragraph Title	Requirement	Para	Paragraph Title	Requirement	Comments
7.5.4	Customer property	If products provided by the Acquirer are lost, damaged or otherwise found to be unsuitable for their intended use in accordance with the contract, the Supplier shall immediately inform the Acquirer and GQAR.	5.4.9	Property belonging to customer or External Providers [8.5.3]	1. If products provided by the Acquirer are lost, damaged or otherwise found to be unsuitable for their intended use in accordance with the contract, the Supplier shall immediately inform the Acquirer and GQAR and retain documented information.	Modified requirement.
7.5.4	Customer property	N/A	5.4.9	Property belonging to customer or External Providers [8.5.3]	2. When the Supplier establishes that an acquirer supplied product is unsuitable for its intended use, they shall immediately report to and coordinate with the Acquirer the remedial actions to be taken. The Supplier shall also inform the GQAR.	New requirement
7.5.5	Preservation of product	N/A	5.4.10	Preservation [8.5.4]	1. Products with limited shelf life shall be subject to control of their expiry dates. 2. If applicable, the control of expiry date/shelf life shall be applied during maintenance, servicing, storage or when fitted. 3. Remaining shelf-life shall be identified and communicated to the GQAR and/or Acquirer prior to delivery.	New requirements.
7.6	Control of monitoring and measuring equipment	The measurement and calibration system applied to this contract shall be in accordance with the requirement of ISO 10012.	5.3.2.	Monitoring and measuring resources [7.1.5]	1. The measurement and calibration system applied to the contract shall meet the requirement of ISO 10012:2003.	Existing requirement.
7.6	Control of monitoring and measuring equipment	When an item of measuring equipment is found to fail re-calibration or is not in calibration, and when there are affected products, the GQAR and/or Acquirer is to be informed and presented with details of affected products, including products already delivered.	5.3.2.	Monitoring and measuring resources [7.1.5]	2. When an item of measuring equipment fails calibration the Supplier shall advise the GQAR and/or Acquirer of the impact of the failure on previous measuring results where this affects delivered products or verification, validation and acceptance results. The GQAR and/or Acquirer may request that measurements taken shall be repeated with calibrated equipment.	Modified requirement.
7.7.1	Configuration Management	As a minimum, the Supplier shall describe and document the CM procedures for: -Configuration Identification	5.4.1.2.1	Configuration Management	The Supplier shall manage configuration through the implementation of Configuration Management Planning, Configuration Identification, Change	Modified requirement: additon of

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Para	Paragraph Title	Requirement	Para	Paragraph Title	Requirement	Comments
	(CM) requirements	-Configuration Control -Configuration Status Accounting -Configuration Audit		(CM) requirements	Control, Configuration Status Accounting and Configuration Audit in accordance with the requirements of ACMP 2100 and any additional CM clauses in the contract or a nationally recognised equivalent.	reference standard.
7.7.2	Configuration Management Plan (CMP)	The Supplier shall prepare a CMP, which describes the application of CM to the contract. NOTE: The CMP may form part of another plan if appropriate. NATO Configuration Management Policy is established in STANAG 4159 while detailed contractual requirements for CM are contained within STANAG 4427 and associated Allied Configuration Management Publications (ACMP).	5.4.1.2.2	Configuration Management Plan (CMP)	The Supplier shall prepare a Configuration Management Plan (CMP) which describes the application of CM to the contract in accordance with ACMP 2100 and any additional CM clauses in the contract or nationally recognised equivalent . The CMP may form part of another plan if appropriate. NOTE: Further information on NATO Configuration Management Policy and Requirements are contained within Allied Configuration Management Publications (ACMP) ACMP-2000 and ACMP-2009.	Modified requirement: change to reference standard.
7.8.1	Reliability and Maintainability (R&M)	If stated in the contract, the Supplier's R&M system, appropriate to the design of the product, shall ensure that R&M issues and related documents, including those from associated Sub-suppliers, are controlled. NOTE: NATO Reliability and Maintainability Policy is established in STANAG 4174 while detailed contractual requirements for Reliability and Maintainability Management are contained within Allied Reliability and Maintainability Publications (ARMP).	5.4.5	Dependability	If stated in the contract, the Supplier shall ensure that Dependability issues and related documents, including those from associated External Providers , are controlled. NOTE: Further information on NATO Dependability Management is contained within Allied Dependability Management Publications (ADMP) .	Modified requirement.
8.2.1	Customer satisfaction	Any complaints or deficiencies relevant to the contract, reported by the GQAR, shall be recorded as customer complaints.	5.5.1	Customer satisfaction [9.1.2]	1. Any complaints or deficiencies relevant to the contract, reported by the GQAR and/or Acquirer, shall be recorded as customer complaints.	Existing requirement.

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Para	Paragraph Title	Requirement	Para	Paragraph Title	Requirement	Comments
8.2.1	Customer satisfaction	N/A	5.5.1	Customer satisfaction [9.1.2]	2. The Supplier shall provide a response to the originator of the complaint or deficiency that shall include information on root cause analysis and corrective action. Note: Customer complaints could be in the form of quality non-conformance, deficiency or occurrence reports or another format but regardless will be identified by the GQAR and/or Acquirer as 'customer complaints'.	New requirement
8.2.2	Internal audit	The Supplier shall ensure that all contractual requirements, including NATO supplements, are included in internal audits.	5.5.2	Internal audit [9.2]	1. During the planning of internal audits the Supplier shall ensure that their audit programme covers all contract related critical processes and activities on an annual basis and includes contractual requirements and NATO supplements. The Supplier shall also consider the output from the actions to address risk and opportunities assessment.	Modified requirement.
8.2.2	Internal audit	The Supplier shall inform the GQAR and/or Acquirer of deficiencies identified during internal audit unless otherwise agreed between the GQAR and/or Acquirer and the Supplier.	5.5.2	Internal audit [9.2]	2. Unless otherwise agreed, the Supplier shall inform the GQAR and/or Acquirer of deficiencies or findings identified during internal audit.	Existing requirement.
8.2.2	Internal audit	N/A	5.5.2	Internal audit [9.2]	3. The Supplier shall retain documented information that demonstrates auditor training and experience.	New requirement
8.2.4	Monitoring and measurement of product	The Supplier shall provide a Certificate of Conformity at release of product to the GQAR and/or Acquirer unless otherwise instructed.	5.4.11	Release of products [8.6]	2. The Supplier shall provide a Certificate of Conformity at release of product to the GQAR and/or Acquirer unless otherwise instructed.	Existing requirement.
8.2.4	Monitoring and measurement of product	The Supplier is solely responsible for the conformance to requirements, of products provided to the Acquirer.	5.4.11	Release of products [8.6]	3. The Supplier is solely responsible for the conformance to requirements, of products provided to the Acquirer.	Existing requirement.

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Para	Paragraph Title	Requirement	Para	Paragraph Title	Requirement	Comments
8.3	Control of non-conforming product	The Supplier shall issue and implement documented procedures which identify, control and segregate all non-conforming products.	5.4.12	Control of nonconforming products [8.7]	1. The Supplier shall issue and implement documented procedures which identify, control and segregate all nonconforming products. <i>Product with unidentified or unknown status shall be classified as nonconforming product.</i>	Modified requirement.
8.3	Control of non-conforming product	Documented procedures for the disposition of non-conforming product are subject to disapproval by the GQAR and/or Acquirer when it can be shown that they do not provide the necessary controls.	5.4.12	Control of nonconforming products [8.7]	2. Documented procedures for the identification, control, and segregation of nonconforming product are subject to disapproval by the GQAR and/or Acquirer when it can be shown that they do not provide the necessary controls.	Existing requirement.
8.3	Control of non-conforming product	The Supplier shall notify the GQAR and/or Acquirer of non-conformities and corrective actions required, unless otherwise agreed with the GQAR and/or Acquirer.	5.4.12	Control of nonconforming products [8.7]	3. The Supplier shall notify the GQAR and/or Acquirer of non-conformities and corrective actions required, unless otherwise agreed with the GQAR and/or Acquirer. The GQAR and/or Acquirer reserve the right to reject all rework, repair and use as is dispositions.	Modified requirement.
8.3	Control of non-conforming product	All rework, repair and use-as-is dispositions must be acceptable to the GQAR and/or Acquirer. When the Supplier establishes that an acquirer-supplied product is unsuitable for its intended use, he shall immediately report to and coordinate with the Acquirer the remedial actions to be taken. The Supplier shall also inform the GQAR.	5.4.12	Control of nonconforming products [8.7]	4. Where the Supplier proposes to raise a concession for the use, release or acceptance of a nonconforming product appropriate authorisations shall be obtained from the GQAR and/or Acquirer unless otherwise agreed. 5. The Acquirer requirements for concessions apply equally to outsourced processes or purchased products. The Supplier shall review any request from External Providers before submission to the GQAR and/or Acquirer.	New requirement
8.3	Control of non-conforming product	N/A	5.4.12	Control of nonconforming products [8.7]	6. The Supplier shall retain documented information of quantity authorized and/or expiration date for concessions or deviation permits. The Supplier shall ensure compliance with the contract requirements when the authorization expires.	New requirement.

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Para	Paragraph Title	Requirement	Para	Paragraph Title	Requirement	Comments
8.3	Control of non-conforming product	The Supplier shall notify the GQAR and/or the Acquirer of non-conforming product received from a Sub-supplier that has been subject to Government Quality Assurance.	5.4.12	Control of nonconforming products [8.7]	7. The Supplier shall notify the GQAR and/or the Acquirer of nonconforming product received from an External Provider that has been subject to Government Quality Assurance.	Modified requirement.
8.5.1	Continual improvement	NOTE: The application of this section is intended to be limited to the scope of the contract.	N/A	N/A	N/A	
8.5.2	Corrective action	N/A	5.6.1	Nonconformity and corrective action [10.2]	The Supplier shall define their process, including tools and techniques, used to support root cause analysis for nonconformities.	New requirement.

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Para	Paragraph Title	Requirement	Para	Paragraph Title	Requirement	Comments
9.1	Access to Supplier and Sub-suppliers and support for GQA activities	<p>The Supplier and/or Sub-suppliers shall provide the GQAR and/or Acquirer:</p> <ul style="list-style-type: none"> - The right of access to facilities where parts of the contracted activities are being performed. - Information pertaining to the fulfillment of requirements in the contract. - Unrestricted opportunity to evaluate Supplier compliance with this Publication. - Unrestricted opportunity to conduct verification of product conformity with the contract requirements. - Required assistance for evaluation, verification, validation, testing, inspection or release of the product for the accomplishment of GQA to contract requirements. - Accommodation and facilities. - The necessary equipment available for reasonable use for performing GQA. - Supplier and or Sub-suppliers personnel for operation of such equipment as required. - Access to information and communication facilities. - The necessary Supplier documentation, to confirm product conformance to specification. - Copies of necessary documents, including those on electronic media. 	4.3	Access to Supplier and External Providers and Support For GQA Activities	<p>The Supplier and/or External Providers shall provide the GQAR and/or Acquirer:</p> <ol style="list-style-type: none"> 1. The right of access to facilities where the contracted activities are being performed. 2. Information pertaining to the fulfillment of requirements in the contract. 3. Unrestricted opportunity to evaluate Supplier compliance with this Publication. 4. Unrestricted opportunity to evaluate External Providers compliance with this Publication. The Supplier will be informed before the evaluation takes place. 5. Unrestricted opportunity to conduct verification of product conformity with the contract requirements. 6. Required assistance for evaluation, verification, validation, testing, inspection or release of the product for the accomplishment of GQA to contract requirements. 7. Accommodation and facilities for performing GQA. 8. The necessary equipment available for reasonable use for performing GQA. 9. Supplier and/or External Providers personnel for operation of such equipment as required. 10. Access to information and communication facilities. 11. The necessary Supplier documentation to confirm product conformance to specification. 12. Copies of necessary documents, including those on electronic media. 	Existing requirements with one additional requirement at (4).
9.2	Products for release to the Acquirer	The Supplier shall ensure that only acceptable products, intended for delivery, are released.	5.4.11	Release of products [8.6]	1. The Supplier shall ensure that only acceptable products, intended for delivery, are released. The	Existing Requirement.

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Para	Paragraph Title	Requirement	Para	Paragraph Title	Requirement	Comments
		GQAR and or Acquirer reserve the right to reject non-conforming products.			GQAR and/or Acquirer reserve the right to reject nonconforming products.	
9.2	Products for release to the Acquirer	N/A	5.4.11	Release of products [8.6]	4. Where the GQAR/and or Acquirer is required to perform any final inspection or formal acceptance activities, the Supplier shall provide the GQAR/and or Acquirer with a minimum of 10 working days notification of the event unless otherwise stated in the contract.	New requirement.

STANDARDS RELATED DOCUMENT

AQAP-2110-SRD.3.1

TRAINING MATERIAL TO SUPPORT AQAP-2110 EDITION D - PRESENTATION

Edition A Version 1

NOVEMBER 2020



NORTH ATLANTIC TREATY ORGANIZATION

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NATO LETTER OF PROMULGATION

16 November 2020

1. The enclosed Standards Related Document, AQAP-2110-SRD.3.1, Edition A, Version 1, TRAINING MATERIAL TO SUPPORT AQAP-2110 EDITION D - PRESENTATION, which has been approved in conjunction with AQAP-2110 by the nations in the Life Cycle Management Group, is promulgated herewith.
2. AQAP-2110-SRD.3.1, Edition A, Version 1, is effective upon receipt.
3. This NATO standardization document is issued by NATO. In case of reproduction, NATO is to be acknowledged. NATO does not charge any fee for its standardization documents at any stage, which are not intended to be sold. They can be retrieved from the NATO Standardization Document Database (<https://nso.nato.int/nso/>) or through your national standardization authorities..
4. This publication shall be handled in accordance with C-M(2002)60.


for Zoltán GULYÁS
Brigadier General, HUNAF
Director, NATO Standardization Office

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AQAP 2110 Edition D Training

Venue dd-mmm-yyyy

- Presenters

AQAP 2110 Ed D Training: Content

1. Introduction to AQAPs
2. Applicability to Contract and Supplier QMS
3. Structure and Overview of AQAP 2110
4. Requirements, Definitions and Interpretation
5. Further guidance
6. Acquirer and/or GQAR Responsibilities
7. Quiz

AQAP 2110 Edition D Training

Training Aims:

- To provide an awareness of the new requirements of AQAP 2110 Edition D
- To promote a consistent interpretation based on NATO guidance
- To explore what you can do as the Acquirer/GQAR in relation to the requirements of AQAP 2110 Ed D

AQAP 2110 Ed D Training: Format

- Slides detailing *REQUIREMENTS* and GUIDANCE
- Interactive - ask questions, offer comment
- Quiz

AQAP 2110 Edition D Training

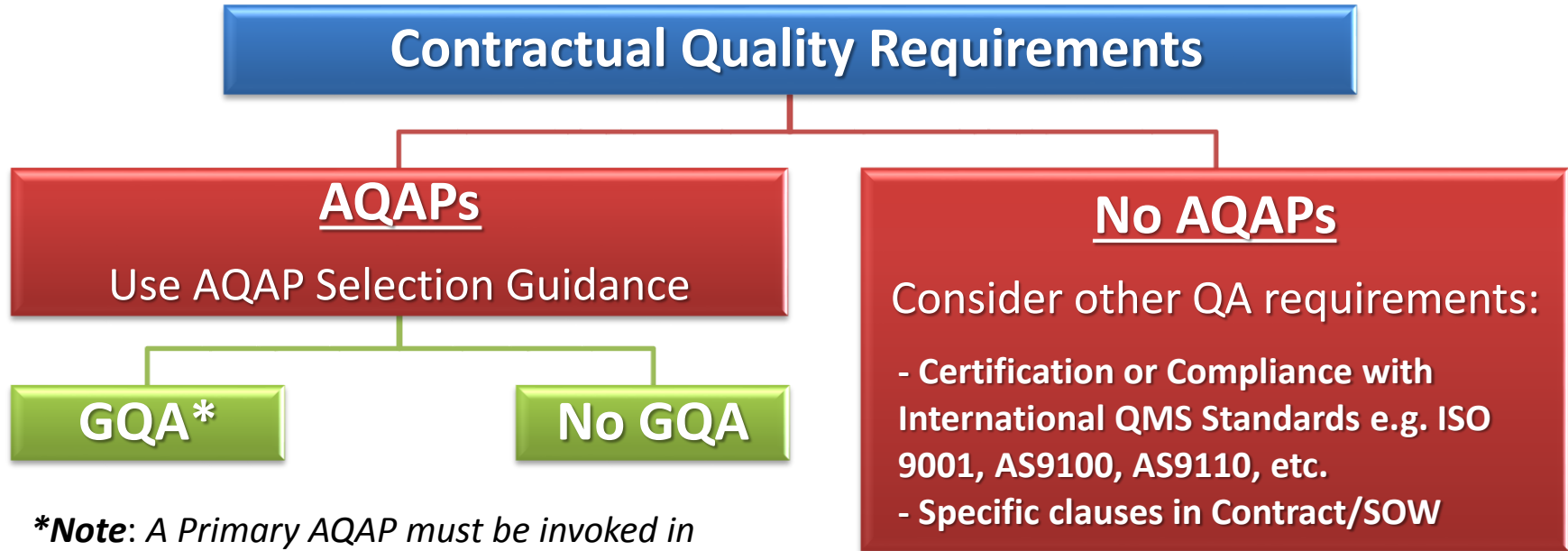
1. Introduction to AQAPs
2. Applicability to Contract and Supplier QMS
3. Structure and Overview of AQAP 2110
4. Requirements, Definitions and Interpretation
5. Further guidance
6. Acquirer and/or GQAR Responsibilities
7. Quiz

AQAP Training Introduction

Why do we use Allied Quality Assurance Publications (AQAPs)?

- Common definition of NATO requirements for quality that can be used in global supply chains
- Supports Government Quality Assurance between nations and agencies
- Provide defence context to ISO 9001:2015 requirements
 - ISO 9001 defines a set of generic requirements for a QMS
 - AQAPs define additional NATO requirements to be applied to specific contracts
- Makes provision for GQAR and/or Acquirer access and assistance
- GQAR and/or Acquirer right to reject product, QMS and plans without penalties

Contractual Quality Requirements



***Note:** A Primary AQAP must be invoked in the contract if GQA is required.

Government Quality Assurance (GQA)

- The decision to request GQA needs to be based on risk.
- STANAG 4107 is the overarching agreement for Mutual GQA between NATO nations and the usage of AQAPs.
- Link to STANAG 4107 Edition 11:
- <https://nso.nato.int/nso/nsdd/stanagdetails.html?idCover=9184&LA=EN>
- **Note:** RGQA can be rejected (by exception) under the provisions of AQAP 2070.

Government Quality Assurance (GQA)

AQAP 2070 defines the process for NATO Mutual Government Quality Assurance (GQA).

- AQAP 2070 is not a contractual document
- It describes the processes that should be followed by staff (delegators and delegates) involved in Government to Government GQA activities
- Activation of GQA services is dependant on the conditions and process steps defined in AQAP 2070
- Link to AQAP 2070 Edition B: <https://nso.nato.int/nso/nsdd/apdetails.html?APNo=2980>

Government Quality Assurance (GQA)

- Where GQA is a requirement, it is important that there is synergy between the contractual requirements and the Request for Government Quality Assurance (RGQA) requirements.
- e.g. If the RGQA requires the GQAR to sign a statement of GQA on a CofC for partial or full shipments, a corresponding condition or statement should be included in the contract.

Government Quality Assurance (GQA)

- GQA provides confidence that the Supplier has met contractual requirements relating to quality.
- The GQAR does not accept, inspect or test the product.
- The Supplier is solely responsible for the conformance to requirements, of products provided to the Acquirer.
- GQA surveillance is risk-based and primarily process-oriented.

Risk Identification: Risk Factors

Exercise:

For each of the topics below, please give examples of risk factors or sources of data which will inform the contract risk identification process.

Product

Contract

Supplier

Defects&Issues

Customer

Note: Supplier risk should not drive selection of AQAPs in contracts, but may influence the decision to invoke GQA.

Risk Identification: Risk Factors

Product

- Design maturity
e.g. new design,
modifications,
upgrades
- Complexity
- Software
- Lifecycle
- Risk of
counterfeit
- Critical Safety
Item
- Operational
Environment

Contract

- Timescales e.g. Urgent Operational Requirement?
- Cost/value
- Duration
- Requirements e.g. clear, defined, realistic
- Legislation

Supplier

- Performance e.g. quality, OTD
- QMS Certification
- QMS Scope
- Capability
- Supply Chain
- Stability
- Single Source
- Engagement with customers
- Pre Contract Award Evaluation

Defects and Issues

- Defect Reports
- QDRs
- RIACs
- In-Service Issues
- Platform Issues
e.g. integration
- Lessons Learned

Customer

- Risks
- Requirements
- Concerns
- Delegated responsibilities
- Feedback
- Priorities
- Stakeholder engagement

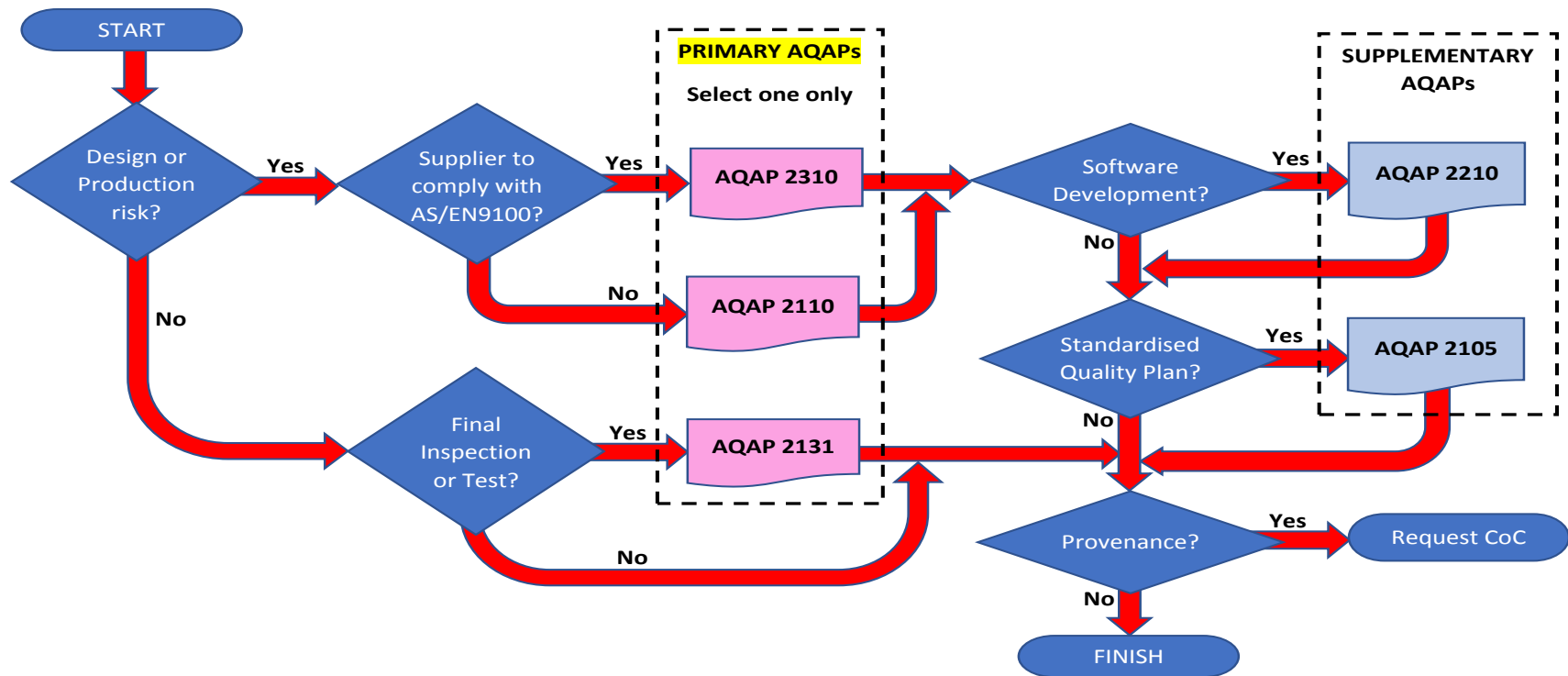
Contractual AQAPs @ November 2017

AQAP 2110	AQAP 2120	AQAP 2130	AQAP 2131	AQAP 2310	AQAP 2210	AQAP 2105
<ul style="list-style-type: none"> • NATO Quality Assurance Requirements for Design, Development & Production • Ed 3 aligns with ISO 9001:2008 • Ed D aligns with ISO 9001:2015 	<ul style="list-style-type: none"> • NATO Quality Assurance Requirements for Production • Ed 3 aligns with ISO 9001:2008 	<ul style="list-style-type: none"> • NATO Quality Assurance Requirements for Inspection & Test • Ed 3 aligns with ISO 9001:2008 	<ul style="list-style-type: none"> • NATO Quality Assurance Requirements for Final Inspection • Relates to all inspection and testing • Standalone publication • No link to ISO 9001 • Ed 2 	<ul style="list-style-type: none"> • NATO QMS Requirements for Aviation, Space & Defence Suppliers • Ed A Ver 1 aligns with AS9100:2009 	<ul style="list-style-type: none"> • NATO Supplementary Software QA Requirements to AQAP 2110 or AQAP 2310 • Ed A Ver 2 aligns with AQAP 2110 Ed 3 and AQAP 2310 Ed A Ver 1 	<ul style="list-style-type: none"> • NATO Requirements for Deliverable Quality Plans • Ed 2 aligns with AQAP 2110/2120/2130 Ed 3
Primary QA Conditions					Supplementary QA Conditions	

Contractual AQAPs @ February 2020

AQAP 2110	AQAP 2131	AQAP 2310	AQAP 2210	AQAP 2105
<ul style="list-style-type: none">• NATO Quality Assurance Requirements for Design, Development & Production• Ed D aligns with ISO 9001:2015	<ul style="list-style-type: none">• NATO Quality Assurance Requirements for Final Inspection & Test• Relates to all inspection and testing• Standalone publication• No link to ISO 9001• New Edition C	<ul style="list-style-type: none">• NATO Quality Assurance Requirements for Aviation, Space & Defence Suppliers• New Edition B aligns with AS 9100:2016	<ul style="list-style-type: none">• NATO Supplementary Software QA Requirements to AQAP 2110 or AQAP 2310• New Edition A aligns with AQAP 2110 Ed D and AQAP 2310 Ed B	<ul style="list-style-type: none">• NATO Requirements for Deliverable Quality Plans• New Edition C aligns with AQAP 2110 Ed D, AQAP 2310 Ed B and AQAP 2210
Primary QA Conditions			Supplementary QA Conditions	

AQAP Selection Guidance



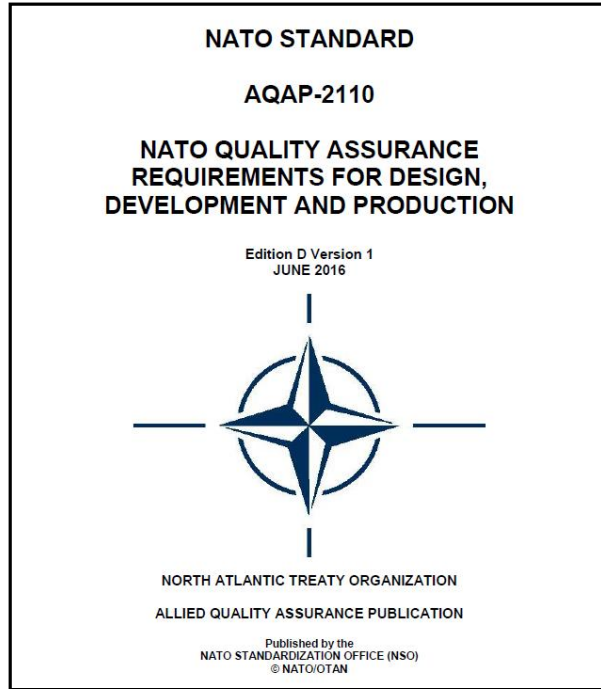
Contractual AQAPs

Exercise:

Q. A contract is to be placed for an upgrade to a batch (Qty 30) of electronic cryptographic units. The upgrade involves hardware and software modifications. What AQAPs should be invoked in the contract?

- a) No AQAPs
- b) AQAP 2131
- c) AQAP 2110
- d) AQAP 2110 and AQAP 2210

AQAP 2110 Edition D Introduction



- Reason for update:-
 - to reflect changes in ISO 9001:2015 standard
 - inclusion of new requirements based on Acquirer and GQAR experience
- Link to AQAP 2110 Edition D:
 - <http://nso.nato.int/nso/nsdd/apdetails.html?APNo=2286>

AQAP 2110 Edition D Introduction

- AQAP 2110 Edition 3 invoked ISO 9001:2008 requirements plus additional NATO specific requirements and was withdrawn in September 2018
- AQAP 2120 and 2130 have also been withdrawn
- Expected that AQAP 2110 Ed D will now be used
- AQAP 2110 Ed D invokes ISO 9001:2015 requirements plus additional NATO specific requirements

AQAP 2110 Edition D Introduction

- It is expected that Suppliers will have transitioned to ISO 9001:2015 by September 2018
- Revised AQAP selection guidance issued in November 2018. Link to AQAP 4107 SRD.2 Edition A Version 1:
- <https://nso.nato.int/nso/nsdd/SRDdetails.html?SRDNo=141&LA=EN>
- Note: AQAP 2310 Edition B NATO QMS Requirements for Aviation, Space and Defence Suppliers aligns with AS/EN 9100:2016

AQAP 2110 Ed D Training

1. Introduction to AQAPs
2. Applicability to Contract and Supplier QMS
3. Structure and Overview of AQAP 2110
4. Requirements, Definitions and Interpretation
5. Further guidance
6. Acquirer and/or GQAR Responsibilities
7. Quiz

AQAP 2110 Ed D & Supplier QMS

- AQAP 2110 Ed D does not require Suppliers to have a certified management system to ISO 9001:2015
- Ed D requires the Supplier's QMS, as it applies to the contract, to comply with the requirements of ISO 9001:2015
- Ed D also requires that the Supplier must be able to readily provide evidence of such compliance
 - Suppliers generally use third party certification to demonstrate that they meet the ISO 9001 requirements contained within AQAP 2110.

AQAP 2110 Ed D & Supplier QMS

- ISO 9001:2015 certification does **not** equate to AQAP compliance
- ISO 9001:2015 certification may support demonstration of compliance with Chapter 4 requirements of the AQAP
- Suppliers must also demonstrate compliance with the NATO-specific requirements contained in AQAP 2110 Ed D Chapter 5

AQAP 2110 Ed D & Supplier QMS

- AQAP 2110 Ed D is not supported by tailored versions (i.e. AQAP 2120 and AQAP 2130)
- For all contracts, the Supplier shall have a QMS appropriate for the products or services being acquired
 - Applicable QMS processes can be captured in a contract quality plan
- NATO-specific requirements of AQAP 2110 can be addressed in contract-specific quality plans, where appropriate

AQAP 2110 Ed D & Supplier QMS

- Where mandated in a contract (e.g. for high risk projects, etc.), **appropriate certification** is:-
 - QMS certified to a recognised European [EN] standard e.g. BS EN ISO 9001:2015
 - Certification Body must hold suitable accreditation from a National Accreditation Body (NAB) who is a signatory to the International Accreditation Forum (IAF)
 - Supplier registered scope of work must cover intended acquisition

Link to IAF website: https://www.iaf.nu//articles/IAF_MEMBERS_SIGNATORIES/4

AQAP 2110 Ed D & Supplier QMS

- AQAP 2110 Chapter 4.1 establishes the applicability of ISO 9001:2015 requirements as necessary to satisfy the contract.
- ISO 9001:2015 Para 4.4.1 requires that the Supplier implement and maintain a QMS, and to the extent necessary maintain documented information (4.4.2). Para 5.1.2 requires that customer requirements are considered.
- The above establishes that the Supplier must maintain a QMS with the processes necessary to achieve the contractual requirements.

AQAP 2110 Ed D & Supplier QMS

Example:

A Supplier has a QMS certified to ISO 9001:2015 and the scope of certification includes the design, manufacture and repair of Printed Circuit Boards (PCBs).

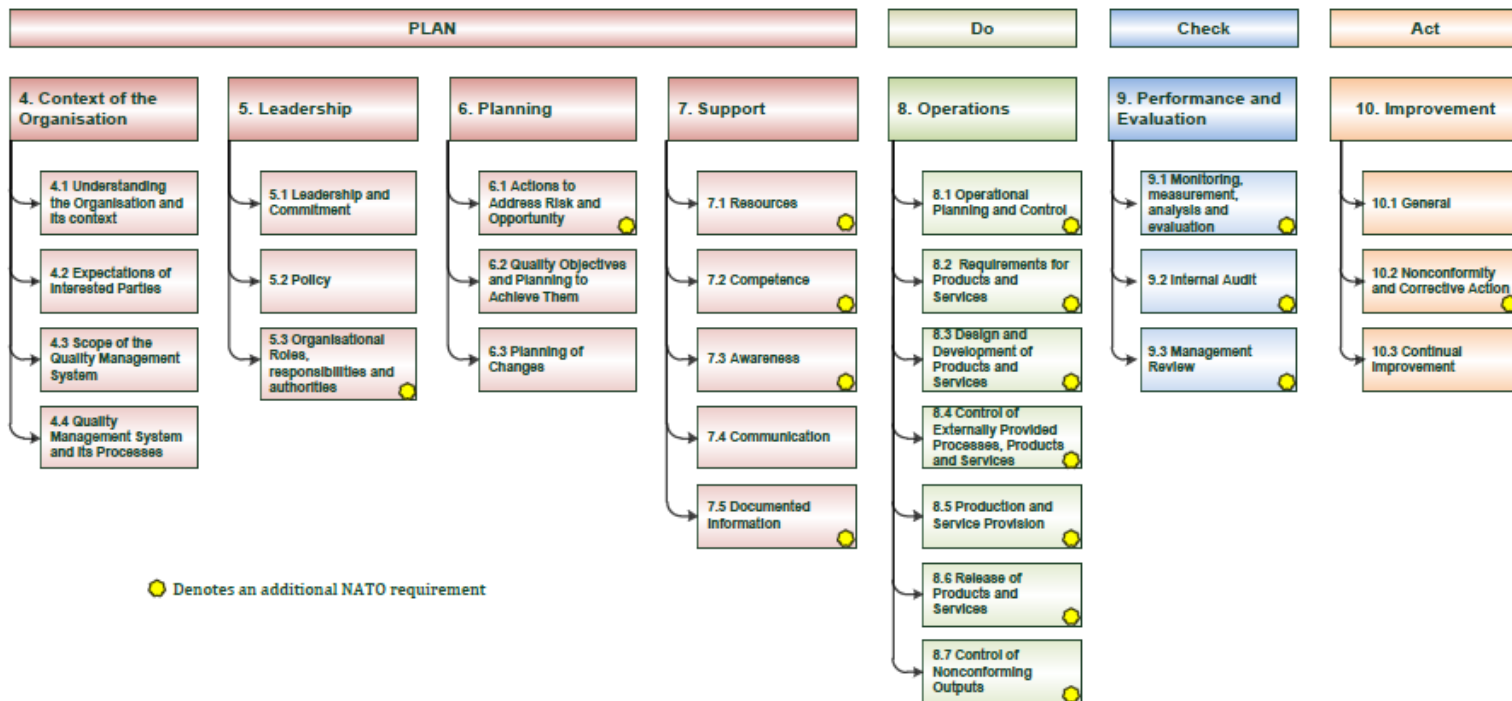
A defence contract is placed with the Supplier for the manufacture of a batch of “build-to-print” PCBs.

- The requirements of AQAP 2110 Ed D Chapter 5.4.3 and ISO 9001:2015 Paragraph 8.3 will not apply to this contract
- The Supplier’s quality planning would address any MOD specific requirements such as part numbers, labelling, etc., but the core activity is within the scope of the QMS.

AQAP 2110 Edition D Training

1. Introduction to AQAPs
2. Applicability to Contract and Supplier QMS
3. **Structure and Overview of AQAP 2110**
4. Requirements, Definitions and Interpretation
5. Further guidance
6. Acquirer and/or GQAR Responsibilities
7. Quiz

AQAP 2110 Ed D and ISO 9001:2015



Structure of AQAP 2110 Edition D

- AQAP 2110 Ed D adopts a revised format
- Previous version referenced all ISO 9001 sub-headings
- AQAP 2110 Ed D:-
 - invokes ISO 9001:2015 requirements as necessary in Chapter 4
 - groups NATO requirements in Chapter 5
 - AQAP sub-headings X-refer to related ISO paragraphs

Overview of AQAP 2110 Ed D

- Maintains focus on risk management & quality planning.
 - Extends these concepts to the supply chain
- Increased focus on requirements management:-
 - Identification of how they are to be achieved
 - Evidence to be presented to support product release
- Supplier to establish and maintain knowledge of the supply chain and external provider assurance activities

AQAP 2110 Edition D Training

1. Introduction to AQAPs
2. Applicability to Contract and Supplier QMS
3. Structure and Overview of AQAP 2110
- 4. Requirements, Definitions and Interpretation**
5. Further guidance
6. Acquirer and/or GQAR Responsibilities
7. Quiz

AQAP 2110 Ed D: Key Concepts

- Management representative
- Risk Management
- Infrastructure
- Planning
- Customer communication
- Critical characteristic
- Dependability
- Supply chain
- Purchasing
- Counterfeit material
- Traceability
- Customer satisfaction
- Improvement

AQAP 2110 Edition D Training

AQAP 2110 Chapter 3.3.7 Definitions

GQAR and/or Acquirer

The term “GQAR and/or Acquirer” has been used in this document to enable the Acquirer to be the default in situations in which there is either no GQAR associated with the contract or where the appointed GQAR has not been delegated the authority to conduct particular activities.

AQAP 2110 Edition D Training

AQAP 2110 Chapter 4.3 General QMS Requirements

Access to Supplier and External Providers and Support for GQA Activities.

- These requirements emphasise the Supplier's responsibility to provide unrestricted access and assistance for the GQAR and/or Acquirer where any parts of the contracted work are being performed.

AQAP 2110: Management Representative

Management representative

- The appointment of a management representative is critical to ensuring that the GQAR and/or Acquirer can perform their duties effectively.
- AQAP 2110 Ed 3 required that a management representative be appointed with the necessary authority and freedom to resolve matters pertaining to quality.
- The management representative is responsible for liaison with the GQAR and/or Acquirer for **all** quality-related aspects.
- Edition D extends the above to include a requirement related to the competence of the management representative.

AQAP 2110 Ed D: Management Representative

Competence of management representative

5.1.1 Organisational roles, responsibilities and authorities [5.3]

3. The management representative shall have the appropriate competence related to Quality Management.

AQAP 2110 Ed D: Management Representative

Guidance:

- It is reasonable to confirm that the management representative is suitably qualified and experienced regarding Quality Management (QM).
- Currency of QM knowledge should be maintained through training and professional development.

AQAP 2110 Ed D: Risk Management

5.2.1 Risk Management [6.1]

1. The Supplier **and External Provider** shall provide objective evidence that risks, including External Provider risks, are considered during planning, including but not limited to Risk Identification, Risk Analysis, Risk Control and Risk Mitigation. The planning shall start with risk identification during contract review and be updated thereafter in a timely manner.

2. Unless otherwise stated in the contract, the Risk Management applied shall meet the principles and guidelines of ISO 31000:2009. The Risk Management Plan shall be made available to the GQAR and/or Acquirer.

3. The Acquirer and/or GQAR reserve the right to reject Risk Plans and their revisions.

AQAP 2110 Ed D: Risk Management

- ISO 31000:2009 defines the principles, framework and process for risk management.
- The framework assists the organisation to embed risk management into its overall management system.
- The process requires the organisation to:-
 - establish its context
 - identify, analyse, evaluate and treat risks
 - continuously monitor and review the process
 - communicate and consult with internal and external stakeholders

AQAP 2110 Ed D: Risk Management

- AQAP 2110 Ed D invokes ISO 31000:2009
- **Note:** ISO 31000:2009 has been superseded by ISO 31000:2018
- If Supplier is required to comply with the latest version of ISO 31000, the Acquirer should consider inclusion of suitable statement in the contract.

AQAP 2110 Ed D: Risk Management

Guidance:

- The risk information/plan can be included in another document but risks must be relevant to the contract. There should be evidence that:
 - risks are being actively reviewed and, where appropriate, mitigation actions are being pursued and are effective.
 - senior managers use risk information as part of their decision making process and at the QMS review.
 - Supplier and Acquirer are sharing risk information.

AQAP 2110 Ed D: Risk Management

Exercise:

Q. Give 3 reasons why the Acquirer and/or GQAR might reject a Risk Plan.

AQAP 2110 Ed D: Risk Management

Example:

GQAR analysis of performance metrics identifies that the performance of an External Provider of a critical item for a defence contract has fallen significantly during the last two quarters. It is expected that:-

- The Supplier risk management plan identifies how External Provider risks are to be managed
- External Provider poor performance has been identified as a risk in the Project/ Supplier risk register and risk information is regularly reviewed
- Mitigation actions have been identified and are being pursued
- The risk has been communicated to senior management to inform their decision making process and QMS review
- The Supplier has informed the GQAR and/or and Acquirer of the risk

AQAP 2110 Ed D: Infrastructure

Segregation

5.3.1 Infrastructure [7.1.3]

The infrastructure shall include an area to segregate nonconforming product (see paragraph 5.4.12 of this publication).

AQAP 2110 Ed D: Infrastructure

Guidance: Segregation

- Wherever possible, an area should be set aside for nonconforming parts and the level of control / access for this area should be appropriate for the type of product.
- Where NC parts cannot be segregated or it would not be cost effective to do so; positive materiel control and identification should be confirmed both in stock management systems and through physical identification or 'locking'.

AQAP 2110 Ed D: Planning

5.4.1.1 Quality Plan (QP)

2. The QP shall:

a. Describe and document the quality management system requirements "contract-specific" necessary to satisfy the contract requirements (making reference, where applicable, to the "company-wide" quality management system);

b. Describe and document the planning of the product realisation in terms of quality requirements for the product, needed resources, required control activities (verification, validation, monitoring, inspection, testing), and acceptance criteria. **This shall include specific arrangements and communication requirements where work is to be conducted at locations external to the Suppliers premises.**

c. **Document, and maintain traceability of requirements from the planning process by including a requirement and solution compliance matrix, justifying fulfilment of all contractual requirements (making reference where applicable).**

AQAP 2110 Ed D: Planning

Guidance: Quality Plan

- The Quality Plan should be developed in conjunction with other project-related planning, e.g. as a sub-set of the Project Management Plan.
- Where functions and processes are clearly defined in the Supplier's QMS, a cross-reference is recommended.
- AQAP 2105 may be used as a framework for the Quality Plan, but other standards can be invoked e.g. ISO 10005, AS/EN9145, etc.

AQAP 2110 Ed D: Planning

Guidance: Quality Plan

- If activity is being undertaken out with the Supplier's QMS scope or usual location, the QP should detail how activity is to be controlled. The plan should also consider how the Supplier will interface with other organisations.
 - E.g. where a Supplier is performing work at another Supplier's location or military site and does not have access to their normal infrastructure for tool control, storage of consumables, etc.

AQAP 2110 Ed D: Planning

Guidance: Quality Plan

- Traceability of requirements can be included in another document or for complex products the supplier can refer to a requirements management software tool
- Traceability of requirements to be maintained throughout the product lifecycle
- Linkage and configuration control between requirements, analysis, architecture, design, verification and validation, etc.

AQAP 2110 Ed D: Customer Communication

5.4.2 Customer communications [8.2.1]

1. If requested by the Acquirer and/or GQAR, the Supplier and/or External Providers shall attend a Post Award GQA meeting focused on the contract arrangements for Quality Assurance of the product and/or GQA practicalities.

AQAP 2110 Ed D: Customer Communication

Guidance: Post Award GQA Meeting

- Purpose: To organize the practicalities for performing GQA during the contract between Supplier (and/or External Providers) and Acquirer and/or GQAR by for example:
 - Appointing the points of contact for GQA;
 - Agreeing of the composition of evidence and elements of evidence;
 - Planning the provision of evidence and elements of evidence;
 - Defining conditions for Acquirer and/or GQAR to get visibility over processes.

AQAP 2110 Edition D Training

Syndicate Exercise: **Post Contract Award GQA Meeting**

The Post Contract Award GQA meeting provides an opportunity for the Supplier and Acquirer and/or GQAR to establish lines of communication, how the GQAR will interface with the Supplier during the contract including sharing and transmission of information and what QA activities are planned for the product and the supply chain.

For your specific contract scenario, which of the following information would you expect to be available at the Post Contract Award GQA Meeting?

AQAP 2110 Edition D Training

Syndicate Exercise: Post Contract Award GQA Meeting

Information	AQAP Chapter/Paragraph	Available Y/N?
Requirement and Solution Compliance Matrix	5.4.1.1.(2).(c)	
Quality Plan	5.4.1.1	
Risk Management Plan	5.2.1	
Configuration Management Plan	5.4.1.2.2	
Customer Communication strategy	5.4.2	
Dependability	5.4.5	
Critical Product Characteristics	5.4.3	
Knowledge of the Supply Chain	5.4.6.1	
Knowledge of Sub-Supplier Quality Assurance Activities	5.4.6.1	
Counterfeit Material avoidance, detection and mitigation process	5.4.6.2.(2)	

AQAP 2110 Edition D Training

Syndicate Exercise: Post Contract Award GQA Meeting

Scenario 1:

- A new Defence Contract has been awarded to a Supplier and the GQAR and/or Acquirer has been invited to attend a Post Contract Award GQA Meeting. The contract is for the development of a one-off prototype model of a new laser weapon, utilising innovative cutting-edge technology. The estimated contract duration is 28 months.

AQAP 2110 Edition D Training

Syndicate Exercise: **Post Contract Award GQA Meeting**

Scenario 2:

- A new Defence Contract has been awarded to a Supplier and the GQAR and/or Acquirer has been invited to attend a Post Contract Award GQA Meeting. The contract is for the manufacture and supply of hull valves for in-service warships. The estimated contract duration is 12 months.

AQAP 2110 Ed D: Critical Characteristic

3.3.11 Key or Critical Product Characteristics or Processes

Processes or Product elements or features which, if not properly controlled, can have an adverse impact on the product delivery, cost and performance.

5.4.3 Determining the requirements related to products [8.2.2]

The supplier shall identify product requirements and functions that relate to critical characteristics such as health, safety, performance, and dependability.

AQAP 2110 Ed D: Critical Characteristic

Guidance:

- Supplier should have an understanding of how the product relates to the critical characteristics
 - This may be difficult for sub tier suppliers who may not be aware of where their product is used.
- This will ensure that resources are used appropriately and that decisions affecting product conformity are made by the right people in the organisation

AQAP 2110 Ed D: Dependability

3.3.4 Dependability

The ability to perform as and when required.

Notes:

- 1. Dependability includes availability, reliability, recoverability, maintainability and maintenance support performance, and, in some cases, other characteristics such as durability, safety, and security.*
- 2. Dependability is used as a collective term for the time-related quality characteristic of an item.*

AQAP 2110 Ed D: Dependability

5.4.5 Dependability

If stated in the contract, the Supplier shall ensure that Dependability issues and related documents, including those from associated External Providers, are controlled.

NOTE:

Further information on NATO Dependability Management is contained within Allied Dependability Management Publications (ADMP).

AQAP 2110 Ed D: Dependability

Guidance:

- The dependability characteristics of any item are inherent in its design.
- Dependability should be considered from the very beginning of the pre-concept stage and be continued, in a disciplined manner, throughout the whole life cycle by the implementation of dependability disciplines as described in the IEC 60300 series standards.

AQAP 2110 Ed D: Supply Chain

5.4.6 Control of externally provided processes, products & services

1. The Supplier shall retain documented information of verification and/or validation of purchased products. The documented information shall be made available to the GQAR and/or Acquirer.

AQAP 2110 Ed D: Supply Chain

Guidance:

- The Supplier should be able to demonstrate to the GQAR and/or Acquirer that the resulting products and services meet the requirements for the specified application or intended use.
- This includes traceability and corrective action e.g. inspection and test records and results of the activities.

AQAP 2110 Ed D: Supply Chain

5.4.6.1 Control of externally provided processes, products & services

1. Where the supplier has decided to externally source a critical item, significant work content, design, immature technical solutions or a configuration item then the Supplier shall establish and maintain knowledge of the supply chain and external provider quality assurance activities.

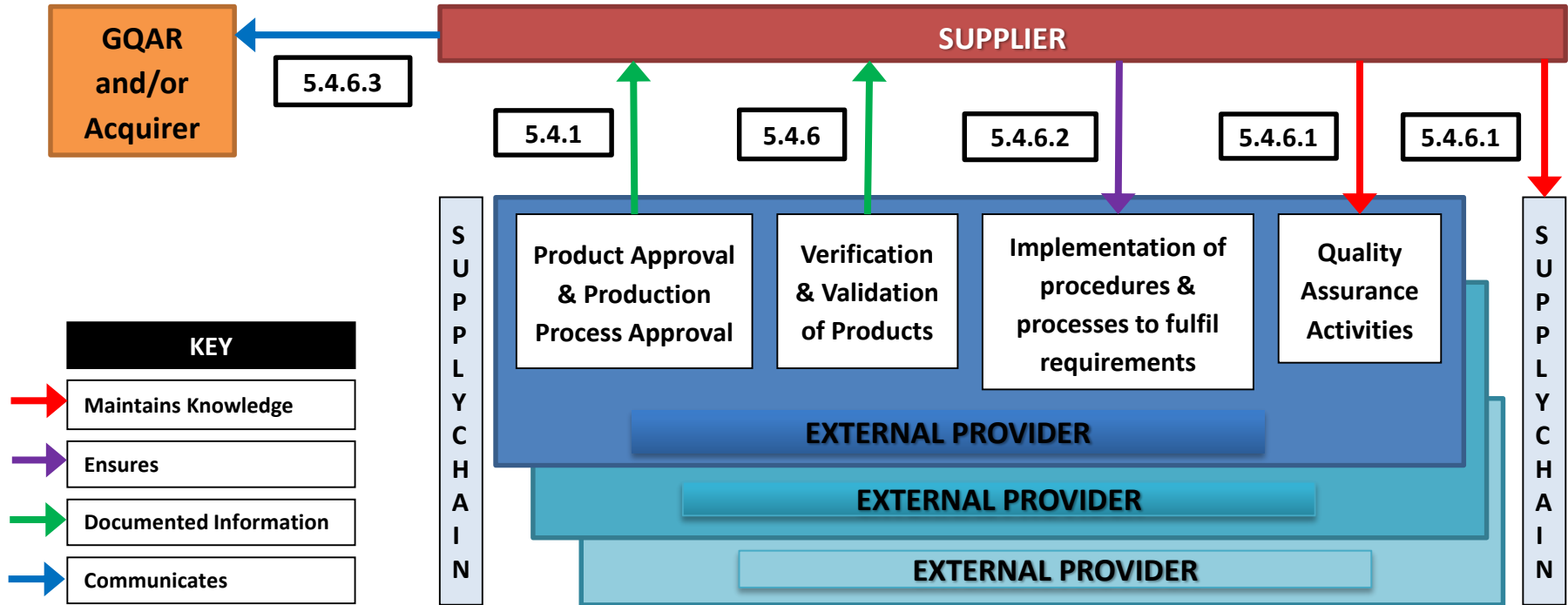
4. Supplier shall document their arrangements for these requirements at the planning stage (see paragraph 5.4.1. of this publication) and identify their proposed quality assurance activities for specific sub-contracts or orders that meet the above criteria.

AQAP 2110 Ed D: Supply Chain

Guidance:

- Supplier should focus QA resource and sub supplier controls based on the level of risk as it applies to the contract
- Sub supplier controls are usually influenced by past performance. Ed D extends these controls to reflect the criticality of the supplier in relation to the product/ contract and deliberately focuses on areas of potential risk such as design
- Criteria provided will inform the Supplier's risk based thinking

AQAP 2110 Ed D: Supply Chain Linkages



AQAP 2110 Ed D: Purchasing Pt. 1

Documented information for external providers

5.4.6.1 General

3. Suppliers shall conduct a formal review of purchasing documents to verify that the correct contractual requirements have been flowed down. The supplier shall retain documented information of this review.

AQAP 2110 Ed D: Purchasing Pt. 1

Guidance: Documented information for external providers

- It is important that the Supplier clearly identifies the process and criteria to be applied to assess whether:-
 - contractual conditions are ‘flowed down’ to the supply chain.
 - purchasing documentation fully identifies the product and applicable contractual conditions.
- The process must offer assurance that a consistent rationale is applied and any associated supply chain risks are documented and addressed.

AQAP 2110 Ed D: Purchasing Pt. 1

Exercise:

Prime Contract: Mid Life Update to ships Capstan including control software upgrade. System comprises Capstan Drum, Electric Motor, Control Panel and Remote Manual Emergency Start/Stop button.

Contract Conditions:

- AQAP 2110: NATO Quality Assurance Requirements for **Design, Development and Production**.
- AQAP 2210: NATO Supplementary **Software** QA Requirements to AQAP 2110 and AQAP 2310
- IEC 60034: Rotating Electrical Machines

Which of the contract conditions would be most appropriate to flow down in the following sub-contracts?

1. Acquisition of programmable Control Panel.
2. Supply of COTS manual emergency Start/Stop button.
3. Overhaul and modification of electric motor.

AQAP 2110 Ed D: Counterfeit Material

- Counterfeit material may have unpredictable performance and failure modes which could compromise capability and equipment safety.
- Additional measures have been implemented to reduce the contractual risk of counterfeit material, including:-
 - UK Defence Standard 05-135 **Avoidance of Counterfeit Materiel** introduced in July 2014.
 - AQAP 2110 Ed D includes a definition for Counterfeit Material and a new requirement relating to Counterfeit Material.

AQAP 2110 Ed D: Counterfeit Material

3.3.12 Counterfeit Material

Materiel whose origin, age, composition, configuration, certification status or other characteristic (including whether or not the materiel has been used previously) has been falsely represented by:

- A) misleading marking of the materiel, labelling or packaging;*
- B) misleading documentation; or*
- C) any other means, including failing to disclose information;*
- except where it has been demonstrated that the misrepresentation was not the result of dishonesty by a Supplier or External Provider within the supply chain.*

AQAP 2110 Ed D: Counterfeit Material

5.4.6.2 Counterfeit

2. The Supplier shall establish and implement a process for the avoidance, detection, mitigation, and disposition of Counterfeit Materiel.

AQAP 2110 Ed D: Counterfeit Modes

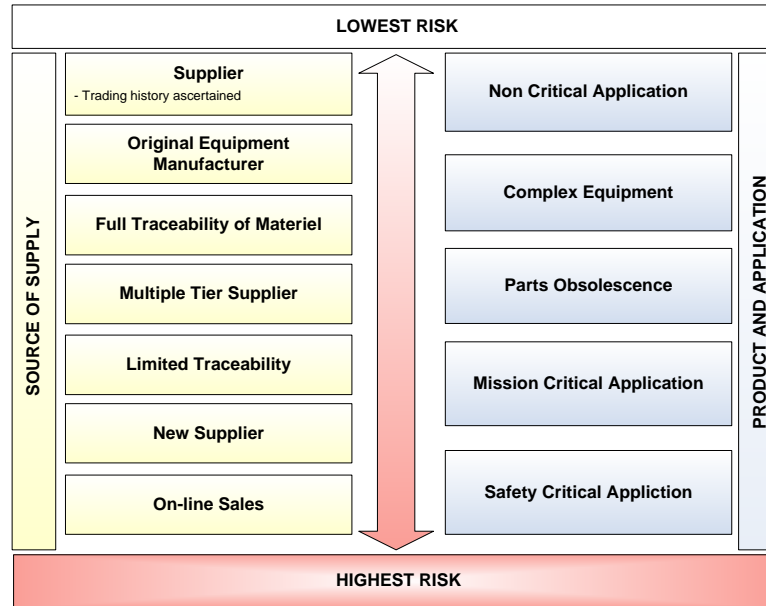
COUNTERFEIT TYPES	Source of Origin	False Trade Mark, False Manufacturer's Name
	Age	False Extended Expiry Date, Recycled
	Composition	Misrepresentation of Material (e.g. Lead vs Lead Free)
	Configuration	Incorrect Marking/Identification
	Certification	False Certification, False Documents
	Material Characteristics	False Specification Claims (e.g. Military vs Industrial), False Material Strength Claim
	Misrepresentation	Lesser Quality, Repackaged to look like new

AQAP 2110 Ed D: Counterfeit Material

Guidance:

- Increased probability of counterfeit materiel where:
 - components or raw material are of a type known to be vulnerable to counterfeiting
 - design requires sourcing of parts that are obsolescent, or are foreseen to become obsolescent during the lifecycle of the equipment
 - likely to be multiple tiers in the supply chain
 - traceability of the materiel is not otherwise mandated
 - design includes Electrical, Electronic and Electro-mechanical (EEE) Parts
 - counterfeiting of test results enables the product to be accepted by an organisation
 - counterfeiting of certificates enables an organisation to benefit from that certification without achieving the required standard or output

AQAP 2110 Ed D: Counterfeit Material



Counterfeit risk identification table

AQAP 2110 Ed D: Purchasing Pt. 2

5.4.6.3 Communication

2. The Supplier shall notify the GQAR and/or Acquirer if a subcontract or order has been identified involving a critical item, significant work content, design, immature technical solutions or where External Provider performance is unknown or causes concern.

AQAP 2110 Ed D: Purchasing Pt. 2

Guidance:

- AQAP 2110 Ed 3 required that the Supplier inform the GQAR/Acquirer 'if a subcontract or order has been identified as constituting or involving risk.'
- Ed D focuses on specific characteristics/ risk areas that the Supplier has decided to subcontract which will enable the GQAR and/or Acquirer to determine appropriate levels of GQA activity.

AQAP 2110 Ed D: Traceability

5.4.8 Identification and traceability [8.5.2]

Where the failure of an item or component could lead to the loss of equipment, performance or life then it is mandatory to maintain traceability.

AQAP 2110 Ed D: Traceability

Guidance:

- ISO 9001 defines the actions to be taken when traceability is a requirement.
- AQAP 2110 Ed D provides criteria for when traceability must be maintained.
- The Supplier is required to maintain build records during manufacture where components and materials have been used.
- Records should be able to support product recall in the event that batches of material are subsequently found to be suspect or nonconforming.

AQAP 2110 Ed D: Control of Shelf Life

5.4.10 Preservation [8.5.4]

- 1. Products with limited shelf life shall be subject to control of their expiry dates.*
- 2. If applicable, the control of expiry date/shelf life shall be applied during maintenance, servicing, storage or when fitted.*
- 3. Remaining shelf-life shall be identified and communicated to the GQAR and/or Acquirer prior to delivery.*

AQAP 2110 Ed D: Control of Shelf Life

Guidance:

- Defence product can be in the manufacturing process for a considerable time, e.g. pumps on a ship. A maintenance regime exists within the manufacturing process.
- Installed equipment should be entered in a maintenance process with the OEM from the time of issue to the time of receipt, including sub-assemblies.

AQAP 2110 Ed D: Release of Products

5.4.11 Release of products [8.6]

4. Where the GQAR/and or Acquirer is required to perform any final inspection or formal acceptance activities, the Supplier shall provide the GQAR/and or Acquirer with a minimum of 10 working days notification of the event unless otherwise stated in the contract.

AQAP 2110 Ed D: Release of Products

Guidance:

- Suppliers are required to conduct effective planning for final inspection and formal acceptance activities
- This requirement encourages Suppliers to communicate key events to the GQAR and/or Acquirer
- The aim is to ensure that appropriate stakeholders are afforded the opportunity to be involved in product release activities where required.

AQAP 2110 Ed D: Concessions

5.4.12 Control of nonconforming products [8.7]

4. Where the Supplier proposes to raise a concession for the use, release or acceptance of a nonconforming product appropriate authorisations shall be obtained from the GQAR and/or Acquirer unless otherwise agreed.

5. The Acquirer requirements for concessions apply equally to outsourced processes or purchased products. The Supplier shall review any request from External Providers before submission to the GQAR and/or Acquirer.

AQAP 2110 Ed D: Concessions

Guidance:

- ISO 9001:2015 requires that the Supplier informs the customer of nonconforming outputs and can obtain authorisation for acceptance under concession
- Suppliers often interpret the customer to be a prime supplier
- This requirement explicitly states that authorisations must be obtained from the GQAR and/or Acquirer (unless otherwise agreed)

AQAP 2110 Ed D: Concessions

5.4.12 Control of nonconforming products [8.7]

6. The Supplier shall retain documented information of quantity authorized and/or expiration date for concessions or deviation permits. The Supplier shall ensure compliance with the contract requirements when the authorization expires.

AQAP 2110 Ed D: Concessions

Guidance:

- The use of concessions should not be encouraged and only by exception.
- In the event that a concession is deemed necessary, authorisation should be limited to a specified time-bound period.
- This requirement aims to ensure that Suppliers implement timely corrective actions to prevent recurrence of nonconformities and thus negate the need for any further concessions.

AQAP 2110 Ed D: Customer Satisfaction

5.5.1 Customer satisfaction [9.1.2]

- 1. Any complaints or deficiencies relevant to the contract, reported by the GQAR and/or Acquirer, shall be recorded as customer complaints.*
- 2. The Supplier shall provide a response to the originator of the complaint or deficiency that shall include information on root cause analysis and corrective action.*

Note: Customer complaints could be in the form of quality non-conformance, deficiency or occurrence reports or another format but regardless will be identified by the GQAR and/or Acquirer as 'customer complaints'.

AQAP 2110 Ed D: Customer satisfaction

Guidance:

- AQAP 2110 Ed D requires that information on root cause analysis is also detailed in the Supplier response.
- The note in Chapter 5.5.1 clarifies that the GQAR and/or Acquirer will explicitly identify to the Supplier when deficiencies are to be treated as customer complaints.

AQAP 2110 Ed D: Improvement

AQAP 2110 3.3.10 Root Cause Analysis

A collective term that describes a wide range of approaches, tools and techniques used to identify causes of nonconformity.

AQAP 2110 5.6.1 Nonconformity and corrective action [10.2]

The Supplier shall define their process, including tools and techniques, used to support root cause analysis for nonconformities.

AQAP 2110 Ed D: Improvement

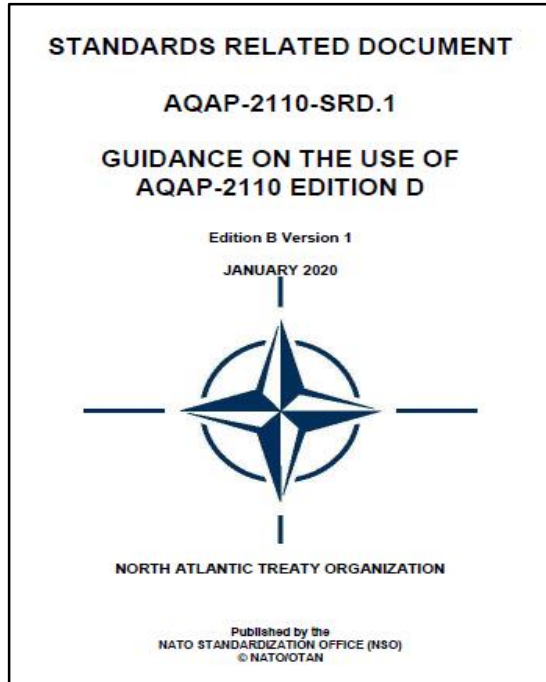
Guidance: Root Cause Analysis

- Suppliers will adopt tools and techniques appropriate for the nature and complexity of the business and be able to manage root cause analysis as a business process.
- Root cause analysis process, tools and techniques applied to the contract shall be included in, or referred to, in the contract quality plan and made available to GQAR and/or Acquirer.
- Suppliers should have competent personnel to support the techniques identified in their process.

AQAP 2110 Edition D Training

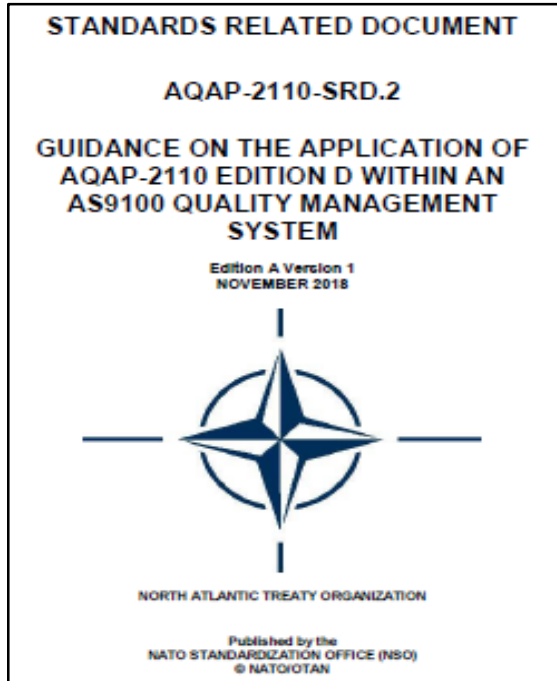
1. Introduction to AQAPs
2. Applicability to Contract and Supplier QMS
3. Structure and Overview of AQAP 2110
4. Requirements, Definitions and Interpretation
- 5. Further guidance**
6. Acquirer and/or GQAR Responsibilities
7. Quiz

AQAP 2110 Ed D Guidance



- Guidance on the use of AQAP 2110 Edition D
 - AQAP 2110 SRD.1 Ed B
 - <https://nso.nato.int/nso/nsdd/SRDdetails.html?SRDNo=177>
- Annex A of SRD.1 contains a list of documented information requested by AQAP 2110 Ed D and ISO 9001:2015

AQAP 2110 Ed D Guidance



- Guidance on the application of AQAP 2110 Ed D within an AS9100 Quality Management System
 - AQAP 2110 SRD.2 Ed A
- <https://nso.nato.int/nso/nsdd/SRDdetails.html?SRDNo=139&LA=EN>
- Released in November 2018

AQAP 2110 Ed D Guidance

Standards Related Document AQAP-2110-SRD.3

- Training Material to Support AQAP-2110 Edition D
 - This presentation is AQAP-2110-SRD.3.1
- Annex A of AQAP-2110-SRD-3 contains a table which provides a direct comparison of the requirements of AQAP 2110 Edition 3 and AQAP 2110 Edition D Version 1

AQAP 2110 Edition D Training

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Acquirer and/or GQAR Responsibilities

- The following slides detail some of the **potential** responsibilities of the Acquirer and/or GQAR with respect to contracting and use of AQAP 2110 both pre and post contract award
- The list is not exhaustive
- Note: not all responsibilities will apply to every contract; however, it is recommended that these areas are considered during planning.

Responsibilities: Pre Contract Award

1. Understand the AQAP 2000 series in order to invoke appropriate AQAPs and other standards in contracts
2. Identify, record, review and monitor **risks** throughout the contract duration [5.2.1] [5.4.6.3] [5.5.3.2]
3. Determine if the contract is to be subject to GQA. If yes, invoke one primary AQAP and include a statement in the contract

Responsibilities: Pre Contract Award

4. Determine any regulatory requirements e.g. airworthiness and invoke in contract (if applicable)
5. Ensure that contractual requirements for dealing with concessions are clearly defined in the contract [5.4.12]
6. Specify Certificate of Conformity requirements [5.4.11.(2)]
7. Invoke appropriate Configuration Management standards in the contract [5.4.1.2]

Responsibilities: Pre Contract Award

8. Review evidence of Supplier's QMS suitability e.g. 3rd party certification, QMS scope [4.2]
9. Consider documented information to be provided by the Supplier, and timescales [4.3] [5.4.1]
10. Establish and define contractual dependability requirements (if applicable) [5.4.5]

Responsibilities: Pre Contract Award

11. Establish if there is a requirement for the supply of customer property to the Supplier [5.4.9]
12. Request a Post Award GQA meeting (if required) [5.4.2.(1)]
13. Specify requirements for Acquirer and/or GQAR attendance at final inspection or formal acceptance activities [5.4.11.(4)]

Responsibilities: Post Contract Award

1. Where considered appropriate: raise Requests for Government Quality Assurance (RGQA) to mitigate risks
2. Ensure synergy between contractual and RGQA requirements
3. Liaise with the GQAR and/or Acquirer or Supplier management representative on quality matters
4. Review plans (Quality, Risk Management, Configuration Management) and comment on acceptability/non-acceptability of plans. [\[5.2.1\]](#) [\[5.4.1.1\]](#) [\[5.4.1.2.2\]](#)

Responsibilities: Post Contract Award

5. Review requirements and solution compliance matrices [5.4.1.1.(2)]
6. Review acceptability of objective evidence of product conformance with requirements [5.4.1.(1)] [5.4.1.1.(2)]
7. Where necessary, comment on the acceptability of the Supplier's QMS as it applies to the contract [4.2]
8. Establish requirements and methodology for dealing with non-conforming product e.g. warranty claims, defects [5.4.11.(1)], dispositions (rework, repair or use as is), concessions [5.4.12]

Responsibilities: Post Contract Award

9. Review proposals by the Supplier to change its organisation that will affect product quality or the QMS [5.4.2.(3)]
10. Approve/disapprove Supplier documented procedures for the identification, control and segregation of nonconforming product [5.4.12.(2)]
11. Raise customer complaints when necessary [5.5.1]

Responsibilities: Post Contract Award

12. Where applicable, review Supplier corrective action proposals [4.2] [5.4.12] [5.5.1.(2)]
13. Where applicable, review risks notified by the Supplier relating to External Providers or externally-provided product [5.4.6.3]
14. Continue to identify, record, review and monitor **risks** throughout the contract duration [5.2.1] [5.4.6.3] [5.5.3.2]

Responsibilities: Post Contract Award

- 15. Review Supplier notifications of lost, damaged or unsuitable customer property and advise on suitability of remedial actions [5.4.9]
- 16. Advise on acceptability of remaining shelf life of product [5.4.10.(3)]
- 17. Review details of products affected by out of calibration measuring equipment [5.3.2.(2)]

Responsibilities: Post Contract Award

- 18. Review deficiencies identified during supplier internal audits [5.5.2.(2)]
- 19. Where applicable, identify the need for contract amendment as a result of non-conformities and corrective actions

AQAP 2110 Edition D: Presentation

- Thank you for listening.
- Any questions?
- Quiz

AQAP 2110 Edition D Training

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AQAP 2110 Edition D: Quiz Help

Primary Contractual AQAPs:

- AQAP 2110: NATO Quality Assurance Requirements for **Design, Development and Production**.
- AQAP 2131: NATO Quality Assurance Requirements for **Final Inspection and Test**.
- AQAP 2310: NATO Quality Assurance Requirements for **Aviation, Space and Defence Suppliers**

Supplementary Contractual AQAPs:

- AQAP 2210: NATO Supplementary **Software** QA Requirements to AQAP 2110 and AQAP 2310
- AQAP 2105: NATO Requirements for **Deliverable Quality Plans**

Guidance AQAP:

- AQAP 2070: NATO Mutual **Government Quality Assurance** (GQA)

AQAP 2110 Edition D Training

QUIZ

Q1. What is the meaning of dependability?

AQAP 2110 Edition D Training

QUIZ

Q2. Which one of the following statements is false?

- a. AQAP 2070 is not a contractual AQAP
- b. AQAPs should only be included in contracts when GQA is required
- c. AQAP 2131 relates to all inspection and test
- d. AQAP 2210 is not a primary AQAP

AQAP 2110 Edition D Training

QUIZ

Q3. Define root cause analysis.

AQAP 2110 Edition D Training

QUIZ

Q4. In general, which primary AQAP(s) should be invoked in aerospace sector contracts?

- a. AQAP 2131
- b. AQAP 2110
- c. AQAP 2310
- d. All of the above

AQAP 2110 Edition D Training

QUIZ

Q5. Give two reasons why we have AQAPs?

AQAP 2110 Edition D Training

QUIZ

Q6. Which of the following sections of AQAP 2110 Ed D was subject to the highest number of new requirements?

- a. 5.4.1. Operational planning and control
- b. 5.4.6. Control of externally provided processes, products and services
- c. 5.4.11. Release of products
- d. 5.4.12. Control of nonconforming products

AQAP 2110 Edition D Training

QUIZ

Q7. AQAP 2110 Ed D states that the Acquirer and/or GQAR reserve the right to reject which of the following Supplier plans?

- a. Quality Plan
- b. Risk Management Plan
- c. Both of the above
- d. None of the above

AQAP 2110 Edition D Training

QUIZ

Q8. Which of the following statements is false?

- a. AQAP 2210 must be used in conjunction with either AQAP 2110 or AQAP 2310.
- b. AQAP 2110 Ed D should be included in contracts where there is a risk in the manufacturing process.
- c. AQAP 2110 Ed D should be included in contracts where there is a risk in the design process.
- d. AQAP 2110 Ed D requires Suppliers to have a certified management system to ISO 9001:2015

AQAP 2110 Edition D Training

QUIZ

Q9. Which one of the following options are considered to present the highest risk in terms of counterfeit material?

- a. On-line Sales
- b. Original Equipment Manufacturer
- c. Multiple Tier Supplier
- d. New Supplier