Ministry of Defence

JSP 940
MOD Policy for Quality

Part 2: Guidance

Foreword

This Part 2 Joint Service Publication (JSP) provides guidance in accordance with the policy set out in Part 1 of this JSP; the guidance is sponsored by the Ministry of Defence National Quality Assurance Authority (MOD NQAA). It provides policy-compliant business practices which should be considered as best practice.

Preface

How to use this JSP

1. Users of this JSP are not expected to read the document from cover to cover but to refer to the relevant chapters / sections as required. In order to facilitate this, it has been necessary to introduce duplication of some material.

2. JSP 940 is both policy and guidance and **shall** be applied across MOD Organisations for the assurance of acquisition, engineering and logistics support in delivery of Defence Capability.

3. This JSP is structured in two parts:

   a. Part 1 - Directive, which provides the direction that **shall** be followed in accordance with statute or policy mandated by Defence or on Defence by Central Government.

   b. Part 2 - Guidance, which provides the guidance and best practice that will assist the user to comply with the Directive(s) detailed in Part 1.

4. This Part 2 incorporates methods of compliance for the specific application of MOD quality policy where required. These are emphasised as such by the use of:

   a. '**shall**' indicates a requirement that can only be deviated from with a waiver or exemption issued by the MOD NQAA;

Note: Until further notice, please send any requests for a deviation waiver against JSP 940 requirements to Quality and Configuration Management Helpline, and direct your enquiry to the Quality policy team.

   b. '**should**' indicates a preferred recommendation as the acceptable means of compliance.

Delivery Teams are to seek approval (with supporting rationale) from QCM Policy before applying any alternative acceptable means of compliance, which are then to be documented within the appropriate quality planning document.

Coherence with other Policy and Guidance

5. Where applicable, this document contains links to other JSPs, some of which may be published by different business areas. Where particular dependencies exist, these other areas have been consulted in the formulation of policy and guidance detailed in this publication.

Job title / email	Project focus
JSP 822	Defence Direction and Guidance for Training and Education
JSP 892	Risk Management
JSP 901	Technical Governance and Assurance of Capability
JSP 935	Software Acquisition Management for Defence Equipment
JSP 456	Defence Catering Manual
JSP 888	Inventory Management and Materiel Accounting (IMMA)
JSP 945	MOD Policy for Configuration Management
JSP 950	Medical Policy

Further Advice and Feedback – Contacts

6. The owner of this JSP is the MOD NQAA. For further information on any aspect of this guide, or to ask questions not answered within the subsequent sections, or to provide feedback on the content, contact:

Job title / email	Project focus
Quality and Configuration Management Helpline	MOD Quality Policy

Version History

Date	Version	Summary of Change
March 2017	1.0	Initial issue
August 2018	1.1	General amendment to reflect publication of updated quality standards and correction of minor grammatical errors.
April 2020	2.0	General revision of the JSP content inclusive of: • developed content to complete the JSP; • various amendments to improve guidance and terminology; • 'Avoidance of Counterfeit Materiel' moved into the 'Standard Quality Assurance Contract Requirements' section; • 'Flight Indemnity' amended to reflect that AAR delegation letters are now issued by the DAT&QA. (now the DFA TQ&S)
April 2021	2.1	This JSP has been updated to: • correct minor errors; • amended requirement for Supplier deliverable quality plan evaluation and acceptance, now to be conducted by a competent GQA Practitioner; • requirement for certificates of conformity for aircraft parts moved from Knowledge in Defence to this JSP; • align with MOD Logistic Policy for certificates of conformity retention; • insertion of instruction to ensure consultation with domain GQA SME for contracts containing Safety Critical Products; • various updates to section 4.3.6 Flight Indemnity; insertion of new section 4.5.8 Amendment to Contracts.

Date	Version	Summary of Change
April 2023	2.2	This JSP has been updated to: • reflect the change in the JSP owner's position as a 'Defence Functional Authority'; • inclusion of the need for Acquisition Organisations to resource MOD commitments introduced by the use of NATO and UK contractual quality standards and conditions; • use of the Model Quality Assurance Question Application Instruction published in the Commercial Toolkit; • introduction and application for the revised DEFCON602A and the new DEFCON602C; • emphasis added that the need for a Deliverable Quality Plan should be a determined requirement and not a default because of the inclusion of a Primary AQAP. • introduction of the new Key Performance Indicator for Quality.
March 2025	2.3	This JSP has been updated to: • amend the JSP 'sponsor from 'Defence Functional Authority for Technical, Quality and Standardization (DFA TQ&S)' to 'Ministry of Defence Quality Authority (MOD QA)'. • incorporate the terminology and application of the Procurement Act 2023, including changes to the Appropriate Certification guidance and process at Chap 4 Annex A. • include a new Annex A in Chap 3 for Quality Management within Defence for Medical Materiel. • include changes to Reporting of Counterfeit Materiel in Chap 4 Annex F at F4.
April 2026	2.4	This JSP has been updated to: • Align with the MOD Quality Competence Passport; • Recognise the formation of the Global Accreditation Cooperation Incorporated organisation with respects to Appropriate Certification; • Incorporate the change in policy and guidance for the use of AQAP 2210 edition B, required by the removal of the UK reservation on STANAG 4107 and the adoption of AQAP 2210 Edition B; • Incorporate changes to the Counterfeit Avoidance policy and guidance within Chap 4 Section 4.3.4.4 h, Chap 4 Annex C and Chap 4 Annex F; • Minor changes to emphasise that Commercial are responsible for inclusion of DEFCON 638 in a contract.
	2.5	This JSP has been updated to: • incorporate "MOD Quality Authority" title change to the "MOD National Quality Assurance Authority (NQAA)";

Date	Version	Summary of Change
		• include a new Annex B in Chapter 3 for Quality Management within Defence Food management; • update to reference supporting material; • minor wording improvement amendments.

Contents

1 Introduction

Joint Service Publication (JSP) 940 Part 2 provides the guidance on managing and using information effectively, so that Ministry of Defence (MOD) Organisations, including MOD Agencies and bespoke trading entities, can meet the MOD National Quality Assurance Authority (MOD NQAA) directives set out in JSP 940 Part 1. The Part 2 guidance follows the policy and principles set out in the Part 1 directive that in attaining Quality, essential processes are required for the delivery of Defence materiel and services in support of Military Capability. This is achieved by ensuring correct standards are maintained by promoting the Governance, Assurance and Improvement (GAI) of acquisition, engineering and logistics support activities, through the consistent management of Quality across Defence.

This JSP documents the controls, assurance and other specific and unique MOD related guidance required to support the Part 1. It is designed to give the Organisation an indication of what good might look like as well as the processes, procedures and techniques that are the MOD's preferred approach; recognising that all teams, sections, Commands and Top-Level Budget Holders (TLBs) have customers and stakeholders [internal and/or external to the Organisation].

The guidance will not stipulate how the Quality Management Systems (QMS) are implemented as there are many ways in achieving this. It provides the Organisation with the guidance on how to achieve this, in the context of the Organisation's operational framework and its intent. This guidance identifies key activities for Management System implementation and is intended to enable the Organisation to achieve the outcomes and intent.

This JSP should be used in conjunction with the Managing Quality content within the Knowledge in Defence (KiD) web site, where the KiD will continue to provide more in-depth guidance. This Part 2 guidance will sign post any external guidance to aid Organisations in their understanding of the topic.

Quality Management is well documented in open-source literature and this JSP is not intended to provide guidance that is already available. As the MOD is very diverse, it would be difficult to provide overarching guidance to all the MOD TLBs. Where this guidance will give greater direction is in the MOD's unique area of Government Quality Assurance (GQA).

1.1 Scope

The scope of this JSP Part 2 is to guide the reader through:

a. Chapter 2 - Governance, Assurance and Improvement (GAI), which will provide reasoning for governance and control of the business which will raise performance levels of the Organisation. Ensuring controls are effective, risks are identified and managed, enabling consistent delivery of products and services and contributing to sustainable improvement. As well as ensuring that suitably qualified and experienced personnel are developed across the department to enable effective delivery of Quality Management and GQA.

b. Chapter 3 - Guidance on Quality Management as it is a key element of GAI. It provides maintenance and control of the business to raise performance at all levels of the Organisation.

c. Chapter 4 - Guidance to the Organisation on GQA covering all the 'standard Quality Assurance (QA)' activities that are undertaken by the Organisation to establish confidence that the contractual requirements relating to Quality are met for the acquisition and logistics support of defence materiel and services. As a large part of this topic is unique to MOD, some of the reference material will remain in the KiD and associated documents. Clear guidance and sign posting to this additional information is provided to ensure the topic is fully explained.

d. Chapter 5 - Guidance on Quality Improvement (QI) Tools and Techniques (T&T) as they assist with evaluating performance and developing ways of working to maximise effectiveness in delivery of required outcomes. QI is part of the GAI approach, where these improvement T&T assist in the assessment of the Organisations performance and Continual Improvement (CI). The guidance covering T&T are no more than examples of the plethora of tools and techniques available in the open-source literature.

1.2 Applicability

As directed in Part 1 of this JSP, the application of this Part 2 is applicable to all MOD TLB Organisations. JSP 940 **should** be detailed/referenced in TLB policy:

a. Chapters 2 and 3 should be applied within each TLB's respective QMS.

b. Chapter 4 should be applied when engaged in acquisition and support contracts, supplementing domain specific contractual quality requirements and regulations (as applicable).

1.3 Training/Skills

The MOD NQAA also has responsibilities for championing the Quality profession across all civilian and military staff in the Defence workforce. These roles also support the development of individuals to ensure capable, suitably qualified and experienced personnel (SQEP) are available across the Department to implement the policies and guidance within this JSP.

The MOD NQAA sponsors the MOD civilian functional competence framework for Quality and maintains a strategic overview of Quality-specific competences and training available across all MOD TLB areas, including the training courses for Quality delivered by the Defence Academy.

The competences required by a Quality Practitioner within the MOD are contained within Skills Footprint documents that can be found in the QCM-Policy Website within DEFNET.

Functional competence is supported by a suite of training courses delivered by the Defence Academy Business Skills College that are free of charge for MOD civilian and military staff, and also by a module-based Quality Development Scheme (QDS) administered by QCM-Policy. Further details on training available from Defence Academy or on the QDS can be found on the QCM-Policy Website.

1.4 References

Reference Identification	Title/Description
ACMP 2100	The Core Set of Configuration Management Contractual Requirements, (referenced in AQAPs 2110 and 2310, the UK National Policy for Configuration Management is published in JSP 945 - MOD Policy for Configuration Management).
AQAP 2070	NATO Mutual Government Quality Assurance Process
AQAP 2105	NATO Requirements for Quality Plans
AQAP 2110	NATO Quality Assurance Requirements for Design, Development and Production
AQAP 2131	NATO Quality Assurance Requirements for Final Inspection and Test
AQAP 2210	NATO Supplementary Software Quality Assurance Requirements to AQAP 2110 or 2310
AQAP 2310	NATO Quality Assurance Requirements for Aviation, Space and Defence Suppliers
AQAP 4107	Mutual Acceptance of Government Quality Assurance and Usage of Allied Quality Assurance Publications (AQAP)
BS EN 9100	Quality Management Systems - Requirements for Aviation, Space and Defence Organisations
Commercial Toolkit	On the Knowledge in Defence (KiD) web site
DEFCON 524A	Counterfeit Materiel
DEFCON 602A	Quality Assurance (With Deliverable Quality Plan)
DEFCON 602B	Quality Assurance (Without Deliverable Quality Plan)
DEFCON 627	Quality Assurance - Requirement for a Certificate of Conformity
DEFCON 638	Flights Liability and Indemnity
DEFSTAN 05 - 057	Configuration Management of Defence Materiel
DEFSTAN 05 - 061 Part 1	Quality Assurance Procedural Requirements - Concessions
DEFSTAN 05 - 061 Part 4	Quality Assurance Procedural Requirements - Contractor Working Parties
DEFSTAN 05 - 061 Part 9	Quality Assurance Procedural Requirements - Independent Inspection Requirements for Safety Critical Items
DEFSTAN 05 - 100	Ministry of Defence Requirements for Aircraft Flight and Ground Running
DEFSTAN 05 - 135	Avoidance of Counterfeit Materiel
DEFSTAN 05 - 138	Cyber Security for Defence Suppliers
Governance, Assurance and Improvement	Chartered Quality Institute - The Quality Profession Challenge - Jul 14
How Defence Works	Corporate Governance
JSP 456	Defence Catering Manual

Reference Identification	Title/Description
JSP 822	Defence Direction and Guidance for Training and Education
JSP 888	Inventory Management and Materiel Accounting (IMMA)
JSP 892	Risk Management
JSP 945	MOD Policy for Configuration Management
JSP 950	Medical Policy
ISO 12207	Systems and Software Engineering - Software Life Cycle Processes
ISO 15288	Systems and Software engineering - System Life Cycle Processes
ISO 25051	Software Engineering. Systems and software Quality Requirements and Evaluation (SQuaRE). Requirements for quality of Ready to Use Software Product (RUSP) and instructions for testing.
ISO 9000	Quality Management System - Fundamentals and Vocabulary
ISO 9001	Quality Management System - Requirements
MAP – 01	Manual of Maintenance and Airworthiness Processes (withdrawn 29/11/2019)
Regulatory Article 1164	Transfer of Aircraft and Equipment
Regulatory Article 4809	Acceptance of Components
STANAG 4107	Mutual Acceptance of Government Quality Assurance and Usage of Allied Quality Assurance Publications (AQAP)
National Quality Infrastructure	Guidance published on the “Gov.UK” website

1.5 Terms and Definitions

Unless stated below, the terms and definitions within ISO 9000:2015 apply.

Term	Definition
Acquirer*	Government and/or NATO Organisations that enter into contractual relationship with a Supplier, defining the product and quality requirements.
Authorised Quality Assurance Signatory	A MOD Crown Servant who meets the following: 1. has completed the Contract Quality Requirements (CQR) course and successfully passed the course examination; and 2. has completed the Counterfeit Avoidance on-line course and successfully passed the examination; and

Term	Definition
	3. holds a Letter of Authority issued by the Quality and Configuration Management Policy Team.
Award Criteria	As defined in the Procurement Act 2023 - Award Criteria means criteria set in accordance with the Act against which tenders may be assessed for the purpose of awarding a public contract following competitive tendering procedure.
Competent Government Quality Assurance (GQA) Practitioner	A Quality professional whose competence is demonstrated (at the appropriate proficiency level) against the MOD Quality Competence Set for GQA.
Competent Quality Management Practitioner	A Quality professional whose competence is demonstrated (at the appropriate proficiency level) against the MOD Quality Competence Set for Quality Management.
Competent Quality Practitioner	A Quality professional whose competence is demonstrated at the appropriate proficiency level against the MOD Quality Competence Set for Managing Quality.
Condition of Participation	As defined in the Procurement Act 2023 - A Condition of Participation is a condition that a supplier is required to satisfy if the supplier is to be awarded the public contract.
Conformity Assessment	Defined as the process demonstrating whether specified requirements relating to a product, process, service, system, person or body have been fulfilled. This definition is derived from ISO/IEC 17000 (Conformity assessment – vocabulary & general principles).
GQA Representative *(as defined within Allied Quality Assurance Publication (AQAP) 2110)*.	The Personnel with responsibility for GQA acting on behalf of the Acquirer.
Government Quality Assurance Surveillance	Government Quality Assurance Surveillance (GQAS) is defined as the systematic and regular monitoring of the contractual elements of the Supplier's QMS, processes and products, to provide confidence to the acquiring nation that the Supplier is fulfilling the requirements of the contract. Conducted by an authorised GQA Representative.
Government Quality Assurance *Note: GQA within NATO under STANAG 4107 is defined as the process by which National Authorities establish confidence*	Application of the GQA Framework requirements both internally, within the MOD Acquisition Organisation, and across the contractual boundary for the provision of

Term	Definition
that the contractual requirements relating to quality are met.	independent assurance and promoting Continual Improvement within the supply chain.
MOD Acquisition Organisation	MOD Section, Delivery, Project, Programme or Portfolio Team placing a contract. *Also see – Acquirer*
MOD Crown Servant	A member of the MOD Civil Service or Military employed by the Crown.
MOD Organisation	Within the MOD Organisational management structure, this may sit at TLB, Agency, Command, Section, Project or Delivery Team level; whichever is appropriate.
Operational Framework	A guide to how an Organisation delivers value to its customers and stakeholders through policies and processes, to achieve effective and efficient ways of working.
Product *(as defined within Allied Quality Assurance Publication (AQAP) 2110)*.	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.
Supplier *(as defined within Allied Quality Assurance Publication (AQAP) 2110)*.	Organisation that acts in a contract as the provider of products to the Acquirer. *Note: The term 'Contractor' is used within MOD commercial documents and defined in Defence Condition (DEFCON) 501 Definitions And Interpretations.*
Technical Discriminator	Term for a required 'technical characteristic' which is used as a Condition of Participation question where the outcome can only be a Pass/Fail.
Top Management (MOD)	In the MOD, Top Management are individuals at Chief Executive Officer/TLB Holder or equivalent level. This can also be broken down into Directorates at 2* level to focus on specific local level activities.
Weighted Measure	Term used for a required 'technical characteristic' which is used as a Condition of Participation question where the outcome is graded dependent upon the 'level' of compliance to the stated requirement.

1.6 Abbreviations

Abbreviation	Full Term
AAR	Authorities Authorised Representative

Abbreviation	Full Term
ACMP	Allied Configuration Management Publication
AQAP	Allied Quality Assurance Publication
BS	British Standard
CoC	Certificate of Conformity
COTS	Commercial Off The Shelf (see RUSP)
CI	Continual Improvement
CP&F	Contract Purchasing and Finance
CR	Contract Requisition
CWP	Contractor Working Parties
DEFCON	Defence Condition
Def Stan	Defence Standards
DIRC	Defence Irregularity Reporting Cell
DLF	Defence Logistics Framework
DMADV	Define Measure Analysis Design Verify
DMAIC	Define Measure Analysis Improve Control
DQA	Defence Quality Assurance
DQA FF	Defence Quality Assurance Field Force
DRIVE	Define Review Identify Verify Execute
DSP	Defence Sourcing Portal
EN	Euro Norm
EGRC	Engine Ground Running Certificate
FAC	Flight Authorisation Certificate
FLC	Front Line Command
GAI	Governance Assurance Improvement
GDP	Good Distribution Practice
GFA	Government Furnished Asset
GMDP	Good Distribution and Manufacturing Practice
GMP	Good Manufacturing Practice
GQA	Government Quality Assurance
GQAP	Government Quality Assurance Plan
GQAR	Government Quality Assurance Representative
GQAS	Government Quality Assurance Surveillance
IAF	International Accreditation Forum
IDA	In Depth Audit
ISO	International Standards Organisation
ITN	Invitation to Negotiate
ITT	Invitation to Tender
JSP	Joint Service Publication
KiD	Knowledge in Defence
KPI	Key Performance Indicator
LFE	Learning From Experience
MA	Marketing Authorisation
MAA	Military Aviation Authority
MAP	Manual of Maintenance and Airworthiness Processes
MOD	Ministry of Defence
MPTF	Military Permit To Fly
NAB	National Accreditation Body

Abbreviation	Full Term
NATO	North Atlantic Treaty Organisation
NQAA	(MOD) National Quality Assurance Authority
PAIQ	Partnering Approach for Improving Quality
PCAE	Pre-Contract Award Evaluation
PDCA	Plan Do Check Act
PDI	Performance Delivery Improvement
PM	Project Manager
PQMP	Project Quality Management Plan
Pt	Part
PSQ	Procurement Specific Questionnaire
QA	Quality Assurance
QAG	Quality Assurance Group
QCM Pol	Quality and Configuration Management Policy
QI	Quality Improvement
QM	Quality Management
QMS	Quality Management System
QPI	Quality Performance Indicator
RFQ	Request for Quote
RPAS	Remotely Piloted Air Systems
RTS	Release To Service
RUSP	Ready to Use Software Product (also see COTS)
SCP	Safety Critical Product
SME	Subject Matter Expert
SoR	Statement of Requirement
SPC	Statistical Process Control
SQEP	Suitably Qualified and Experienced Personnel
SQuaRE	Software Product Quality Requirements and Evaluation
SRD	Standard Related Document
TLB	Top Level Budget [*Holders*]
T&T	Tools and Techniques

2 Governance, Assurance and Improvement

2.1 Introduction

This section of the Joint Service Publication (JSP) is intended to give an introduction to the Governance, Assurance and Improvement (GAI) Model and explain why and how the model should be used in the MOD. This section also covers the benefits that can be realised by implementing the GAI Model.

Forming the basis of all MOD Quality policy, applying the GAI Model will ensure the interests of customers and stakeholders are understood; that appropriate methodologies are established to mitigate risk and protect reputation; and improve ways of working to maximise effectiveness and eliminate unnecessary costs. All MOD Team Leaders have the responsibility for implementing the requirements for GAI.

The Governance, Assurance and Improvement (GAI) Model as defined by the Chartered Quality Institute (CQI) in the Quality Profession Challenge (Jul 14) is described below in Figure 2-1.

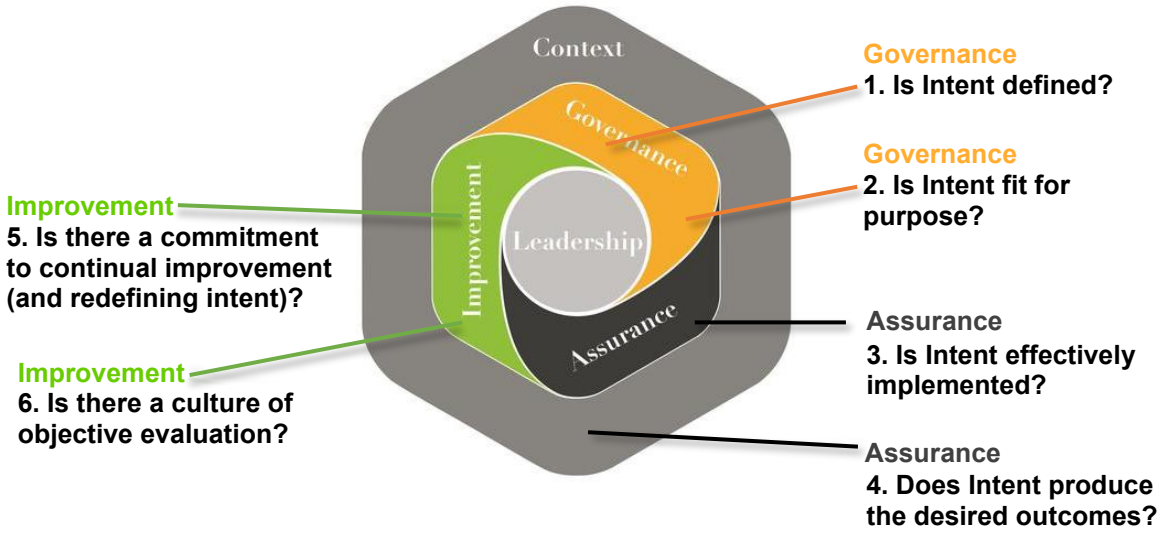


Figure 2-1: Governance, Assurance and Improvement Model

2.2 Governance

2.2.1 Introduction

The Governance section of the GAI Model ensures all Organisation requirements are reflected in operational frameworks, policies, processes and plans, and that these meet all stakeholder requirements. Governance also needs to answer the following two questions:

a. **Is management intent defined?**

Top Management are key to enabling successful delivery of services or products that meet the criteria of Time, Cost and Quality, by setting appropriate intent at the highest levels. In the MOD, Top Management are individuals at Chief Executive Officer/TLB Holder or equivalent level. This can also be broken down into Directorates at 2* level to focus on specific local level activities.

Top Management should be using appropriate methods to establish its stakeholder needs, expectations and views. In other words, determining the interests of relevant interested parties. A mechanism should be in place to periodically monitor performance.

Top Management should also be ensuring their policies, processes and plans have been produced with consideration of interests of relevant interested parties. Any objectives the Organisation sets (Ref ISO9001:2015 clause 6.2.) need to be consistent with MOD policy, evidence should exist that demonstrates that the Organisation is continually evaluating its risks and opportunities; resetting policy, process and plans when necessary to remain effective.

b. **Is management intent fit for purpose?**

Top Management need to consider whether the outcomes it intends to deliver are what its stakeholders really want.

The Organisation's policies, processes and plans should be effective in meeting stakeholder expectations, removing variation, minimising risks and maximising opportunities. Top Management need to ensure that the Organisations management systems are being continually assessed and improved.

Top Management should be displaying the values they prescribe through their behaviour and actively developing the capacity and capability of the Organisation to become effective. This enables individuals to perform effectively in defined roles with clear accountabilities.

2.2.2 Types of Governance

There are four types of Governance within this JSP: Corporate, Operational, Acquisition and Business Governance. These are explained below.

2.2.2.1 Corporate Governance

Corporate Governance is a system that instils policies and rules for maintaining the cohesiveness of an Organisation. Corporate Governance is designed to hold an Organisation to account whilst helping it steer clear of financial, legal and ethical pitfalls. From a MOD perspective, Corporate Governance is set by the UK Government and outlined in: *How Defence Works - Corporate Governance - The Defence Operating Model*.

2.2.2.2 Operational Governance

Operational Governance enables the Organisation to predictably, consistently and efficiently deliver the top management strategic intent. It should dovetail into Corporate Governance so the Organisation's ability to maximise performance improvement is not compromised by failures that are routinely delivering low value for money. These failures

can also have a negative effect on the reputation of the Organisation and most importantly, cost lives.

2.2.2.3 Acquisition Governance

Acquisition Governance ensures the Organisation's acquisition planning strategy addresses stakeholder requirements, for example Statutory, Regulatory, Customer, Society and Workforce. It ensures the identification and articulation of the acquisition requirements, inclusive of quality in MOD contracts. It defines how the management system processes for acquisition will be applied to particular projects or activities and prioritises the Organisation's quality activities based on risk and opportunity.

The quality activities within Acquisition Governance are covered in more detail in the **Government Quality Assurance** Chapter 4 within this JSP.

2.2.2.4 Business Governance

Business Governance develops process management capability (ownership, definition, implementation and improvement) across the Organisation to deliver consistent results. It defines the Organisation's quality policies, plans and processes and ensures that roles, responsibilities, authorities and accountabilities are defined in the governance arrangements within the management system.

It ensures the Organisation's policies, processes and plans are effective in meeting stakeholder expectations, removing variation, minimising operational risk and maximising efficiency. It also supports the senior management team in ensuring that the operational approach and system of business management is continually assessed and improved.

The activities within Business Governance are covered in more detail in the **Quality Management** Chapter 3 within this JSP.

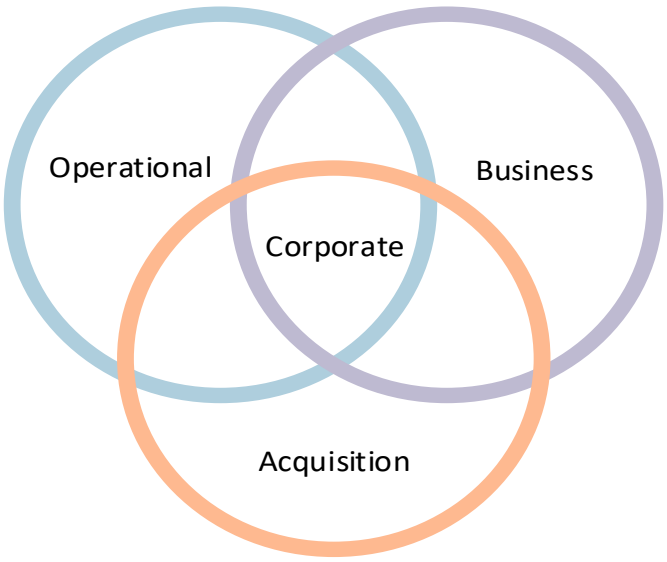


Figure 2-2: Governance Relationship

2.3 Assurance

2.3.1 Introduction

Embedding a culture of assurance ensures that policies, processes and plans are effectively implemented, and that all outputs are consistent with requirements.

Assurance in the GAI Model provides an assessment as to whether the user requirements have been satisfied and are operating effectively. In itself, assurance does not deliver a project, but it can identify and help mitigate any risks to successful delivery present in a project's sponsorship, business case and benefits plan, governance and reporting arrangements, contracting and supply chain strategies, commercial and delivery skills, funding and resourcing and overall project management approach.

Assurance provides information to those that Sponsor, govern and manage a project to help them make better informed decisions which reduce the causes of project failure. It is intended to promote the conditions for success and increase the chance of delivering the required outcome cost effectively whilst remaining safe.

Assurance can highlight a breach of time, cost and quality control limits as agreed at approval of the business case and trigger appropriate intervention. Improved visibility of project performance, tracked at the portfolio level, should lead to decisions across projects and Organisations. Assurance is also a key enabler for managing improvement opportunities across the Organisation.

When thinking about Assurance, you need to go back to the answers given to the first two Governance questions (is intent defined and is it fit for purpose) and ask yourself:

a. **Is management intent effectively implemented?**

The fact that management intent has been defined and is fit for purpose counts for little if the intent is not subsequently translated into practice.

(1) are the actions taken to address risks and realise opportunities observable?

(2) are plans established to achieve the Organisation's quality objectives being operated?

(3) is top management displaying the leadership that the International Standards Organization (ISO) 9001:2015 standard dictates?

In short, it is all about ensuring that the Organisation is actually doing what it has said it will do – practising what it has preached.

b. **Does it produce the intended outcomes?**

In order to determine whether the products and/or services are producing the desired outcomes, evidence will need to be sought that verification has been performed at prescribed points in the production or service provision process to confirm defined acceptance criteria have been met. Evidence should also be sought of validation to ensure that the product or service is fit for its intended use.

2.3.2 Types of Assurance

There are two types of Assurance within this JSP; **Acquisition Assurance** which looks at the deliverable focus and **Business Process Assurance** which looks at internal focus.

2.3.2.1 Acquisition Assurance (deliverable)

Through the application of the Organisation's Quality Management System.

Acquisition Assurance ensures appropriate methods/processes are used to select suppliers and to ensure flow-down of customer and stakeholder requirements to the supply chain. It uses appropriate methods/processes to assess supplier capability, performance and to identify and analyse risk, failures and non-conformances. It also supports the Organisation in evaluating any issues, concerns, risks and development of appropriate mitigation and solutions to ensure effective resolution.

In practical terms, it provides assurance to top management that the performance of suppliers and supply chains continue to meet the Organisation's and stakeholders' requirements. It ensures that supply chain design and supplier selection processes include an objective assessment of the capability of suppliers to fulfil all the requirements of the Organisation and its stakeholders.

It can also help identify risks and opportunities associated with the Organisation's supply chain and procurement strategies, co-ordinate appropriate mitigation activities and deploy an appropriate assurance regime.

Acquisition Assurance also helps to identify relevant standards and appropriate contractual arrangements to ensure effective flow down of customer and stakeholder requirements throughout the Organisation's supply chains. It also identifies and uses appropriate measurement techniques including risk-based surveillance to assess and report on levels of conformance and improvement in the Organisation's supply chains.

The activities within Acquisition Assurance will directly contribute to the **Government Quality Assurance** Chapter 4.

2.3.2.2 Business Process Assurance (internal)

Business Process Assurance ensures the flow-down of customer and stakeholder requirements across the Organisation. It uses requirements management, process implementation and tailoring principles, risk management and performance measurement to ensure effective planning and internal controls are in place. It uses appropriate methods to ensure an effective balance between internal confidence and independent assurance.

It helps ensure management intent, as reflected in its policies, processes and plans, through its effective implementation. It can identify risks, failures and non-conformances associated with customer and stakeholder requirements; also ensures effective action is taken to identify root causes and resolve issues.

In practical terms, it bases quality activities on identified risks and opportunities associated with the Organisation's processes. Using Business Process Assurance, you can plan and implement an appropriate regime of independent assurance and internal confidence activities for the Organisation, project or product/service delivery stream, based on the identified risks and opportunities.

It can also measure and monitor levels of customer and stakeholder satisfaction with respect to the Organisation's processes and plans, using the findings of independent assurance activities to assess and report on achievement of the Organisation's planned performance and the levels of compliance being achieved.

Independent audits of the Organisation's management system processes may be conducted to determine compliance to planned requirements. This also provides assurance that legal, regulatory, process control and safety requirements remain effective, particularly during periods of change.

Below are a number of processes, groups and organisations that can assist in the assurance of delivered products and/or services (this list is not exhaustive):

- Assurance of Quality in Defence Acquisition.
- Government Quality Assurance Surveillance.
- Quality Assurance Groups.
- Pre-Contract Award Evaluation.
- Partnering Audit Arrangements within the Military Air Environment.
- MOD Government Quality Assurance Representative Organisations.

More information about these processes, groups and Organisations is explained in **Government Quality Assurance** Chapter 4.

2.4 Improvement

2.4.1 Introduction

The Improvement Chapter of the GAI Model facilitates a culture of evaluation, learning and improvement which drives more effective, efficient and agile ways of working to support business strategy, to enhance reputation and increase value for money.

The final two questions you need to answer are:

a. **Is there a culture of objective evaluation?**

The objective evaluation of any Organisation's management system should be first and foremost built around a robust internal audit programme. This should utilise risk-based thinking to direct audit resource to where it can add the most value, either through mitigation of business risk or realisation of business opportunities.

Where a culture of objective evaluation is well embedded, clear evidence will be available that the outcomes from audits and reviews are acted on quickly and with purpose.

b. **Is there a commitment to continually improve?**

Continual Improvement (CI) can be seen as 'reoccurring activity to enhance performance', where performance can relate to the management of activities, processes, products, services, systems or Organisations.

Some questions to ask to see if loops have been closed could be:

a. are nonconformities and their associated corrective action processed in a timely manner?

b. has the action taken to address risks and opportunities been evaluated, and is context being periodically revisited?

c. is top management using its performance data to keep the business moving forwards?

Such questions are essential for establishing whether there is a commitment to CI.

There are three main benefits of using Improvement techniques.

a. **Gathering Insight** – uses appropriate methods to understand all stakeholder needs and to identify any changes to the Organisation's context, including changes to the market, customer requirements and other factors impacting on the Organisation. It uses benchmarking and other appropriate tools and techniques to evaluate performance and improvement priorities.

b. **Evaluating Measures/Results** – facilitates the development and use of appropriate measures of operational performance and product/service quality across the Organisation to ensure fact-based decision making. It also helps to establish priorities for change.

c. **Implementing Change** – evaluates the nature and magnitude of change required (incremental, step change, transformational) and how to achieve the required changes through the development of the Organisation's people, processes, plans, tools, technologies and/or infrastructure. It also identifies any issues associated with the Organisation's culture with respect to achieving and sustaining the desired levels of operational performance and product/service quality.

The activities within Improvement will directly contribute to the **Quality Improvement** Chapter 5.

3 Quality Management

3.1 Introduction

This chapter provides the guidance on the implementation of MOD requirements and their application to achieve the directive(s) within Joint Service Publication (JSP) 940, Part 1, Section 1.3. It is intended to enable the Competent Quality Practitioner to develop and maintain a Quality Management System (QMS). Further supporting advice and guidance can be found within the relevant sections in Managing Quality on the Knowledge in Defence (KiD) web site.

3.2 What is Quality Management?

Quality Management is the process of ensuring that all the activities necessary to deliver organisational outputs meet customer and stakeholder requirements; that they are planned and carried out, efficiently and effectively. Quality Management needs to be governed, assured and improved ensuring the delivery of high standard products, services and outcomes critical to MOD Organisations.

JSP 940 Part 1 contains the directive and requirements for the management of quality and states that:

In meeting the MOD policy requirements for Quality Management, all Top Management within MOD Organisations shall:

> ***a. take responsibility for the quality of the products, services, capabilities or information they are managing, and for controlling the internal MOD processes required to deliver them.***
>
> ***b. develop and implement a Quality Management System using the principles defined in the ISO9000 standard as follows: Customer Focus; Leadership; Engagement of People; Process Approach; Improvement; Evidence Based Decision Making; and Relationship Management***

(JSP 940 Part 1 Section 1.3)

The development and implementation of a management system that at least meets the principles of International Standards Organization (ISO) 9001 will:

a. improve management of risk through risk-based thinking (*JSP 892 - Risk Management*).

b. enhance reputation and confidence in the Organisation.

c. demonstrate control of processes through consistent and planned ways of working.

d. achieve more efficient use of resources.

e. allow a greater visibility of the Organisation’s performance.

f. identify improvement opportunities.

g. increase customer satisfaction through the effective delivery of organisational outputs.

h. promote personnel involvement and improvement.

3.3 The Management System and its Development

A management system is a framework of policies, processes and procedures used by an Organisation to ensure that it can fulfil all the tasks required to achieve its objectives (*International Organization for Standardization (2001) Guidelines for the justification and development of management system standards. International Standard ISO Guide 72, Geneva, Switzerland)*. It can also be interpreted as an Operational Framework, providing an integrated and coherent approach to an Organisation in performing its mission responsibilities and achieving strategic direction through Leadership (*ISO 9000:2015 Quality Management Systems - Fundamentals and Vocabulary*).

Quality Management introduces a number of important management principles to guide an Organisation towards improved performance; refer to Figure 3-1 below:

Figure 3-1: The Seven Quality Management Principles

Note: Further information on the Quality Management Principles can be found in Managing Quality on the KiD.

In order to establish a management system, the MOD has considered the following key elements which are all centralised around Leadership; refer to Figure 3-2 and Table 3-1 below.

Figure 3-2: The Model for a Management System or Operational Framework

Key Topics	Benefits
The Context of the Organisation	A greater understanding of the Business with the associated risks and opportunities.
The Needs and Expectations of Interested Parties	The Organisation's activity will be performed to the highest standards with the reduction of unnecessary cost.
Key Responsibilities of the Organisation	Clarity of responsibilities and accountabilities to individuals at all levels.
Key Activities of the Organisation	Defined, consistent policies and processes across the Organisation with the breakdown of silo working.
Allocation of Activities to Personnel	A greater understanding of other activities and resources required to achieve the Organisational Objectives with increased Organisational performance, morale and motivation.
Management Organisation and Operating Approach	Establishment of Organisation Structures and Committees, defining the flow of communication, aiding top management to identify the talent and resource requirement.
Evaluation of Compliance	Assess and confirm the effectiveness of the management system meeting the needs and expectations of interested parties.

Table 3-1: Benefits of Considering the 7 Key Steps to Establish a Management System

3.3.1 The Context of the MOD Organisation

The context of the MOD Organisation is about understanding the business by gathering Organisational knowledge (*ISO 9001:2015 - Quality Management Systems – Requirements*) and identifying all of the internal and external issues, risks and stakeholder requirements that are relevant and may affect the strategic direction of the Organisation and management system (*How Defence Works - Corporate Governance - The Defence Operating Model*). Organisational knowledge is required for competence, awareness and communication of the management system.

In order to understand the context of the business, consider the following steps:

a. establish the interested parties / stakeholders who effect or could be affected by the management system; for example:

(1) customers.

(2) end users.

(3) employees.

(4) external providers or suppliers.

(5) regulators.

(6) other MOD Organisation or Agencies.

(7) the Government.

(8) the public.

(9) taxpayers.

b. monitor all interested parties relevant to the management system on a regular basis, as the context will change through time.

c. through risk-based thinking identify the risk and opportunities that need to be managed (*ISO 9001:2015 - Quality Management Systems - Requirements, Clause 6.1 Risks and Opportunities*). This should involve contingency planning and preventive action (*JSP 892 - Risk Management*).

3.3.2 Needs and Expectations of Interested Parties

Needs and expectations are satisfied by considering all aspects valued by interested parties during the delivery of strategic, tactical and operational processes. Engagement with key interested parties at the earliest availability will provide the opportunity to ensure the Organisation's activity is performed to the highest standards with the management of efficiency and costs.

a. define top management's intent through the scope of the management system by considering the context of the Organisation and interested parties.

b. approve a Quality Policy and Strategy relevant to the scope of the Organisation, considering risks, opportunities, requirements of the interested parties and improvement.

c. agree and approve specific criteria with the relevant interested parties to inform measurable business metrics, Key Performance Indicators (KPIs) and milestones that will be consistent with the Quality Policy and strategic direction.

d. understand the aspirations of the interested parties to exceed their needs and expectations, in particular the customers of the Organisation.

e. ensure continual and optimal alignment with the evolving needs and aspirations of interested parties through periodic reviews and making the best use of resources.

f. encourage continual Improvement (refer to Chapter 5) and the enhancement of customer satisfaction.

g. ensure any property belonging to customers and external providers are treated with adequate care (*ISO 9001:2015 – Requirements*).

3.3.3 Key Responsibilities of the Organisation

It is necessary to define clearly the responsibility, authority and interactions of all personnel whose work affects the quality of products and services, as well as the governed approaches, assurances and improvements that are needed for effective operation within the MOD Organisation. This provides clarity of responsibilities and accountabilities to individuals at all levels.

There is a primary emphasis on the key responsibilities of Leadership and top management to:

a. demonstrate commitment to the management system by initiating, planning and resourcing its direction to fulfil its mission and purpose.

b. express the mission and vision of the Organisation’s future in Policies or Strategies.

c. ensure the Quality Policy and Quality Objectives are compatible with the strategic direction of the Organisation.

d. ensure the management system requirements are integrated into the Organisation’s processes.

e. understand the Organisation’s risks and opportunities and the impact on the delivery of products or services.

f. consider establishing a committee to monitor and review the overall effectiveness and efficiency of management systems.

g. consider the availability of resources required to fulfil responsibilities.

h. define and assign relevant responsibilities and authorities to the committee, process owners and suitably qualified and experienced personnel for promoting a culture of risk-based thinking, enhancing customer focus and improvement, whilst remaining accountable for the overall effectiveness.

Note: References for this section include: ISO 9001:2015 - Quality Management Systems – Requirements; JSP 892 - Risk Management. and the MOD .gov website.

3.3.4 Key Activities of the Organisation

A framework of interrelated processes (refer to Figure 3-3 below) through the adoption of a 'Process Approach', as defined in ISO 9000:2015, Quality Management Systems, Fundamentals and Vocabulary, will enable an Organisation to deliver outputs to satisfy objectives and meet the needs of the interested parties, preventing silo working and encouraging cross-departmental or matrix management working.

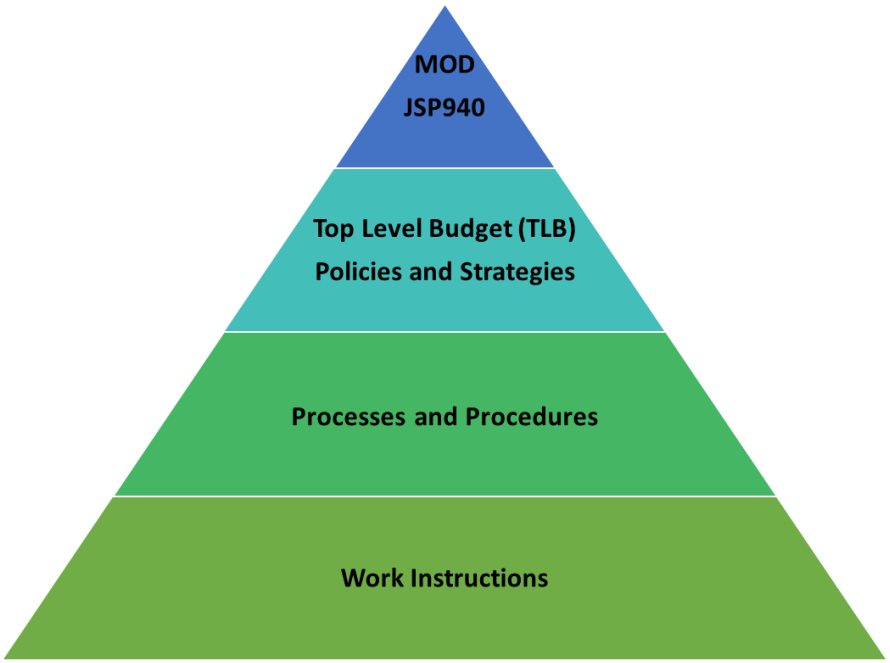


Figure 3-3: A Typical Framework of a Management System in the MOD

When developing a management system, the following activities should be considered:

a. identify the key processes required to fulfil the core activities in the Organisation.

b. perform a gap analysis against the ISO 9001 standard.

c. establish resources to support the development and implementation of the processes, including the process owners, authors, peers and user reviewers.

d. agree and develop the hosting of the management system that is easy to use and accessible by all employees, considering software or web-based options.

e. ensure effective and appropriate controls to manage the processes are in place, with appropriate permissions to view and authority to change.

f. ensure templates, process sequences and interactions have been agreed through appropriate working groups with process owners.

g. ensure internal audits or assessments are delivered through a risk-based programme with suitably qualified Internal Auditors.

h. raise awareness and encourage understanding of the application of the Quality Policy, processes and management system requirements through both internal and external communication to all areas of the MOD Organisation.

i. ensure individuals are aware of their own contributions to the effectiveness of the management system, including the benefits of continual improved performance.

The management system needs to be maintained once it has been developed and implemented, to ensure continual compliance.

3.3.5 Allocation of Activities to Personnel

The allocation of activities to personnel across the Organisation is a critical success factor and issuing responsibilities to perform these activities allows individuals to become invested in the Organisation, thereby empowering them and improving their effectiveness and efficiency.

The appropriate co-ordination of activities to personnel will result in better Organisational performance, enhance productivity with increased morale, motivation and participation. Additionally, it allows personnel within the Organisation to gain a greater understanding of other activities and resources required to achieve the Organisation's objectives.

When allocating activities to personnel, the following should be considered:

a. consider the risks and priority of the activity based on the Organisation's objectives.

b. assign activities closely aligned with strengths of individuals by evaluating the competency and skill set required to fulfil the activity and ensure these are met and maintained, whilst retaining documented evidence.

c. consider the development opportunities that the activities may present for the personnel.

d. encourage individuals to take responsibility for their activities, ensuring they are appropriately empowered and treated fairly.

e. recognise, value and reward individuals for successful completion of activities.

f. encourage employee involvement at all levels to enable all competencies and skills to be utilised effectively.

3.3.6 Management Organisation & Operating Approach

Management Organisation improves operational efficiency by defining the flow of communication and reporting requirements which are essential to an Organisation's

success. It can also assist top management to identify the talent and resource requirement, and:

a. ensure frequent and effective communication throughout the Organisation.

b. ensure reporting relationships are clear, concise and known (Organisation Charts).

c. make employees aware of the customer's requirements through the Organisation's quality policy, business metrics, objectives, KPIs or milestones that are relevant to them.

d. consider how knowledge has been determined for the processes and activities of the Organisation for the delivery of products and services.

e. identify the information that is needed and consider how knowledge can be updated and maintained within the Organisation, for example by addressing succession planning.

3.3.7 Evaluation of Compliance

The evaluation of the MOD Organisation's progress against business metrics, objectives, KPIs or milestones are vital to confirm the effectiveness of the management system, meeting the needs and expectations of interested parties.

In order to evaluate the compliance of the MOD Organisation, consider the following steps:

a. review, update and agree key business metrics, objectives and KPIs with interested parties to aid improvement activity, considering the purpose of change, the potential consequences, risks and opportunities; as defined in JSP 892 - Risk Management; the resource and allocation of responsibilities whilst maintaining the integrity of the management system.

b. review, update and agree the context of the Organisation at least annually with top management.

c. review any management system trends.

d. action and close audit findings, including nonconformities, corrective actions, whilst being mindful of occurring trends with regular reviews.

e. review customer, interested parties and stakeholder feedback, including both satisfaction and dissatisfaction.

f. develop and complete action plans to address poor results, trends or feedback taking into consideration the importance of the processes concerned and the requirement to meet external regulatory conditions.

g. agree reporting methods at least annually through board meetings.

h. consider lessons learnt from experiences to facilitate improved ways of working for the future.

i. benchmark good practices both internally and externally.

j. share best practice both internally and externally.

QUALITY MANAGEMENT WITHIN DEFENCE FOR MEDICAL MATERIEL

A1. Introduction

1.1 The management of medical materiel is a highly important area regulated by the Medicines and Healthcare product Regulatory Agency (MHRA). Policy on the management of medicines can be found at JSP 950 Medical Policy Leaflet-9-2-1.

1.2 One of the key regulatory requirements is to maintain a Quality Management System (QMS) to ensure the principles of Good Distribution and Manufacturing Practice (GMDP) are implemented to guarantee medical products are effective, safe, reliable, free from contamination or defect and are not falsified.

1.3 The QMS also protects the distribution system from counterfeit products, unapproved, illegally imported, stolen, substandard, adulterated, and/or misbranded products.

A2. Good Distribution Practice (GDP)

2.1 GDP is the term used to describe the processes involved in procuring, holding, supplying, or exporting medical products. GDP ensures compliance with policy and regulations; clear definitions and the delivery of quality related management responsibilities; delivery of products to the right customer on time; and a documented quality management system setting out responsibilities, process, and risk management principles.

A3. Good manufacturing practice (GMP)

3.1 GMP is the minimum standard that a medicines manufacturer **shall** meet in their production processes. Products **shall** be of consistent high quality, be appropriate to their intended use and meet the requirements of the marketing authorisation (MA) or product specification.

A4. Quality Management for Medical Materiel

4.1 The policy and guidance within JSP 950 and JSP 940 are to be applied by all units involved in any aspect of the storage and distribution of medicines, from the manufacturer to the end user, or the person dispensing or supplying medicines directly to a patient. This includes all units involved in different stages of the supply chain of medical products; suppliers, distributors, logistics providers, traders, transport companies and forwarding agents and their personnel.

4.2 Quality Management is important for Medical Materiel because it provides a systematic process for assessing risk and controlling all aspects of activity relating to medical products. It protects safety, integrity and efficacy of the products, and ultimately in place to protect patients.

4.3 Further authoritative advice and guidance is published in the Maintaining Quality for Medical Materiel topic within Managing Quality in Knowledge in Defence.

Note: There are other regulated environments which contain requirements for the application of Quality Management Systems to deliver the specific needs to those environments.

ANNEX B TO
JSP 940 PART 2
CHAPTER 3

QUALITY MANAGEMENT WITHIN DEFENCE FOR FOOD

A1. Introduction

1.1 The management of food is an important area regulated by the Food Safety Act 1990 and the Animal Welfare Act 2006. Policy on the management of food can be found at JSP 456 Defence Catering Manual.

1.2 One of the key regulatory requirements is to maintain a comprehensive Food Safety Management System (FSMS) to ensure the principles of HACCP (Hazard Analysis Critical Control Points) and Good Distribution and Manufacturing Practice (GMDP) are implemented to guarantee food products are safe, authentic, correctly labelled, free from contamination or defect.

1.3 The FSMS **shall** include principles of VACCP (Vulnerability Assessment and Critical Control Points) and TACCP (Threat Assessment and Critical Control Points) to protect the distribution system from counterfeit products, unapproved, illegally imported, stolen, substandard, adulterated, and/or misbranded products.

A2. Quality Management for Food

2.1 The policy and guidance within JSP 456 and JSP 940 are to be applied by all stakeholders involved in any aspect of the storage and distribution of food, from the manufacturer to the end user, or the person supplying food directly to the consumer. This includes all stakeholders involved in different stages of the supply chain of food products; suppliers, distributors, logistics providers, industry partners, traders, transport companies and forwarding agents and their personnel.

2.2 Quality Management is important for food because it provides a systematic process for assessing risk and controlling all aspects of activity relating to food products. It protects safety, integrity and authenticity of the products, and ultimately in place to protect consumers.

2.3 Further authoritative advice and guidance is published in the Defence Requirement for Food document found on gov.uk; [Defence Requirement for Food - GOV.UK].

A3. Pre-requisite Programmes (PRPs)

3.1 PRPs are the basic practices and conditions essential for safe production, handling and provision of food. They are also known as Good Manufacturing/Hygiene Practices and are the foundations of HACCP. Implementation of PRPs is the minimum standard that a food manufacturer **shall** meet in their production processes. Products **shall** be of consistent high quality, be appropriate to their intended use, meet the legal requirements of labelling and conform with product specifications.

A4. Good Distribution Practice (GDP)

4.1 GDP is the term used to describe the processes involved in procuring, holding, supplying, or exporting food products. GDP ensures compliance with policy and regulations; delivery of products to the right customer on time; delivery of food products at the correct temperature, and within the correct shelf-life and a documented quality management system setting out responsibilities, process, and risk management principles.

Note: Further supporting information will be published in the ‘Quality Management Within Defence For Food’ topic in Managing Quality on the KiD.

4 Government Quality Assurance

4.1 Introduction

Government Quality Assurance (GQA) consists of multiple activities which **should** be applied across both the Procurement and Support elements of the Ministry of Defence (MOD) Acquisition process. As part of an applied Quality Management System (QMS), its primary role is to deliver technical assurance to the MOD for the management of risk. This is done both internally and, where applicable, across the contractual boundary in order to achieve the requirements of the Defence Lines of Development (DLOD).

GQA **should** be applied to all MOD contracts and tailored by Competent Quality Practitioners to deliver the appropriate contractual quality conditions and quality assurance across the supply chain.

This chapter provides the MOD requirements and the guidance for their application to achieve the directive(s) within Joint Service Publication (JSP) 940, Part 1, section 1.4 for acquisition. It has been aligned with the GQA Framework (see Figure 4-1) to provide a consistent approach to the application of GQA for all defence acquisition. Further supporting advice and guidance can be found within the relevant sections in Managing Quality on the Knowledge in Defence (KiD) web site.

Note: For Government Quality Assurance: A Functional Framework for Acquisition. Refer to Managing Quality on the KiD.

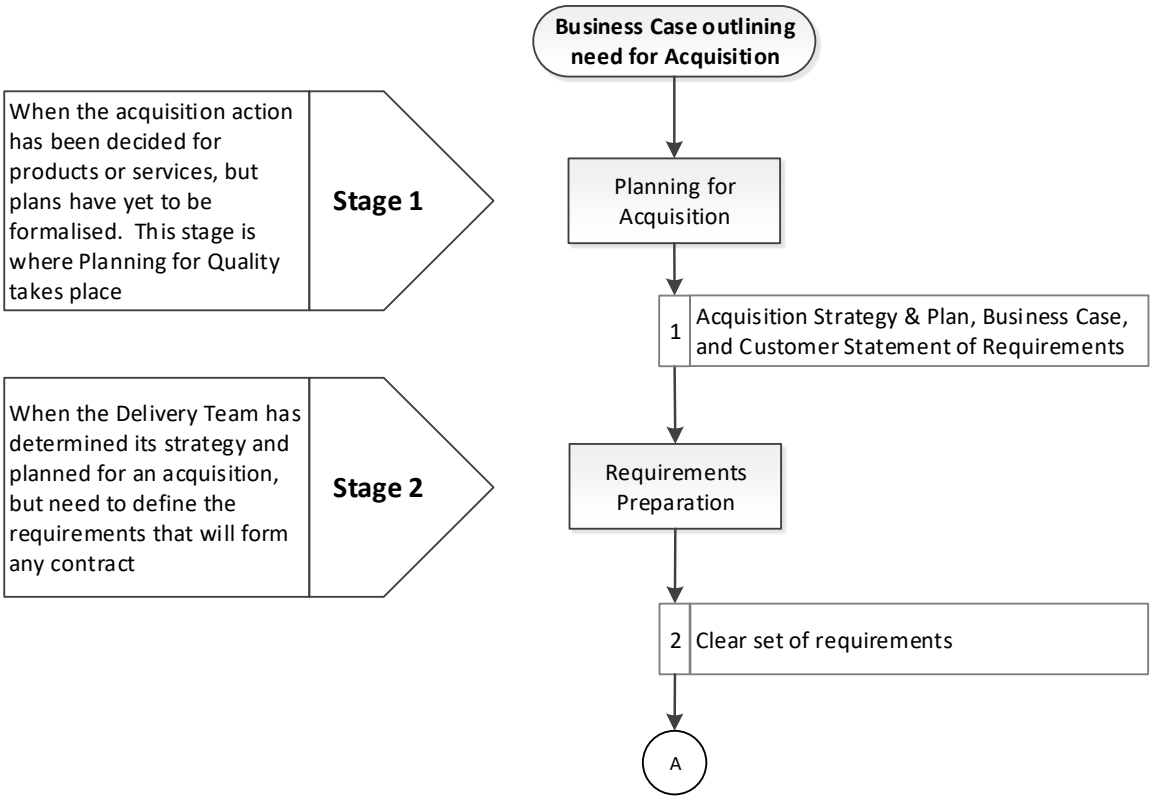


Figure 4-1a: GQA Framework Stages

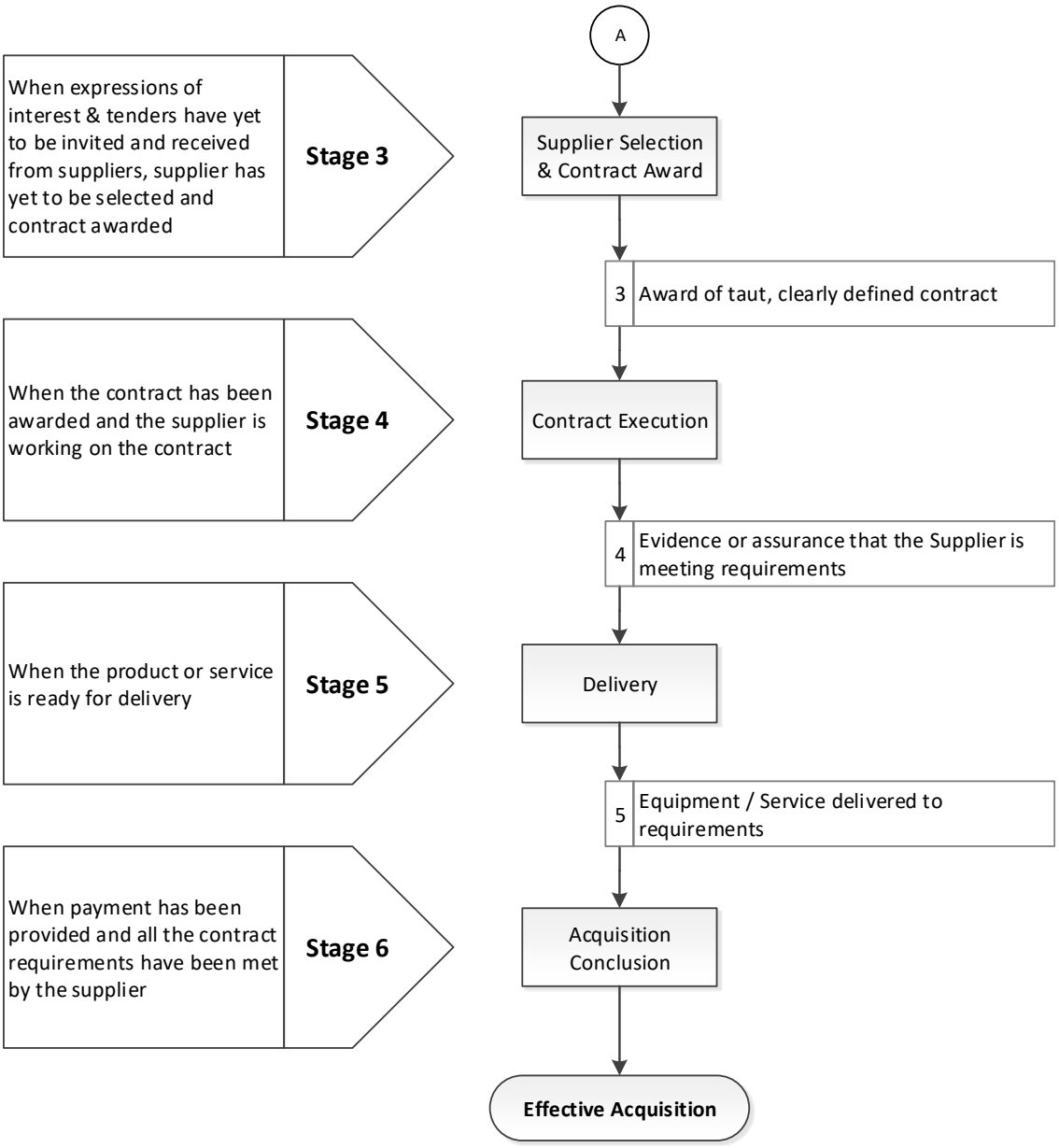


Figure 4-1b: GQA Framework Stages

4.2 Planning for Quality

4.2.1 Introduction

Planning for quality is a process where stakeholder (customer, project and business) quality requirements are captured, planned, embedded, measured, and continually improved upon throughout the life of the project. This is achieved through the application of approved and accepted quality planning using a Plan-Do-Check-Act philosophy and the principles of Through Life Management.

Quality planning is an integral element within the wider project planning activity and is intended to incorporate all project quality activities; referring to other functional elements within the Organisation's planning hierarchy (see Figure 4-3).

Note: Acquisition and/or contractual support contracts for the provision of training to the MOD apply the requirements of JSP 822 (Defence Direction and Guidance for Training and Education) and those detailed within Chapter 4 of this JSP.

4.2.2 Requirement

This section provides the MOD Requirements and their application to achieve the directive within JSP 940, Part 1, Section 1.4 ‘a’ and ‘b’.

In meeting the MOD policy requirements for GQA, all Top Management within MOD Organisations shall as a minimum:

> ***a. develop a strategy and plan for achieving quality, including stated and measurable acceptance criteria, whilst taking account of previous learning from experience.***
>
> ***b. formalise any delegation of authority for undertaking GQA activities, only to suitably competent staff with the necessary resources.***

(JSP 940 Part 1 Section 1.4)

Effective quality planning in the MOD **should** be conducted and documented for the procurement and support of all products supplied to the MOD.

Quality planning **should** be conducted by a Competent Quality Practitioner within a structured process as part of a MOD Organisation’s adherence to their QMS.

Quality planning is to follow the MOD Planning for Quality Model, outlined in the Planning for Quality Guidance Document on the KiD, adopting the eight Planning for Quality Principles (Figure 4-2). The results of any quality planning **should** be detailed within the Quality Management Plan, to be developed from the early stages of Capability Requirements Identification.

The level of planning required can be tailored to meet the needs of the acquisition / in-service support activities to be conducted.

4.2.3 Acquisition Planning for Quality Principles

Eight principles have been identified for use by the MOD in order to facilitate effective planning for quality and improved project performance.

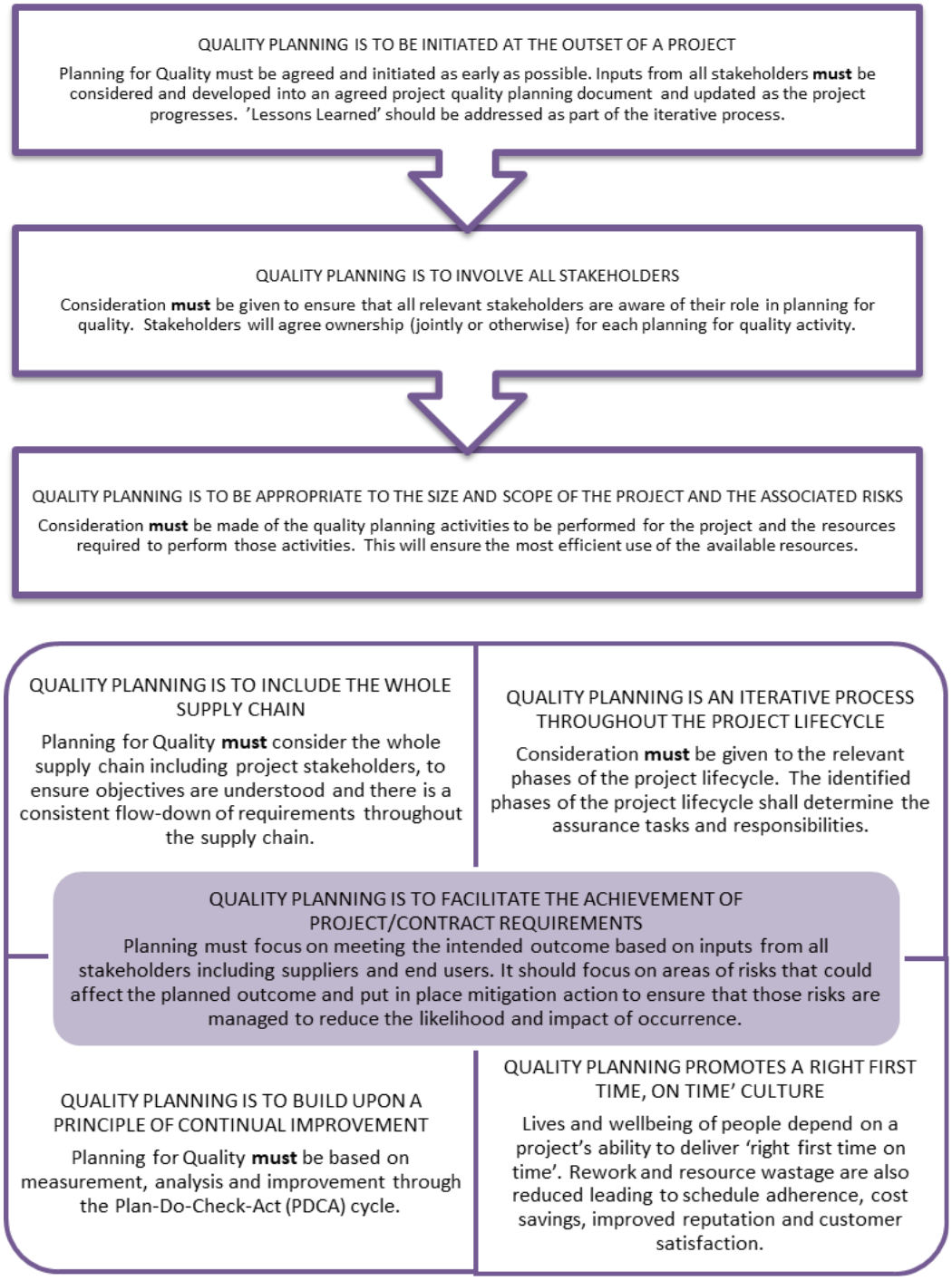


Figure 4-2: Acquisition and Support Planning for Quality Principles

4.2.4 Planning for Acquisition and Support

Planning for quality in defence will be required at all levels within the acquisition and support document hierarchy structure (see figure 4-3). From high-level planning at the Acquisition Programme level, intrinsically linked to the application of QMS and policy requirements in delivering the capability, through to low level planning, detailing how quality is to be ensured and assured for a specific project/acquisition activity.

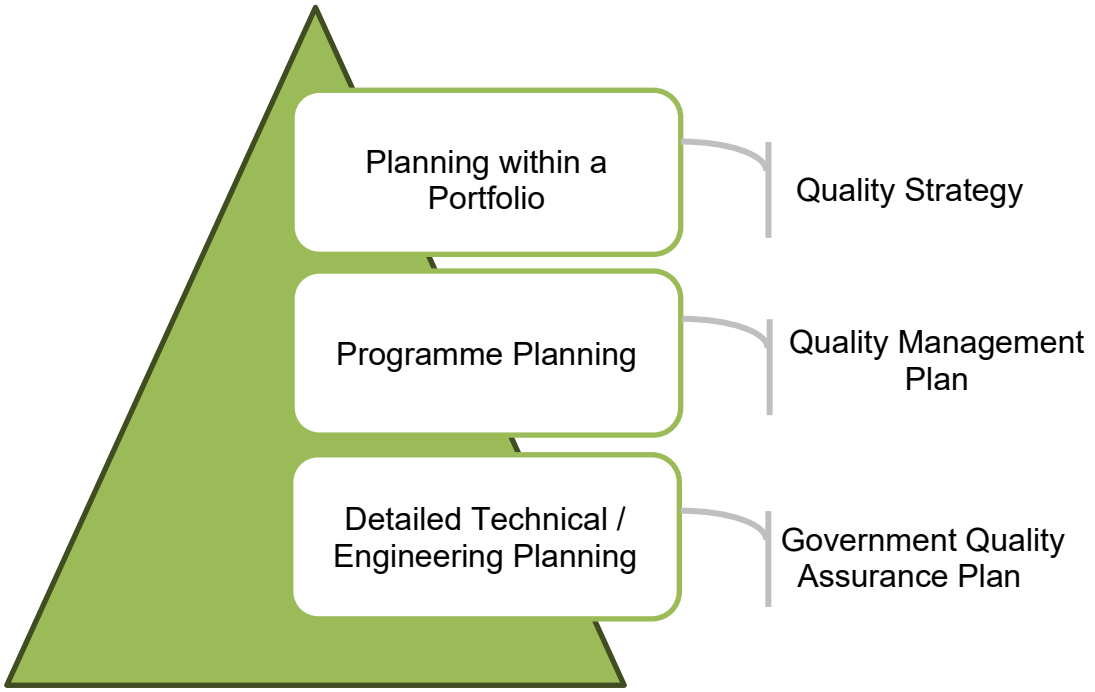


Figure 4-3: Example Quality Planning Hierarchy

4.2.4.1 Planning within a Portfolio/Programme Planning

Quality planning within a Portfolio/Programme level will consist of the development of the Quality Strategy. This is developed at the earliest possible stage and will provide the Strategy for the application of all Programme Quality activities as required by the Organisational QMS.

The Quality Strategy is a 'high-level' document, defining the roles and responsibilities for the management of quality from a through-life perspective. It is intended to document:

a. effective and efficient Organisational business management controls.

b. the allocation of roles, responsibilities and competence of acquisition Organisation staff with all aspects of Quality.

c. methods of communication and reporting requirements.

d. the quality-related activities the acquisition Organisation expect other Organisations (including Suppliers) to do.

e. the application of LFE activities.

The Quality Strategy will lay the foundation for the acquisition Organisation's quality planning.

Further guidance on the content of a Quality Strategy can be found in Managing Quality on the KiD.

4.2.4.2 Project Management Plans / Service Delivery Plan

The Quality Management Plan is intended to detail the management of quality for acquisition and support. It is intended to be an element of the Project Management Plan and / or Service Delivery Plan. It needs to capture the application of the Organisation's processes for quality and quality assurance as it applies to the specific project / support activities. It will detail:

a. the achievement of the Quality Strategy requirements;

b. the application of the Organisation's QMS processes;

c. applicable review stages/milestones;

d. the internal assurance and audit activities; and

e. references to applicable GQA planning.

4.2.4.3 GQA Planning

GQA planning is a detailed project/acquisition specific planning activity. Project specific assurance activities will be defined and executed as a result of GQA Planning. This will include planning for process and product assurance both internally, with the acquisition organisation management of quality and externally for the Supplier assurance requirements. Effective planning for quality will also provide levels of assurance, commensurate with the phase of the project, not only for quality but also for Engineering, Procurement, Supply Chain and In-Service Support Assurance.

GQA planning is required to effectively identify and manage the associated risks and issues to quality. It needs to advise on where and when the projects assurance activities and GQA resources are required. Effective planning will consider internal and external dependencies over all phases of the Lifecycle; from Concept through In-Service and on to the termination of the capability and its Disposal.

GQA planning **should** be conducted by a Competent GQA Practitioner and **should** be formally documented, co-ordinated and controlled within a GQA Plan or Engineering Management Plan.

Project Assurance and Acceptance requirements will be captured from:

a. stakeholder identification and engagement (i.e. Customer / User (Front Line Commands (FLCs)), Domain Regulators and equipment / platform Support Teams).

b. project plans (i.e. Project / Engineering Management Plans, Acceptance Plans, Work Breakdown Structures and Service Delivery Plans).

c. supply chain assessment (i.e. Supplier risks, supply chain risks, Supplier Organisation and Work Breakdown Structures).

d. product/service requirements.

4.2.4.4 Project Quality Management Plan

The Project Quality Management Plan (PQMP), refer to Planning for Quality in Managing Quality on the KiD, is developed to capture the Planning for Quality requirements, incorporating the hierarchical planning elements in a single document; this will include the Quality Strategy, the Quality Management Plan and the GQA Plan. To ensure that internal MOD acquisition quality activities are appropriate and implemented, the MOD Acquisition Organisation is expected to apply a tailored planning approach to the achievement of quality for an acquisition and/or support contractual activity.

The PQMP, developed in consultation with the relevant specialist stakeholders, is intended to provide an auditable record for the application of the Organisations QMS processes in the achievement of contractual requirements.

Further guidance on the content of a PQMP can be found in Managing Quality on the KiD.

4.3 Requirements Preparation

4.3.1 Introduction

This section provides guidance for the identification and application of GQA requirements and activities in defence acquisition. The purpose of the Requirements Preparation stage is to establish clear requirements for the products or services to be acquired. The capture of acquisition quality requirements is facilitated through the identification and management of potential risks to quality and needs to include the identification of stakeholder requirements.

Note: The quality requirements detailed within this chapter refer only to the MOD ‘Standard’ quality requirements that are applicable to all acquisition. This section does not include domain [Land, Sea, Air, Cyber and Space] specific quality requirements which need to be defined by Competent Quality Practitioners within those domains.

Note: Guidance on quality requirements for international acquisition through the Organisation Conjointe de Cooperation en Matire d'Armement or Foreign Military Sales is not included in this JSP. Refer to the ‘Overseas Quality Assurance (QA)’ topic in Managing Quality in the KiD.

Contact the Quality and Configuration Management Policy (QCM Pol) Helpline via the MS Form on the QCM-Pol intranet site if clarification is required.

4.3.2 Requirement

The Requirements Preparation stage **should** be implemented during the development of a contractual Statement of Requirements (SoR) through the review of the Business Case and relevant project documentation in discussion with project Subject Matter Experts (SMEs) as required. The output of this review will feed into the Contract Requisition (CR).

The identification of specific GQA activities should be incorporated within the quality planning and resource documentation.

4.3.3 Appropriate Certification

A Supplier holding appropriate QMS certification provides evidence that they have applied processes and systems in place with clear controls to manage quality for the products and services detailed within the scope of their certification. The scope of their certification demonstrates that the systems and associated processes are aimed at delivering specific products and / or services.

It is essential to the overall effectiveness of the Armed Forces that product and services procured conform to MOD's contractual requirements. Selecting competent suppliers with the capability to meet contract requirements provides a level of assurance that this can be achieved. QMS certification is one method by which the MOD can make this evaluation of the supplier. It enables an objective assessment of a Supplier's competence to feed into the Supplier Selection process before they are invited to tender for work.

Appropriate QMS Certification is defined as:

a. **The Right Standard** – a recognised Euro Norm (EN) QMS standard.

b. **The Right Scope** – registered scope of work on the certificate covers intended acquisition.

c. **The Right Issuing Body** – certification was issued by a Certification Body holding suitable accreditation, with the right scope, from a National Accreditation Body (NAB) who is a signatory to:

- the International Accreditation Forum (IAF) or IAF Accredited Regional Multi-Lateral Agreements (MLA); or
- Global Accreditation Cooperation Incorporated's Multilateral Recognition Arrangement (MRA).

Note: As of the first of January 2026, the IAF, their associated regional bodies and the International Laboratory Accreditation Cooperation formed the newly created 'Global Accreditation Cooperation Incorporated'. The Global Accreditation Cooperation Incorporated organisation will transition, over three years (from January 2026), to provide a single accreditation Multilateral Recognition Arrangement (MRA). The Global Accreditation Cooperation Incorporated's MRA Mark will become available for use and may be seen on certificates from the end of April 2026. The IAF and International Laboratory Accreditation Cooperation marks will be phased out of use during the transition period.

British Standard (BS) EN International Standards Organization (ISO) 9001 'Quality Management Systems - Requirements' is the MOD's preferred baseline standard, although recognised suitable sector scheme standards may be accepted where justified (see below). For medical devices, adherence to ISO 13485 is required.

The MOD requirement for Suppliers to hold appropriate QMS certification is a transparent, non-discriminatory and proportionate technical requirement for Suppliers bidding for contracts related to the acquisition and/or support of defence capability. The need to hold appropriate QMS certification can be used as either a Condition of Participation (as a Technical Discriminator or Weighted Measure) or Award Criteria during the Tender.

The use of accredited QMS certification, as an element of Conformity Assessment (see definition), provides an internationally recognised method that can be used to advise on a Supplier's competence and technical ability to provide organisational outputs (products and services). This use of QMS certification, when applied in the MOD's Quality policy for Appropriate Certification, is in compliance with the UK Procurement Act 2023 and the Great Britain Regulation on Accreditation and Market Surveillance GB RAMS and the UK Government Conformity assessment and accreditation policy. Refer to the associated National Quality Infrastructure guidance on GOV.UK.

Note: The Regulation on Accreditation and Market Surveillance No 765/2008 ('RAMS') was retained in UK law by the EU (Withdrawal) Act 2018 and deficiencies were corrected by The Product Safety and Metrology etc. (Amendment etc.) (EU Exit) Regulations 2019 UK Statutory Instruments 2019 No. 696 (as amended). This is the legislative framework for accreditation in Great Britain – referred to as 'GB RAMS'. In Northern Ireland, Regulation (EC) No. 765/2008 of the European Parliament and of the Council setting out the requirements for accreditation and market surveillance (as it applies in EU law, through the Northern Ireland Protocol) will continue to apply (referred to as 'RAMS NI').

Note: Users of Legacy/Framework contracts placed prior to the adoption of the UK Procurement Act 2023 should seek advice from Commercial Policy for the application of appropriate certification for these contracts; it should be noted that in either case the same principles apply.

4.3.3.1 Requirement

This section provides the MOD Requirements and their application to achieve the directive within JSP 940, Part 1, Section 1.4 'c'.

In meeting the MOD policy requirements for GQA, all Top Management within MOD Organisations shall as a minimum:

c. Only place MOD contracts with Suppliers who can demonstrate that they have a Quality Management System appropriate for the products or services being acquired.

(JSP 940 Part 1 Section 1.4)

The requirement for a Supplier to have an appropriately certified QMS is mandated where:

a. regulatory requirements for Supplier QMS certification exists (i.e. domain specific Supplier certification).

b. a Very High / High risk project has been identified (i.e. acquisition or support of complex defence systems, safety related items, high costs or risk to MOD reputation).

The method for the application of this policy **shall** be in accordance with the Appropriate Certification Process at Annex A.

The articulation and use of Appropriate certification during the Commercial contracting processes **shall** use the appropriate Quality question detailed within the MOD Defence

Sourcing Portal (DSP) as described in the Model Acquisition QA Questions Application Instruction document published on the KiD.

The Quality 1 question within the DSP is to be used within the Procurement Specific Questionnaire (PSQ) and **shall not** be changed in any way beyond the specification of the appropriate standard. The reference in the question to a "suitable alternative" means a suitable alternative QMS standard to that requested and not an alternative to a certified QMS.

In exceptional circumstances, there may be instances where contracts placed for the acquisition and support of defence capability are to be considered as not requiring prospective Supplier's to hold appropriate valid QMS certification, such as:

a. a contract being placed in an industry sector where the holding of a certified QMS is not an accepted industry norm.

b. contracting for the provision of Commercial off The shelf (CoTs) or unmodified Military off The shelf (MoTs) products.

c. for foreign military sales.

d. risks associated with the possible failure of the products are very low.

The following sector scheme QMS standards may also be considered as a 'Technical Discriminator' for use when selecting a suitable Supplier:

a. BS EN 9100*, Quality Management Systems - Requirements for Aviation, Space and Defence Organisations.

b. BS EN 9110*, Aerospace series- Quality Management Systems - Requirements for Aviation Maintenance Organisations.

c. BS EN 9120*, Aerospace Series - Quality Management Systems - Requirements for Aviation, Space and Defence Distributors.

d. BS EN ISO 13485*, Medical Devices - Quality Management Systems - Requirements for Regulatory Purposes.

Note: The MOD Acquisition Organisation needs to ensure the correct issue date of the standard used.

Other QMS standards that are accepted by MOD and may be considered for use as a 'Weighted Measure' or 'Award Criteria' but which **may not** be used as a 'Technical Discriminator' are:

a. ISO 16949 Quality Management Systems Certification, issued by an International Automotive Task Force (IATF) approved certification body, is acceptable if the scope of work under the contract is within the automotive sector. **This is not a NAB accredited process**.

b. TickITplus (UKAS and SWEDAC (NAB for Sweden) only) - provides ISO 9001 accredited certification with a capability grading for Information Technology Organisations. **This is not a recognised EN standard**.

c. **BS ISO 7101:2023 -** Healthcare quality management – Quality Management for Healthcare systems and organisations. **This is not a recognised EN standard.**

Calibration: where recognition of calibration services is required the contracted provider **shall** be accredited to BS EN ISO / IEC 17025 - 'General requirements for the competence of testing and calibration laboratories'. Verification of the appropriate scope of the accreditation **should** be conducted. Refer to the Defence Logistics Framework (DLF) for calibration policy, advice and guidance.

Second and Third-Party certification to NATO contractual standards (NATO Allied Quality Assurance Publication's (AQAP)) **are not accepted** by the MOD as a means of Supplier QMS certification and are not to be requested as such in MOD contractual activity.

4.3.3.2 Application

The application of the Appropriate Certification for a specific contract is dependent upon any applicable regulatory requirements and the severity of risk associated with the acquisition contractual requirements; from both a technical and complexity perspective.

In some instances, it may be necessary or appropriate to place contracts with Suppliers who do not hold appropriate certification where the assessed risks are low or very low. The decision to proceed **should** be subject to a risk assessment and endorsed by a Competent GQA Practitioner, with the risks managed appropriately for the contract and with the outcome recorded in the project file and minuted on Contract Purchasing and Finance (CP&F) as a record.

As an initial estimator (until verified by the project risk management activity), a Very High or High-risk project should be assumed where:

a. the project or contract involves any system part, assembly or equipment where a failure is likely to have a Critical or Severe impact and the likelihood of occurrence is likely to be Medium to Very High (product or service risk); or

b. where the product or service is considered complex or involves a complex supply chain (risk to the achievement of quality requirements).

The application of this policy **shall** be in accordance with the Appropriate Certification Process at Annex A to this chapter and applied using the appropriate Model Quality Assurance question.

Note: The instructions for the application of Appropriate Certification, utilising the Model QA questions developed by QCM Policy and MOD Commercial Policy (in consultation with MOD Central Legal Services), can be downloaded from the Commercial Toolkit 'Quality Assurance in Contracts' page published within the KiD.

4.3.4 Standard Quality Assurance Contract Requirements

4.3.4.1 Introduction

Standard QA Requirements are categorised as either **Primary** - the main requirements for QMS systems, or **Supplementary** - those that supplement the QMS for a specific purpose.

Annexes B and C to this chapter provide selection flowcharts and a table of the ‘standard’ QA contract conditions to assist in the selection process.

4.3.4.2 Requirement

This section provides the MOD Quality Requirements and their application to achieve the directive within JSP 940, Part 1, Section 1.4 ‘d and e’.

In meeting the MOD policy requirements for GQA, all Top Management within MOD Organisations shall as a minimum:

> ***d. ensure all MOD contracts include a section entitled Quality Assurance Requirements, and that all Contract Requisitions have had the Standard Quality Assurance Contractual Requirements endorsed by a MOD Crown Servant who is an Authorised Quality Assurance Signatory.***
>
> ***e. ensure that all appropriate actions are taken to establish the processes required for the avoidance of counterfeit materiel, including the necessary contractual arrangements for the prevention of entry into the Supply Chain.***

(JSP 940 Part 1 Section 1.4)

See Flowcharts at Annex B and the 'Table of Standard Contractual Quality Conditions' at Annex C aid the selection of Primary and Supplementary Standard Quality Assurance Contract Requirements.

Note: Assistance on the identification of an Authorised Quality Assurance Signatory can be obtained from the QCM Policy Helpline Form on the QCM Policy intranet page.

4.3.4.3 Primary Quality Standards

Primary Standard QA Contractual Requirements are expressed in the NATO Allied Quality Assurance Publications (AQAPs). These AQAPs are implemented under NATO Standardization Agreement (STANAG) 4107 as part of the NATO Interoperability requirement through standardising the development and application of QA in the procurement of Defence products.

Note: Product is as defined within the NATO AQAPs, see Section 1.5 of this JSP ‘Terms and Definitions’.

A list of the Primary Standard QA Contractual Conditions is provided in the Table of Standard Contractual Quality Conditions at Annex C.

Primary AQAPs are requirements to be applied to the provision of products or services. They do not mandate that a Supplier needs to have a 'certificated' QMS. AQAPs 2110 and 2310 are, however, aligned to the requirements contained in the QMS certification standards. They contain generic requirements which are complementary to other contractual requirements and **should** be considered for all Suppliers to the MOD regardless of type, size and product:

a. AQAP 2110 contractually invokes compliance with ISO 9001 QMS standard, with additional NATO requirements.

b. AQAP 2131 is for final inspection and test; where ‘test’ is the requirements that relate to production test processes. This standard is not directly linked to the Supplier’s QMS.

c. AQAP 2310 contractually invokes compliance with BS EN 9100 QMS standard, with additional NATO requirements.

Supplier contractual QMS requirements for ISO 9001 are no longer supplemented by the application of differing AQAPs, aimed at omitting elements of QMS which would not apply to the achievement of contractual requirements. A Supplier’s QMS is to cover the work that they perform, which is captured by AQAP 2110 requirement. An exception to this is where a contract is relatively low risk and requires verification for limited production controls and/or final inspection and test which is covered by AQAP 2131.

Where the need for a primary AQAP has been identified, one **and only one**, of the primary AQAPs is included in the SoR and CR.

For subcontracting, only the applicable Standard QA Contractual Requirements, not necessarily the full AQAP, need to be flowed down. The Supplier’s Quality Plan **should** provide details of how this will be accomplished.

Where contracts are considered low risk, it may be decided not to include a primary AQAP in the contract. This decision **should** only be taken after consultation with an Authorised Quality Assurance Signatory. If no AQAP is included, but Certificates of Conformity (CoC), traceability and design provenance are required, appropriate Defence Conditions (DEFCONs) can be used; refer to Supplementary QA Requirements (below).

Note: NATO also publish AQAP Standards Related Documents (SRD) which provide guidance on the use of a contractual AQAP.

Note: All DEFCONS, in addition to associated Commercial Policy Statements and supporting guidance, are published in the Commercial Toolkit within Knowledge in Defence.

4.3.4.4 Supplementary Quality Standards

Supplementary QA requirements are provided to communicate additional NATO and MOD requirements related to specific activities as detailed in the following sections. The use of these supplementary requirements may require competent personnel, which is to be identified and planned for by the Acquisition Organisation. This is to be raised by the Authorised Signatory or Competent GQA Practitioner to The Project or Programme Manager once these requirements are selected for a contract.

a. **Software.** AQAP 2210 is the NATO quality standard which provides contractual quality requirements for software - to supplement AQAP 2110 and 2310. AQAP 2210 defines additional requirements for software developed, maintained and utilised in the delivery of products and services for the MOD over and above that provided by the application of the Primary AQAP.

AQAP 2210 Edition B **shall** be applied to contracts where AQAPs 2110 or 2310 are selected as the Primary AQAP and where the contract requires additional assurance (over and above that provided by the Primary AQAP) for the development / modification / maintenance / change in use of deliverable or non-

deliverable software by the Supplier in the achievement of contract deliverables to the MOD.

Where it is determined that there could be a need for additional software quality assurance, the selection of AQAP 2210 Edition B for a contract by an Authorised Signatory or a Competent GQA Practitioner should only to be made in consultation with software Suitably Qualified and Experienced Personnel (SQEP) (As defined in JSP 935 section 2.1). This will ensure the inclusion of AQAP 2210 Edition B is proportionate to manage the perceived contractual risks. The lead Engineer should be engaged where there is difficulty in obtaining appropriate software SQEP.

Upon confirmation of the requirement for AQAP 2210 Edition B in the contract, the following activities are required:

1) Use of the AQAP 2210 ITT Question and review of the Supplier's responses to the ITT AQAP Software Question;
2) Evaluation and agreement of the Supplier's Project Software Quality Plan (PSQP) post contract award.

The Model Quality Assurance Invitation To Tender (ITT) Question for Software Acquisition Quality Assurance **shall** be used when AQAP 2210 Edition B has been selected for a contract. This question has been developed to test a prospective Supplier's understanding of AQAP 2210 Edition B through their categorisation of 'in scope' software as required by the standard.

Note: The 'Acquisition Software Quality Assurance and User Guide on the Application of AQAP 2210 Edition B' is available to download from Managing Quality in the KiD. This document contains additional guidance for the use of AQAP 2210 Edition B as well as the Model Quality Assurance Invitation To Tender (ITT) Question.

AQAP 2210 Edition B requires the Supplier to develop and submit an acceptable PSQP to the Authority. The PSQP should be requested as a discrete document or as part of another software planning document delivered under the contract and **shall not** form part of a requested Quality Plan (known as a Deliverable Quality Plan) specified by the use of Defence Condition 602A or 602C.

AQAP 2105 Edition C chapter 5 **shall not** be applied for a PSQP required for AQAP 2210 Edition B as this version of AQAP 2105 does not align with AQAP 2210 Edition B.

As a PSQP is required as a 'deliverable' under the contract, in accordance with AQAP 2210 Edition B, the MOD Acquisition Organisation will need to specify when this plan is to be delivered and the arrangements for evaluation and agreement. The MOD Acquisition Organisation will need to ensure that SQEP are available post contract award to conduct the review of the submitted PSQP.

AQAP 2210 requires the Supplier to apply additional controls to assure software quality; For more information refer to section 4.3.7 Software Quality Management.

b. **Supplier Quality Plans**. The Primary AQAPs 2110 and 2310 require the Supplier to submit a quality plan, the requirements for a quality plan which is to be delivered to the Acquirer are detailed within AQAP 2105 – NATO Requirements for Quality Plans. However, the requirement for a quality plan to be delivered **should**

be where contractual risks require additional assurance, over and above that provided by the primary AQAP, for the contract. The inclusion of AQAP 2110 or 2310 in a contract always needs to be accompanied by either DEFCON 602A, DEFCON 602B or DEFCON 602C, selected as applicable to define MOD requirements in respect of a 'deliverable' quality plan.

(1) DEFCON 602A – Quality Assurance (With a Deliverable Quality Plan).

(2) DEFCON 602B – Quality Assurance (Without a Deliverable Quality Plan).

(3) DEFCON 602C – Quality Assurance (With a Deliverable Quality Plan and QA Information).

Where it is determined that risks warrant a deliverable quality plan, in accordance with the requirements of AQAP 2105, for the provision of assurance over and above that provided by the primary AQAP, the contract needs to include DEFCON 602A and AQAP 2105.

Where it is determined that risks are deemed to be more significant than just warranting a deliverable quality plan, then additional assurance for the application of a supplier's QMS (as required by the DEFCON 602C 'additional QA information') can be requested by the inclusion of DEFCON 602C and AQAP 2105.

MOD review and acceptance of a Supplier's deliverable quality plan **shall** be conducted by a Competent GQA Practitioner in consultation with appropriate SMEs as necessary. This resource requirement is to be identified and confirmed prior to selection of DEFCON 602A or DEFCON 602C.

MOD review and acceptance of a Supplier's submission for the additional information required by the use of DEFCON 602C **shall** be conducted by a Competent GQA Practitioner in consultation with appropriate SMEs as necessary. This resource requirement is to be identified and confirmed prior to selection of DEFCON 602C.

Note: The additional QMS information requested in DEFCON 602C provides the baseline information required for the Quality Key Performance Indicator introduced at section 4.3.9.

Consideration should also be made for linking Authority acceptance of the deliverable quality plan to a contractual milestone as it is a 'Deliverable' under the contract.

Recognising that the contractual risks may not warrant the submission of a quality plan by the Supplier, the Authorised Quality Signatory may override the Primary AQAP requirement with DEFCON 602B that requires the Supplier to plan for quality but not submit a quality plan to the Authority.

Both DEFCON 602A and 602C contain a default acceptance review cycle and a 'material breach' clause. The review cycle will need to be evaluated for the contract and once established with the Supplier, **shall** be adhered to although there is provision for extending the initial submission and the 12-month

acceptance target. The 12-month timescale cannot be reduced and should only be extended where the contract is considered a complex acquisition. The Authorised Quality Assurance Signatory/Competent GQA Practitioner is not to make reference to the use of the “material breach” clause and all enquiries regarding this clause are to be referred to the Authority’s commercial officer.

For more information refer to the ‘Supplier Quality Plans’ and ‘Software Quality Management’ topics in Managing Quality on the KiD.

In exceptional cases where a Draft Quality Plan is required from a Supplier at the Invitation to Tender (ITT) or Invitation to Negotiate (ITN), the Draft Quality Plan should not form part of the Tenderer/ Supplier evaluation activity and is to be used to inform the organisation on possible future risks and post contract quality assurance requirements only.

c. **Certificate of Conformity (CoC)**. A CoC provides a method of formal assurance from the Supplier that the product(s) conform to contractual requirements. This is recognised within all the Primary AQAPs, which require the Supplier to provide a CoC, but they do not define the CoC content. Therefore, DEFCON 627 (MOD requirements for CoC) is used to contractually invoke CoC requirements for all Primary AQAPs.

The ability to trace the history, distribution, use or location of materials or parts following delivery is an important aspect of any product within the defence inventory. This is especially relevant where products are critical to safety or subject to regulatory requirements.

For example, where products are procured as part of an aircraft, including standard consumable spares which might have applications other than aircraft use, DEFCON 627 **shall** be invoked in these contracts. Contracts placed for Military Aerospace parts are to fulfil the requirements of Regulatory Article 4809.

Retention of CoCs is to be in line with ‘Retention of Materiel Accounting Records’. as detailed in the Defence Logistic Framework (DLF) and comply with the organisation's records retention policy; See also JSP 888 Chapter 4 Leaflet 4A.

DEFCON 627 is also to be used where risks do not warrant the inclusion of a Primary AQAP, but design provenance or traceability is determined as a requirement.

For more information refer to the ‘Certificate of Conformity’ and ‘Traceability and Design Provenance’ topics in Managing Quality on the KiD.

d. **Managing Concessions**. The process for a Supplier to request, and the Authority (MOD) to approve, concessions is set out in Defence Standard (Def Stan) 05-061 Part 1 - Quality Assurance Procedural Requirements – Concessions. Whenever there is a likelihood that the Supplier may need to request a concession, and they are considered technically competent to categorise non-conforming products and hold the appropriate design authorisation, privileges or approvals where required by applicable regulations.

e. the process for the Management of Non-conforming products (detailed at Annex D to this chapter and referenced in section 4.5.3 Management of Non-conforming Products) **should** be applied.

Note: There are instances where alternative MOD processes exist to manage concessions; specifically where maintenance support activity is contracted out to industry. In cases where mandated in-service procedures already exist, the use of the appropriate concession's procedure needs to be considered when placing the contract.

Note: Determination of a Supplier's technical competence should also consider certification and approvals held by the Supplier and may require the conduct of a Pre-Contract Award Evaluation (PCAE). See also the Supplier Technical Capability topic on the KiD.

Refer to the 'Managing Concessions' topic within Managing Quality on the KiD for further guidance.

f. **Contractor Working Parties**. A Contractor Working Party (CWP) is comprised of one or more Supplier's representatives contracted to undertake specific tasks outside of their own facility, usually at MOD premises. CWP activities are typically concerned with installation, repairs, modifications, and the provision of services.

It is important that all CWP contracted activities are planned for and conducted by competent personnel through the application of controlled processes. This is recognised within AQAP 2110 or AQAP 2310 (which include the requirement for Suppliers to plan for specific arrangements and communication where work is to be conducted at locations external to their premises, detailed in AQAP 2110 and AQAP 2310 section 5.4.1.1 (2) b.

When determining the contractual requirements, where there is likelihood that CWPs will be required to operate under a contract, the contract **should** include Def Stan 05-061 - Part 4 - Quality Assurance Procedural Requirements - Contractor Working Parties where AQAP 2110 and AQAP 2310 are not included in the contract.

Refer to the 'Contractor Working Parties' topic within Managing Quality on the KiD for further guidance.

g. **Independent Inspection for Safety Critical Items**. Many military platforms contain equipment or systems which are considered safety critical. During the production or maintenance of this equipment or these systems there may be stages of assembly, installation and / or test that would induce an unacceptable risk should an error occur. Independent or Duplicate inspection may therefore be considered as an appropriate method of risk mitigation.

Def Stan 05-061 Part 9 - Quality Assurance Procedural Requirements – Independent Inspection Requirements for Safety Critical Items, **shall** be included in contracts whenever there is a likelihood that the Supplier will need to conduct independent inspections on equipment, systems or tests identified as being safety critical or where the contract includes 'one shot' escape and survival systems.

Note: ‘one shot’ – equipment or systems, the integrity of which cannot be verified by functional tests after final installation.

Refer to the ‘Independent Inspection for Safety Critical Items’ topic within Managing Quality on the KiD for further guidance.

h. **Avoidance of Counterfeit Materiel**. An increasing drive to increase Defence acquisition tempo, supply chain shortages and global economic pressures all serve to benefit counterfeiters. These, coupled with increasingly sophisticated techniques in counterfeit materiel production and capability to avoid detection via many of the existing test methods present increasing risk for Defence Supply Chains.

The potential impacts of counterfeit materiel entering the defence supply chain range from poor value for money and impacts on reliability and availability through to seriously compromising capability, risk to life and reputational damage. It may also expose military equipment and operations to increased vulnerability such as cyber-attacks (Refer to Def Stan 05-138: Cyber Security for Defence Suppliers).

In support of reducing risk probability through avoidance, and providing controls to mitigate potential impacts, acquisition contracts awarded **shall** include Def Stan 05-135 and DEFCON 524A. These place obligations on suppliers to have appropriate arrangements for the avoidance of counterfeit materiel, its detection, and to manage appropriately, including dispositioning of, any suspected counterfeit materiel should it enter the supply chain.

MOD Acquisition teams **shall** assess the counterfeit risk at the contract planning stage, and keep it under review thereafter, as part of acquisition risk review to inform appropriate assurance activities that ensure counterfeit risk is being actively managed.

ONLY where there is a robust understanding of the supply chain and a strong case that the risk of counterfeit materiel being supplied and entering the supply chain is both low probability and low impact, may the Def Stan and DEFCON be omitted; however, a record of this decision and the underpinning risk assessment **shall** be clearly retained as a record within the project history.

Additional Information and the process to be followed for avoidance, investigation of suspect materiel (including as part of incident investigations) and the dispositioning of counterfeit materiel within the supply chain is detailed at Annex F to this chapter. This is supported further by the Counterfeit Avoidance Guidance topic in Managing Quality on the KiD.

Note: DEFCON 524A - Counterfeit Materiel, will be included in a contract by the commercial officer. This DEFCON provides the contractual means for the authority to isolate and dispose of identified counterfeit materiel appropriately.

Also to be considered for inclusion within the SoR/CR when required:

- Flight Indemnity and the use of Def Stan 05-100 with DEFCON 638.

See Section 4.3.6 below.

4.3.5 Contracts Involving Safety Critical / Safety Related Products

There is an intrinsic link between Quality and Safety. Quality assurance and safety management approaches are both risk-based. There is expectation that a system conforms to the required specifications and this underlying assumption may be used for hazard analysis or risk assessment. Safety, as an attribute of the quality of a system, describes the ability of this system to prevent harm.

Safety Critical Products (SCP) are not defined within this JSP; readers **should** consult with appropriate Technical, Safety and GQA SMEs who will need to refer to domain specific standards/regulations to define what is 'Safety Critical'.

Note: The term SCP used here is intended to include Safety Critical equipment / systems / services / software etc.

GQA actions required for contracts involving SCP are detailed at Annex E to this chapter, supported by the 'Contracts Involving SCP' topic in Managing Quality on the KiD.

4.3.6 Flight Indemnity

4.3.6.1 Introduction

DEFCON 638 provides 1st and 3rd party indemnity for Contractor (referred to as the 'Supplier' in this JSP) aircraft flights, taxiing and engine ground runs.

Def Stan 05-100 provides the process to activate the indemnity requirements for an Authorised Flight and Engine Ground Running in compliance with DEFCON 638.

This section provides guidance for MOD and Supplier Personnel who are involved in the implementation of DEFCON 638, and consequently, Defence Standard 05-100 in contracts in accordance with the Commercial requirements as detailed in the Commercial Toolkit - Limitation of a Contractors Liability and Indemnities.

4.3.6.2 Requirement

When the contract requires a Supplier to undertake flight and engine ground running of military registered aircraft allotted or allocated to the Supplier, the MOD Acquisition Organisation Team Leader will need to ensure that the Supplier accepts liability for the aircraft (in accordance with the instructions within the Commercial Toolkit). Alternatively, the Team Leader may, in accordance with the instructions within the Commercial Toolkit, agree to the provision of MOD flight indemnity in accordance with DEFCON 638. When DEFCON 638 is included in a contract Def Stan 05-100 **shall** also be included.

In some cases, older contracts may still invoke issue 3 of Def Stan 05-100. In these cases, QCM Policy require MOD Acquisition Organisations to invoke Def Stan 05-100 [latest issue] at the next contract review. This is to be at nil cost to the MOD Acquisition Organisation. Any concerns raised by the Supplier are to be reported to QCM Policy.

4.3.6.3 Supplier Responsibilities

The Supplier working under a MOD contract and operating MOD aircraft is responsible for:

a. all safety, airworthiness and quality aspects of aircraft construction, overhaul, repair, modification or servicing throughout all stages and phases of manufacture.

b. ensuring that the aircraft satisfies the design standard laid down in the Certificate of Design, the Military Permit to Fly (MPTF) or the existing Release to Service (RTS).

c. ensuring the aircraft is allotted or allocated to them in accordance with the requirements for 'Transfer of Aircraft and Equipment', published in Regulatory Article 1164 - Transfer of UK Military Registered Air Systems.

d. appointing a competent Representative to be responsible for preparing and signing Part 1 of the Engine Ground Running Certificate (EGRC) or Flight Authorisation Certificate (FAC); this Representative certifies that the aircraft has been prepared and is fit for the intended engine ground run or flight and requests permission for the engine ground run or flight to proceed in accordance with Def Stan 05-100.

e. submitting the EGRC or FAC to the Authorities Authorised Representative (AAR) with supporting documentation.

f. flowing down contractual requirements if the flight testing or engine ground running is to be completed by a Sub-Supplier.

g. approving the EGRC or FAC signatures at the Sub-Supplier.

4.3.6.4 The Authority's Authorised Representative

The AAR may be:

a. a member of a Registered GQAR Organisation.

b. a Crown Servant authorised by the MOD NQAA.

Note: For information on obtaining AAR authorisation refer to the Flight Indemnity topic in Managing Quality on the KiD.

The MOD NQAA may authorise a Crown Servant (civilian or military) to be the AAR; the MOD NQAA will ensure the Crown Servant is competent to:

a. ensure that the MOD Form 700 Series documentation or equivalent, where applicable, is complete and reflects the build standard of the aircraft;

b. ensure that the requirements of Def Stan 05-100 have been met;

c. understand the liability and indemnity requirements of DEFCON 638 and Def Stan 05-100.

The MOD NQAA will only authorise responsibility to a Crown Servant where the declared configured standard of the aircraft is 'within' the existing RTS and fit for the purpose of the intended flight or engine ground running as detailed in the EGRC or FAC.

The FAC part 2 signatory for Aircraft flown outside the existing RTS (in accordance with the MPTF) **shall** be an authorised member of an authorised GQAR Organisation.

Where the MOD NQAA authorises a Crown Servant to be the AAR with responsibility to sign an EGRC or FAC; the authorisation will be recorded within a formal Letter of Authority.

Note: Letter of Authority: 'Approval Letter - Authority For Certification of Flight Authorisation and Installed Engine Ground Running Certificates'.

The AAR is responsible for:

a. reviewing the documentation submitted to support the FAC;

b. determining and completing verification activities to confirm that they are satisfied that the intended Flight or Engine Ground Run conforms to the requirements of Def Stan 05-100; and

c. endorsing the part 2 of the EGRC / FAC on satisfactory review of the documentation and any verification activities.

Note: There is no mandated requirement for the AAR to inspect an aircraft. In certain cases, to support the document review and in response to risk-based tasking, inspection of the aircraft may be carried out to provide confidence in the Supplier's processes that the aircraft has been prepared in accordance with Def Stan 05-100.

4.3.6.5 Flight Authorisation Certificates for Supplier Ferry Flights

A Supplier ferry flight may occur when a Supplier is required to collect an aircraft from a location remote from their premises to fly the aircraft to the Supplier's site. Providing DEFCON 638 has been invoked in the contract in accordance with the Commercial Toolkit, the MOD AAR may sign Part 2 of the FAC.

Note: Ferry Flight' is defined in Defence Standard 05-100.

Where the MOD NQAA authorises a Crown Servant to be the AAR with responsibility to sign the FAC for Ferry Flights the requirement will be recorded within the Letter of Authority.

4.3.6.6 Additional Information

An aircraft operating on a number of contracts for the flight test may have more than one FAC. To avoid confusion in relation to any possible claims under the indemnity cover afforded by DEFCON 638 it **shall** be made clear in accordance with Def Stan 05-100:

a. which FAC is in operation for any particular activity;

b. which contract the aircraft is operating under.

DEFCON 638 and Def Stan 05-100 may be included in overseas contracts where the Supplier will be required to fly the aircraft. The requirements are the same as for those in UK contracts. Overseas Suppliers are required to meet the required Military Aviation Authority (MAA) Regulatory requirements. Further information can be sought from the QCM Policy Helpdesk and the MAA website.

4.3.7 Software Management

Software is a product and as such the mandated requirements for quality [JSP 940 Part 1] apply. The application of specific quality assurance activities, tools and techniques need to be modified to address the differing needs of a software life cycle. Software Quality Contractual Standards exist to cover the essential aspects of Software Quality Assurance.

The **Appropriate Certification** policy **should** be applied when selecting Suppliers. In the field of software there are a number of options for QMS certification schemes. The most prominent schemes in the UK are TickITplus, ISO 9001 (with a specific software scope) and BS EN 9100 with BS EN 9115 (for Software) within the scope. The scope of the certification is the important aspect as it identifies the specific capabilities of the Supplier. It is vital that the scope of the Supplier's certification covers all the activities needed to fulfil the contract.

For MOD contracts that include development or maintenance of either deliverable or non-deliverable software. **AQAP 2210** is considered appropriate.

Note: For Commercial Off The Shelf (COTS) / ready to use software product, ISO 25051 (Software engineering Systems and software Quality Requirements and Evaluation (SQuaRE)) requirements for quality of Ready to Use Software Product (RUSP) and instructions for testing contains appropriate requirements and is recommended as an informative standard. This standard is **not suitable for inclusion within a contract**.

Note: Emerging guidance from NATO for Software Quality Assurance includes the adoption of software specific life cycle processes in line with ISO 12207: Systems and software engineering, Software life cycle processes. The intent will be that this should be utilised during the Supplier Selection process (i.e. Invitation To Tender (ITT)) for requirements upon the Supplier to ensure Quality coverage in both the Engineering and Management frameworks. This will be captured in more detail when the NATO policy is published.

COTS software products are ready-made packages bought off-the-shelf by the MOD either directly or through the supply chain. Selecting high quality COTS software products is of prime importance because COTS software products may have to be operational in various environments and selected without the opportunity to compare performance among similar products.

For all software acquisition, consult JSP 935 - Software Acquisition Management for Defence Equipment.

4.3.8 Non-Contractual Standards

Routinely documents are published by UK MOD, NATO or Governments to promulgate quality policy or record inter-governmental quality processes or agreements. These types of documents are **not suitable** for contracting purposes with Suppliers. The following examples **should not** be included as requirements in contracts:

a. Defence Logistics Framework.

b. STANAG 4107 - Mutual Acceptance of Government Quality Assurance and Usage of the Allied Quality Assurance Publications.

c. AQAP 2000 (NATO Policy on an Integrated Systems Approach to Quality Through the Life Cycle).

d. AQAP 2070 (NATO Mutual Government Quality Assurance (GQA) Process).

e. AQAP 4107 (Mutual Acceptance of Government Quality Assurance and Usage of the Allied Quality Assurance Publications).

f. Memoranda of Understanding / Implementing Arrangements.

The Quality Management Standards ISO 9001 and BS EN 9100 are **not suitable** as a contractual standard and **should not** to be used on their own. The appropriate requirements of ISO 9001 and BS EN 9100 are included in the Primary AQAPs (AQAP2110 and AQAP2310).

4.3.9 Quality Performance Indicators

Measurement, analysis and improvement rely on objective evidence and understanding of how the quality of products and/or services delivered to the front line is changing, and how well the associated quality processes are working.

4.3.9.1 Quality Key Performance Indicator (KPI)

A Key Performance Indicator (KPI) for Quality has been developed and published within Managing Quality on the KiD in the QPI topic. The KPI for Quality is for use in MOD contracts which is aligned to (and a continuation of) the 'additional QMS information' required in DEFCON 602C. Designed to provide an incentive to the Supplier for the application of robust QMS processes during the term of a contract, this KPI should be used within the Contract Management Plan and is recommended for use for complex and high risk acquisition.

If Acquisition Organisations determine that they are going to use this KPI for their acquisition they **shall** also use DEFCON 602C as a contractual requirement.

4.3.9.2 Quality Performance Indicator (QPI)

For all contracts, Quality Performance Indicators (QPIs) should be considered for use in the contract, in addition to the other performance measurements agreed by the MOD Acquisition Organisation and Supplier.

These QPIs should be jointly reviewed by the respective MOD and Supplier quality focal points. The reviews should take place within an agreed timescale and as appropriate to the contract. Actions arising from these reviews will need to be documented and addressed.

Further guidance on QPIs can be found in Managing Quality on the KiD.

4.4 Supplier Selection and Contract Award

4.4.1 Introduction

This section provides guidance on the GQA activities during the MOD Commercial tendering process.

During the commercial Supplier Selection process quality requirements need to be determined and implemented by a Competent GQA Practitioner for the MOD Acquisition Organisation. This includes ensuring that the Contract Initiator and Commercial Officer are aware of the required approach to quality. Discussions need to be held with the Contract Initiator and Commercial Officer to ensure that the quality requirements are appropriately captured and an appropriate method to evaluate supplier responses is included in the Request For Quote (RFQ). This will enable Supplier understanding of the tender requirements and achievement of the contract quality requirements.

Further guidance during Supplier Selection and Contract Award can be found in Managing Quality on the KiD.

4.4.2 Requirement

All GQA activity conducted during the Supplier Selection and Contract Award stage **shall** be conducted by Competent GQA Practitioners and adhere to the Commercial policy as defined within the Commercial Toolkit on the KiD.

To ensure Supplier compliance to the MOD Appropriate Certification policy, assessment of a submitted QMS certificate, **shall** be conducted by a Competent Quality Practitioner.

4.4.3 GQA During Supplier Selection

During the Supplier Selection process and Contract Award stage the Competent GQA Practitioner will be expected to define the quality assurance 'Conditions of Participation' and 'Award Criteria' to be used during the Commercial activities. As the quality assurance Subject Matter Expert (SME), this should be done in consultation with other MOD Acquisition Organisation SMEs to feed into the Contract Requisition (CR) and RFQ processes.

Note: 'Conditions of Participation' and 'Award Criteria' are terms from the 'Procurement Act 2023' and implemented through the processes in the MOD Commercial Toolkit.

Supplier selection will be undertaken using either the commercial 'Open Procedure' contracting process (which is not recommended for complex requirements) and the 'Competitive Flexible Procedure' (for complex acquisition). Questions and criteria should be appropriate to enable assessment of prospective supplier responses, specific to the contract to be placed and in accordance with the Commercial Officer's instructions.

Note: 'Open Procedure' is a Single stage involving both 'Conditions of Participation' and 'Award Criteria' during tender evaluation.

Note: 'Competitive Flexible Procedure' is Two stages where 'Conditions of Participation' are used during the initial PSQ and 'Award Criteria' at the tender evaluation.

4.4.3.1 Tender Notice

The Tender Notice provides notification to industry of the MOD's intention to place a contract and specific requirements for competing for that contract. This **shall** include notification of the application of the MOD's Appropriate Certification policy, where it is to be used as a 'Technical Discriminator'. Refer to section 4.3.3 for information on Appropriate Certification.

4.4.3.2 GQA during the Procurement Specific Questionnaire (PSQ)

Identification of Contractual Quality Standards: the PSQ, if used, looks at the existing capability and capacity of the Supplier.

Where appropriate; at the PSQ stage in the tendering process, the Competent GQA Practitioner is responsible for ensuring the correct application of the MODs Appropriate Certification Policy (see section 4.3.3) for appropriate Quality Management System (QMS) certification as a 'Condition of Participation' and for conducting the evaluation of responses from the bidders.

Should the achievement of contractual requirements not mandate a certified QMS, additional questions (for verification of Supplier processes) can be tailored to the question set for the PSQ, in consultation with the Commercial Officer.

4.4.3.3 GQA during the ITN/ITT

During the tender evaluation process, the MOD Acquisition Organisations Competent GQA Practitioner, in consultation with the Commercial Officer and appropriate SMEs, is to assist in ensuring that the suppliers are able to demonstrate how they will meet the contract requirements. They are also responsible for ensuring that the contract reflects the requirements for managing Supplier non-conforming product through the application of the Concessions Process (refer to Annex D).

The Competent GQA Practitioner is responsible for ensuring the use and evaluation of suitable QA questions and that each question is designed to gain the required evidence to demonstrate the bidder's ability to deliver on the contract. Where a draft Supplier's Quality Plan is required (see Managing Quality on the KiD, which provides the risk factors to consider for whether a Supplier Quality Plan is required) it is to provide an overview of how they will meet the requirements.

4.4.4 Pre-Contract Award Evaluation (PCAE)

4.4.4.1 Introduction

Pre-Contract Award Evaluation (PCAE) is one of a number of Tender Assessment (TA) tools that may be used to mitigate or identify risks associated with a specific Tenderer or the associated bid. It is a systematic evaluation of a Tenderer's ability to meet draft contract requirements and is undertaken by the MOD Acquisition Organisation, at the Tenderer's premises, in support of project TA activities.

4.4.4.2 When to use PCAE

Where concerns exist regarding the Tenderer's past performance or the proposed controls detailed in the Tenderer's bid, PCAE may be used to explore the validity of these concerns and establish the level of risk associated with the Tenderer's bid and enable the development of effective risk mitigation activities.

The requirement to undertake PCAE is a decision taken by the MOD Acquisition Organisation and **should** be included in any Special Notices and Instructions raised in support of the draft contract.

Note: Special Notices and Instructions are detailed on the Commercial Managers Toolkit on the KiD.

PCAE may be applied to a number of functional areas within the Tenderer's organisation. This guidance considers the implementation of PCAE within the Tenderer's Quality Management (QM) function only.

4.4.4.3 The Process

The evaluation process seeks to establish evidence that supports the effective application of QM controls by the Tenderer throughout the Tenderer's organisation and throughout the supply chain that the Tenderer proposes to use. Where evidence cannot be presented by the Tenderer, the MOD Acquisition Organisation need to establish the potential impact on the contract deliverables and ensure the impact is captured and assessed in the tender assessment documentation.

Evaluation of individual Tenderer's QM controls cannot be performed using a 'one-size fits all' process. Evaluation activities need to be tailored to suit concerns or perceived risks with the respective Tenderer's bid.

When planning an evaluation of the Tenderer's QM controls, the MOD Acquisition Organisation should, as a minimum, address the following generic areas:

a. the Tenderer's ability to plan for the delivery of a product that conforms to specified requirements, including identification and understanding of contract requirements.

b. the Tenderer's proposed application of the QMS to ensure delivery of a product and/or service that fully satisfies contract requirements.

c. the Tenderer's proposed Quality Assurance activities, including the competence and resources to be committed to the contract.

d. the Tenderer's proposed Quality Control activities.

Note: A potential technical risk may be associated with the control of nonconforming products if Def Stan 05-061 Pt.1 were to be used in the contract where the Supplier does not hold the appropriate competence and approvals to categorise arising nonconformities. This should be identified at the contract review post Supplier selection. Further assessment and risk mitigation will need to be applied including the removal of the requirement to self-assess nonconformities (including concessions).

4.4.4.4 Competence

For the PCAE to be effective, the MOD Acquisition Organisation **should** ensure that individuals evaluating the Tenderer's QM controls are, as a minimum, a Competent Quality Practitioner. More information on functional competences can be found in Managing Quality on the KiD.

4.5 Contract Execution

4.5.1 Introduction

The Contract Execution stage is when the Supplier works towards realising the equipment or service to the requirements specified in the contract thus validating the MOD Acquisition Organisation's strategy for the acquisition.

In addition to the activities required of a GQA Practitioner in support of the contractual requirements, this stage will provide an outline of how QA services can assist in gathering evidence that the Supplier has met and continues to meet their commitments. Also, that identified risks are managed and emerging risks or issues are responded to appropriately. This exemplifies a factual-based approach to decision making.

The benefits of GQA activity in the Contract Execution stage provide assurance that the Supplier will meet its commitments and deliver to the requirements of the contract through surveillance against identified risks, as well as provide early warning of emerging risks and issues. This will build up valuable information on the Supplier for future acquisitions that can also be used for measurement and acquisition review purposes during the Acquisition Conclusion phase.

Further guidance on GQA during Contract Execution can be found in Managing Quality on the KiD.

4.5.2 Requirement

This section provides authoritative guidance for the management of nonconformities arising in Defence Acquisition, as well as the MOD Requirements (and their application) to achieve the directive within JSP 940, Part 1, Section 1.4 'f', 'g' and 'h'.

In meeting the MOD policy requirements for GQA, all Top Management within MOD Organisations shall as a minimum:

> ***f. manage supplier and/or product related risk, with consideration given to conducting GQA Surveillance (GQAS) to assist in the risk mitigation process.***
>
> ***g. only task authorised GQA Representatives (GQARs) to carry out GQAS to assist in the mitigation of risk on contracts or sub-contracts within the UK.***
>
> ***h. utilise the Overseas Quality Assurance procedures to request GQAS to assist with risk mitigation on contracts or sub-contracts placed outside the UK.***

(JSP 940 Part 1 Section 1.4)

4.5.3 Management of Non-conforming Products

4.5.3.1 Introduction

This section provides authoritative guidance for the management of nonconformities arising in Defence Acquisition, specifically in relation to the selection of Def Stan 05-061 Pt.1 in contracts and the management of Supplier concession applications.

When a non-conforming product is identified which is unable to be corrected, or its correction at the time of detection could impact on other contractual requirements, the Supplier may therefore seek permission from the MOD to deliver or use the non-conforming product either:

a. for a limited duration during production (known as a Production Permit or Deviation); or

b. to deliver or use the non-conformance against the contract (known as a concession).

Where it is in the MOD's interest, acceptance of a nonconformity may be considered.

4.5.3.2 Requirement

Where a Primary AQAP (AQAP 2110 or 2310) is called up in a contract, the MOD Acquisition Organisations are responsible for ensuring that they have the appropriate processes in place to manage Supplier non-conforming product and concession requests.

The contract is to be specific in the application of all concession requirements.

MOD Acquisition Organisations need to maintain records of all concession applications and supporting documentation.

The process to be followed for the Management of Non-conforming products is detailed at Annex D to this chapter, where the non-conformance is related to counterfeit materiel see Annex F to this chapter.

4.5.4 Government Quality Assurance Surveillance

4.5.4.1 Introduction

Government Quality Assurance Surveillance (GQAS) is defined as the systematic and regular monitoring of the contractual elements of the Supplier's QMS, processes and products, to provide confidence to the acquiring nation that the Supplier is fulfilling the requirements of the contract.

In accordance with the NATO Agreement STANAG 4107 each nation is to have a National Quality Assurance Authority, (See the National Quality Assurance Authority topic in Managing Quality on the KiD), who is responsible for the mutual provision of GQA within that nation to other participating nations.

4.5.4.2 Government Quality Assurance Representatives (GQARs)

GQARs are the Personnel with responsibility for GQA and GQAS, within the Supplier environment, acting on behalf of the MOD Acquirer. See also section 4.5.7.

For contact details of MOD Organisations or individuals authorised by the MOD NQAA to act as a MOD GQAR, a list is available to download from Managing Quality on the KiD.

4.5.4.3 Risk-Based Government Quality Assurance Surveillance Process

The Risk-Based GQAS Process describes national practice, and the process to be followed by MOD Acquisition Organisation staff and GQARs, it includes:

a. formal tasking and considerations.

b. planning surveillance activity.

c. undertaking surveillance and reporting.

d. record retention classification and use.

There may be occasions when existing authorised MOD GQAR Organisations or personnel do not have sufficient resources or the necessary expertise to provide the GQAS required. In these **exceptional** circumstances the MOD Acquisition Organisation's Team Leader **should** seek approval from the MOD NQAA before using alternative resources for carrying out GQAS.

The MOD NQAA, having taken due regard of all available GQAR resources, will ensure that proposals for alternative resourcing of GQARs are acceptable and in the best interests of the MOD. In such exceptional circumstances the MOD Acquisition Organisation's Team Leader should contact QCM Policy in the first instance for further advice on how to proceed.

The 'Risk-Based GQAS Process' and 'Overseas GQA' can be found within Managing Quality on the KiD.

4.5.5 Quality Assurance Groups

In order to co-ordinate the GQA arrangements and activities, the Competent GQA Practitioner may need to set up a Quality Assurance Group (QAG). The decision on whether to establish a QAG can only be made after consideration of the size, value, complexity of the project and/or contract(s) in addition to the risks that impinge upon quality. Similar factors influence the membership of the group, the scope of its activities, frequency of its meetings and reporting chains. These **should** all be detailed within the MOD Acquisition Organisation's Quality plan.

Consideration of the need for a QAG should also include associated contracts subsidiary to or in support of the overall acquisition requirement. It may be appropriate to establish a sub-portfolio QAG, with other project areas (working with funds delegated from the main project) feeding into this as required. Some of these may justify the formation of a QAG in their own right; others may be incorporated into the business of the main project QAG, whilst others may be dealt with on an informal basis.

The QAG should be formally integrated into the project management structure, with written terms of reference, clearly defined membership, regular meetings and published minutes.

For some contracts, where a significant amount of work is subcontracted, or where several sites of a large organisation are involved, the Prime Supplier's GQAR may set up a co-ordination meeting. It may well be cost-effective to incorporate such a meeting into the QAG, by inviting the appropriate Sub-Supplier GQAR to attend (acting upon the advice of the Prime Supplier GQAR). The Competent GQA Practitioner should make sure that subcontract GQAR or multi-site arrangements are properly considered by the Prime Supplier GQAR concerned. If such meetings are held separately, inputs to the QAG by the Sub-Supplier GQAR should be co-ordinated by the Prime Supplier GQAR.

4.5.6 Partnering Approach for Improving Quality

4.5.6.1 Introduction

The introduction of new contracting arrangements, such as contracting for Capability / Availability / Partnering demand much closer working relationship between the MOD and Industrial Suppliers. This leads to greater interaction and dependency between the MOD Acquisition Organisation's and Supplier staff for the assurance of a quality product. Use of the Partnering Approach for Improving Quality (PAIQ) can help with this; and can allow either the MOD or Supplier to raise issues related to quality. The PAIQ is an enabler for the resolution of significant quality problems during the acquisition process.

The objective of the PAIQ process is to assure the delivery of Fit for Purpose materiel. This is achieved by ensuring the following critical success factors are met:

a. responses to quality issues of all stakeholders in the supply chain are effectively managed.

b. agreed and effective corrective and preventive actions are introduced to ensure quality related contractual requirements and commitments are met.

c. supplier and customer are fully aware, where appropriate, that they have been considered to be in default of their quality contractual requirements and commitments.

The use of the PAIQ as an escalation process to resolve the root cause of contractual quality issues (using a partnered approach between the MOD Acquisition Organisation and Supplier) is describe in more detail within the Partnering Approach for Improving Quality - Flowchart (Figure 4-4).

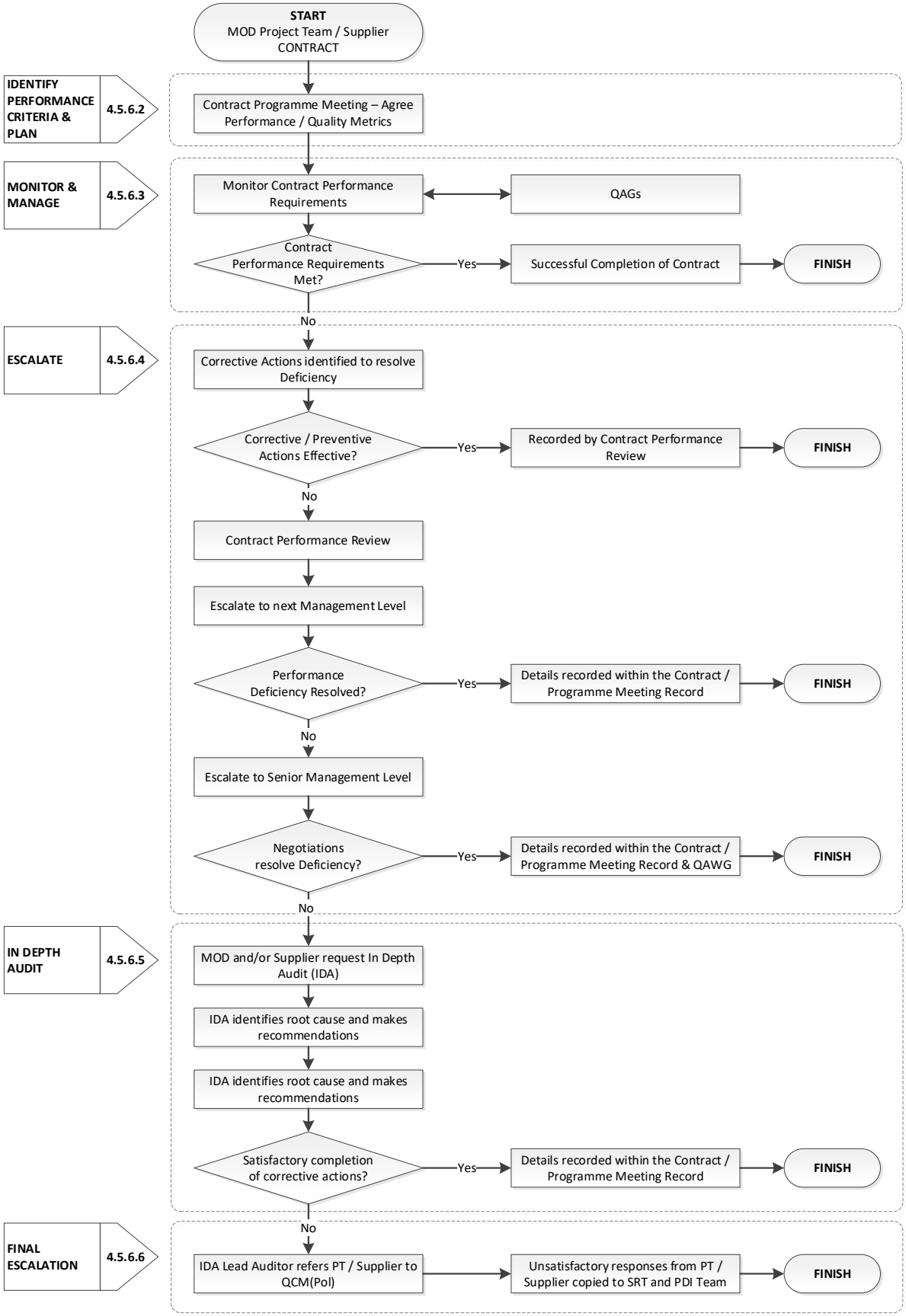


Figure 4-4: Partnering Approach to Improving Quality Flowchart

4.5.6.2 Identify Performance Criteria and Plan

To support the identification of performance criteria the Project Manager and Supplier **should**:

a. ensure that quality is an agenda item at project review meetings.

b. agree the required Quality Performance Indicators (QPIs).

c. maintain records of meetings and supporting evidence.

The selected QPIs should be monitored on a case by case basis by the Project Team and Supplier.

4.5.6.3 Monitor and Manage

The QPIs should be regularly reported and reviewed at the project review meetings or other suitable forum agreed by the MOD Acquisition Organisation and Supplier; details of the review **should** be recorded in the meeting minutes. Such meetings should be commensurate with the reporting timeframe of the individual project.

If the MOD Acquisition Organisation or Supplier considers that the specific quality related requirements have not been met, the deficiency **should** be raised at the project review meeting. If agreed, the respective party will need to generate a corrective and/or preventive action plan detailing the owner(s), proposed corrective and/or preventive actions and timescales, for agreement, to resolve the issues.

The identified deficiencies will need to be monitored via the project review meetings or other suitable forum. All efforts to resolve the deficiency should be taken at this initial level.

4.5.6.4 Escalation

Where both parties are unable to agree, at the lower level, that the corrective and/or preventive actions have been effective; the deficiency will be escalated to the next management level within the Supplier or MOD Acquisition Organisation.

If subsequent negotiations between the MOD Acquisition Organisation and Supplier cannot resolve the deficiency within the agreed timescales at lower management level, the deficiency will be raised through the management chain. Ultimately the matter **should** be brought to the attention of the Director / 2* level or equivalent and the Supplier's Chief Executive Officer or Managing Director, if not resolved at a lower level.

Failure to resolve the actions may result in the MOD Acquisition Organisation's Team Leader or the Supplier to request the Defence Quality Assurance Field Force (DQA FF) to initiate an In-Depth Audit (IDA); this may be done by contacting the Quality and Configuration Management (QCM) Policy MS Form helpline on the QCM-Pol intranet site. QCM Policy is to be copied with the relevant information.

4.5.6.5 In-Depth Audit

The scope of the IDA can cover all stakeholders, including the MOD Acquisition

Organisation, Supplier, sub-suppliers and other parties as required.

An IDA is undertaken by an independent MOD Lead Auditor from an independent DQA FF Section, supported by subject matter experts and other GQAR Organisations where necessary. The IDA will evaluate the effectiveness of the relevant processes for the management, implementation and governance of the contract with regard to the MOD Acquisition Organisation and Supplier. The outcome will identify root causes and corrective and/or preventive actions necessary to ensure the contract meets its requirements for quality.

The DQA FF Lead Auditor will liaise with the Supplier, MOD Acquisition Organisation and other stakeholders to arrange the IDA. If any party does not agree to the IDA, then a documented record of the meeting will be inserted in the IDA file.

On completion of the IDA, the Lead Auditor will report the outcome of the IDA to the MOD Acquisition Organisation's Team Leader and Supplier Managing Director. The Lead Auditor will determine, based on discussion with the affected party, the best course of action for progressing the level of corrective and/or preventive actions, subsequent quality improvement necessary and agreed time scales.

Provided the recommendations are implemented within the agreed time scales no further action is necessary.

4.5.6.6 Escalate - Final

If a Supplier or Project Team fail to implement the agreed corrective and/or preventive actions within the agreed time scales or respond satisfactorily to the IDA findings; the Lead Auditor will refer the relevant party to QCM Policy.

QCM Policy will provide details of Project Teams and Suppliers who do not respond to the IDA findings to the Strategic Supplier Management Team and the Performance Delivery Improvement (PDI) Team.

4.5.7 MOD GQAR Organisations

It is the MOD NQAA policy that only Organisations and/or individuals that have been assessed, registered and duly Authorised by the MOD NQAA, may act as Government Quality Assurance Representatives (GQARs) on behalf of the UK MOD.

Registration of GQARs provides assurance that an Organisation and/or individual is capable, and continues to be capable, of providing Government Quality Assurance Surveillance that meets the MOD NQAA requirements.

For further information on GQAR Organisations (including applications for GQAR status) refer to Managing Quality on the KiD. MOD Organisations and / or individuals requiring to be added to the Authorised GQAR list should apply to QCM Policy. See the Managing Quality topic on the KiD 'Applying for Authorised MOD GQAR Organisation Status' for more information.

4.5.8 Amendments to Contracts

When an Amendment Requisition is raised during Contract Execution, the GQA Practitioner should conduct a review of the required change to determine any impact the

amendment may have on the contractual quality conditions. A review should also be conducted on the acquisition quality planning and quality assurance activities to ensure that they reflect this change where necessary.

If GQAS is being conducted for the contract, the tasked GQAR is to be made aware of the contract amendment to enable a review of the Surveillance Plan and associated risk.

4.6 Delivery

4.6.1 Introduction

This stage is where the Supplier presents conforming equipment or service to contractual requirements; this allows for the Acquirer to make payments, as agreed within the contract, to the Supplier.

Delivery is not the time when the evidence of conformance is gathered, rather when it is collated and confirmed to meet the requirements of the contract. This will include verification of the product(s) and required documented information (i.e. Certificate of Conformance, required test records and product certifications), to confirm conformance to requirements.

Where specific acceptance and assurance criteria/activities have previously been identified as requiring GQA input, these are to be conducted and recorded in accordance with the acquisition quality and acceptance plans.

The existence of outstanding concessions on delivered products **should** be captured and recorded upon receipt, with the necessary actions taken to ensure traceability and identification of concessed products.

4.6.2 Requirement

All GQA activity conducted during the Delivery stage **should** be conducted by a competent GQA Practitioner and adhere to the contractual requirements; engaging with the Acquisition Organisations engineering, logistics and commercial personnel as required.

The competent GQA Practitioner needs to ensure that the quality planning and acquisition records are maintained and updated as necessary to provide confidence in the quality of delivered products.

For more information on Delivery refer to Managing Quality on the KiD.

4.7 Acquisition Conclusion

4.7.1 Introduction

This stage is where all contract requirements have been met by the Supplier and the Acquirer has provided all payments for conforming the equipment or service. Although this is the end of the acquisition action, it isn’t the end of the Acquisition Cycle.

The GQA activities conducted, and supporting documentation, should be completed at the Acquisition Conclusion stage. This should be included within the Project Closure documentation and contribute towards recorded Learning from Experience (refer to section 5.4 Learning from Experience).

In accordance with the Deming Cycle method of promoting continual improvement (refer to section 5.7.5 Plan, Do, Check, Act), it is recommended that a review is conducted at the end of each stage to capture any lessons learnt and allow that learning to be implemented as appropriate at the next stage.

GQA practitioners can provide valuable information on Supplier and Acquirer performance which can be applied to future acquisitions of a similar nature to promote best practice and improve efficiency.

4.7.2 Requirement

The GQA practitioner **should** ensure that all GQA activities are concluded, recorded and reported appropriately.

For more information on Acquisition Conclusion refer to Managing Quality on the KiD.

APPROPRIATE CERTIFICATION PROCESS

Refer to Figure 4-A1.

A1. Acquisition Records

1.1 MOD Acquisition Organisations **shall** record all activities and decisions related to this process in the Project Record and / or applicable Project Quality Plan, identifying and establishing appropriate management of risks to quality; applying the adopted MOD Risk Management process.

A2. Assessment of Risks

2.1 The Competent GQA Practitioner (in conjunction with the Project Manager and other Subject Matter Experts (SME) where necessary) **shall** review the project requirements, applicable regulations and associated risks to assess the need for assurance of a prospective Supplier's management of quality.

2.2 This review **shall** include risks associated with the Supplier's ability to achieve contractual requirements and risks associated with the product / service required to determine the need for Supplier QMS certification.

2.3 The requirement for an appropriately certified QMS is mandated as Technical Discriminator (in the Conditions of Participation detailed in the Procurement Specific Questionnaire (PSQ)) in the case of:

a. regulatory requirements for Supplier QMS certification (i.e. domain specific Supplier certification).

b. a Very High / High risk project.

2.4 Should the output of the project risk assessment determine that a prospective Supplier's QMS certification 'is not mandated', the MOD Acquisition Organisation **shall** determine whether or not Supplier QMS certification is required as a Condition of Participation; as a Technical Discriminator or Weighted Measure in the PSQ or as an Award Criteria during the Tender. Where potential risks are considered anything other than Low to Very Low the use of a Technical Discriminator as a Condition of Participation is considered appropriate (as a proportionate method of gaining assurance of a prospective Suppliers QMS processes).

2.5 Should the output of the risk assessment above determine that the risks are Medium to Low; Appropriate Certification may be applied as a Weighted Measure at PSQ or Award Criteria at Tender.

2.6 Where the output of the risk assessment above determines that the risks are Very Low and do not warrant the use of Appropriate Certification within the contract, prospective Suppliers may not be required to have a certified QMS.

2.7 If the MOD Acquisition Organisation justify single source procurement in accordance with the Commercial Toolkit and the Supplier does not have the required certified QMS;

the MOD Acquisition Organisation **shall** conduct a risk assessment and manage the identified risks. Where applicable, the Regulator **shall** be consulted and where there is a significant level of risk the Acquisition Organisation **should** advise QCM Policy.

A3. Appropriate Certification as a Technical Discriminator

Note: In order to use a Technical Discriminator as a Condition of Participation, for Supplier evaluation in bidding for MOD contracts, the requirement (QMS certification to a specific standard) and the required form of evidence (NAB accredited CB certification) will need to be detailed within the Tender Notice issued for the contract.

3.1 Where a Supplier QMS certification is required as a Technical Discriminator, the Competent GQA Practitioner **shall** determine the standard the QMS needs to be certified to. The certification standard **shall** be a recognised Euro Norm standard, be appropriate for the product or service required, be in compliance with the Technical Specifications requirements within the Procurement Act 2023, and, where applicable, meet regulatory requirements. In order to ensure that the selected standard is proportionate and non-discriminatory, the standard to be used **shall** be BS EN ISO 9001 unless dictated otherwise by applicable regulations or if suitable specific sector scheme standards are commonly used within the relevant prospective Supplier industry sector.

3.2 The Competent GQA Practitioner **shall** advise the contract Commercial Officer that:

a. the contract requires prospective Suppliers to hold appropriate QMS certification;

b. the Tender Notice requires the insertion of the appropriate information as detailed in the Defence Sourcing Portal (DSP).

c. the Quality 1 question within the DSP is to be used at PSQ and **shall** not be changed in any way beyond the specification of the appropriate standard;

d. the Technical Discriminator question **should** only be used at PSQ unless it is appropriate for an Open Procedure (single stage combining Conditions of Participation and Award Criteria questions), this should be in exceptional circumstances and you will be advised by the Commercial Officer if the Open Procedure is to be used.

Note: The reference in the Condition of Participation question to a “suitable alternative standard” means a suitable alternative QMS standard to that requested and not an alternative to a certified QMS.

Note: The instructions for the application of Appropriate Certification utilising the Model QA questions developed by QCM Policy and MOD Commercial Policy in consultation with MOD Central Legal Services can be downloaded from the Commercial Toolkit ‘Quality Assurance in Contracts’ page published within the KiD.

Commercial Note: The point in which you may ask for hard evidence (copies) of the certificates proving the standard a supplier holds, varies according to the procedure you are applying to the procurement, the Commercial Policy within the Commercial Toolkit provides guidance on this.

3.3 Assessment of Supplier Responses: on receipt of the Supplier QMS certificate(s), the Competent GQA Practitioner **shall** review them to ensure:

a. the certification is to the standard stated in the contracts notice. Where a 'suitable alternative standard' is submitted by a Supplier, this **shall** only be an alternative QMS standard and not an alternative to a certified QMS.

Note: An example of a suitable alternative would be where the QMS certification standard is outside of the European Co-operation and so would not be shown as an "EN" standard; this would also be required to meet the points below. Alternatively, where ISO 9001 was requested, a suitable Sector Scheme QMS standard (see section 4.3.3.1 – Requirement) might also be accepted as a suitable alternative. Sub-Paragraph b, c and d below still apply.

b. the certification is in date and valid.

c. the certification submitted relates to Supplier making the submission and covers the locations where the work is to be conducted. The scope detailed on the certification covers the requirements of the contract.

d. the certification is issued by a recognised NAB accredited 3rd party certification body with the appropriate scope.

3.4 If a Supplier fails to provide a copy of their certification when requested at the appropriate time, it is to be assumed that such certifications do not exist, and the Supplier assessment conducted accordingly.

3.5 Unacceptable / No Supplier QMS Certification Presented; QMS Certificates which do not meet the above criteria do not provide assurance and there may be additional risks in relation to quality if it is decided to procure from these Supplier's. An assessment of the risks to quality in achieving the contractual requirements **shall** be carried out and documented. From this assessment the MOD Acquisition Organisation **shall** either:

a. where Supplier QMS certification is mandatory:

(1) provide the recommendation to reject the Supplier's application; or

(2) in exceptional cases for direct award (single source) acquisition, seek dispensation to continue with the Supplier's application from QCM Policy and, if applicable, the relevant Regulatory Authority. Providing documented evidence of proposed risk management and associated costs (for example, increased use of Government Quality Assurance Representative (GQAR) surveillance and / or product verification).

b. where Supplier QMS certification is not mandatory:

(1) provide the recommendation to reject the Supplier's application; or

(2) in exceptional cases for direct award (single source) acquisition, where the MOD Acquisition Organisation propose to manage associated risks to quality, provide documented evidence of risk management and associated costs (for example, increased use of GQAR surveillance and / or product verification); this option is to be made in discussion with the contract Commercial Officer in order to capture any commercial implications that may exist.

(3) where applicable (if uncertainty exists), consult with QCM Policy.

3.6 The recommendation regarding the Supplier QMS certificate(s) is to be forwarded to the contracts Commercial Officer for inclusion in the Supplier Assessment Process.

A4. Appropriate Certification as a 'Weighted Measure' or 'Award Criteria'

Note: Appropriate Certification model questions, with evaluation criteria, have been developed by QCM Policy, in consultation with Commercial Policy and MOD Legal Services, which **should** be used where Appropriate Certification is to be used within the DSP. The instructions for the application of Appropriate Certification utilising the Model QA questions can be downloaded from the Commercial Toolkit 'Quality Assurance in Contracts' page published within the KiD.

4.1 Where Appropriate Certification is determined to be used as a Condition of Participation Weighted Measure at PSQ or Award Criteria during Tender, the Competent GQA Practitioner is to identify the relevant standard to which Supplier QMS certification is required.

4.2 The Competent GQA Practitioner, in consultation with the relevant project staff and the responsible Commercial Officer, **shall**:

a. If at PSQ, use the Appropriate Certification Weighted Measure question within the DSP. If at Tender, use the Quality 3 question (from the Model Acquisition QA Questions Application Instruction) as an Award Criteria;

b. agree the weighting of the question.

The use of these questions **shall** be in accordance with Model Acquisition QA Questions Application Instruction and comply with MOD Commercial Policy.

Note: If Appropriate Certification has not been applied at PSQ it can be applied as an Award Criteria at ITT.

Commercial Note: The point in which you may ask for hard evidence (copies) of the certificates proving the standard a supplier holds, varies according to the procedure you are applying to the procurement, the Supplier Selection Policy within the Commercial Toolkit provides guidance on this.

4.3 The Competent GQA Practitioner **shall** conduct an evaluation of Supplier responses; carried out in accordance with commercial instructions for the contract.

4.4 The evaluation results **shall** be forwarded to the contract Commercial Officer for inclusion in the Supplier Assessment Process.

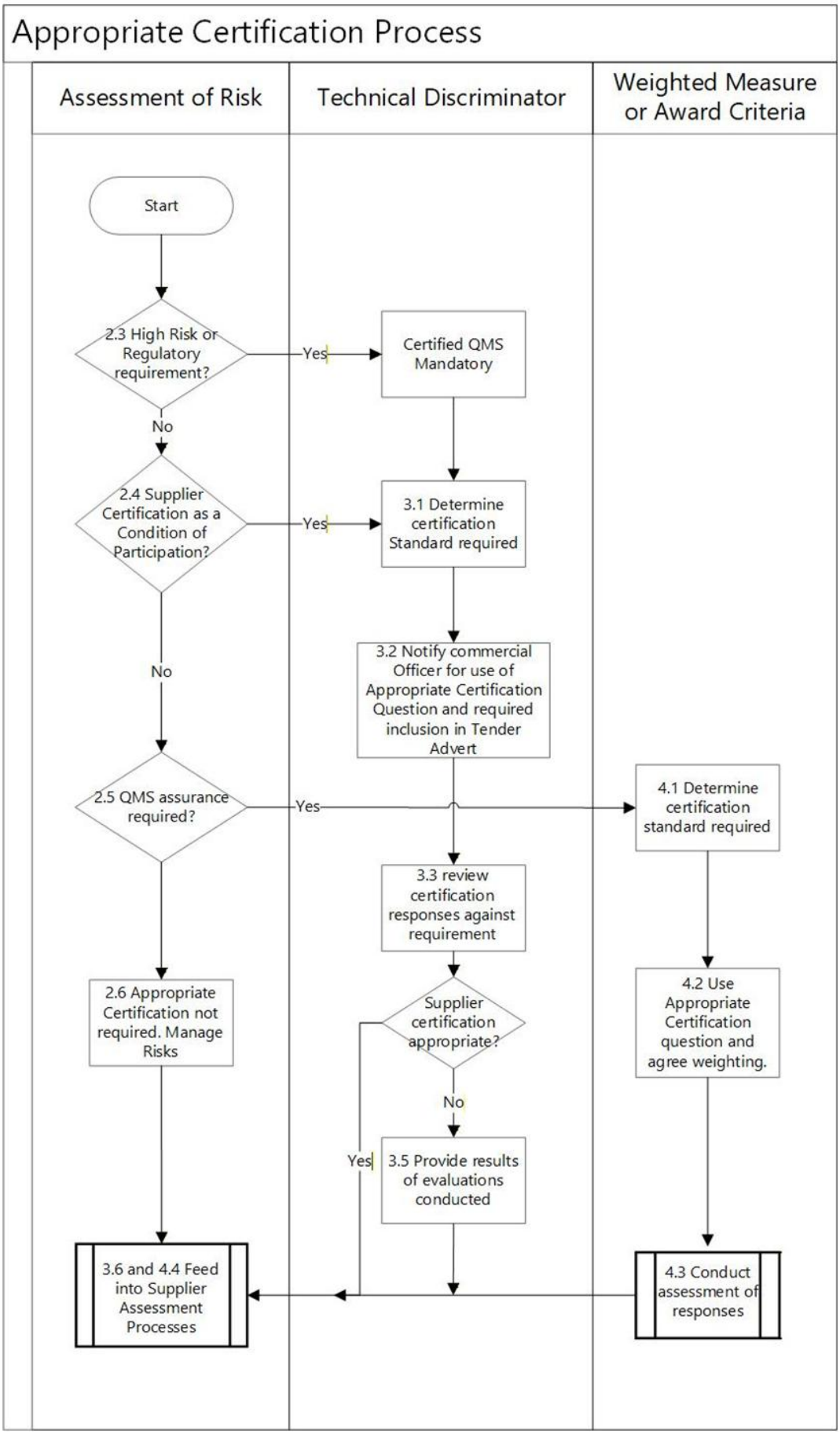


Figure 4-A1: Appropriate Certification Process

SELECTION OF STANDARD QUALITY CONTRACT CONDITIONS

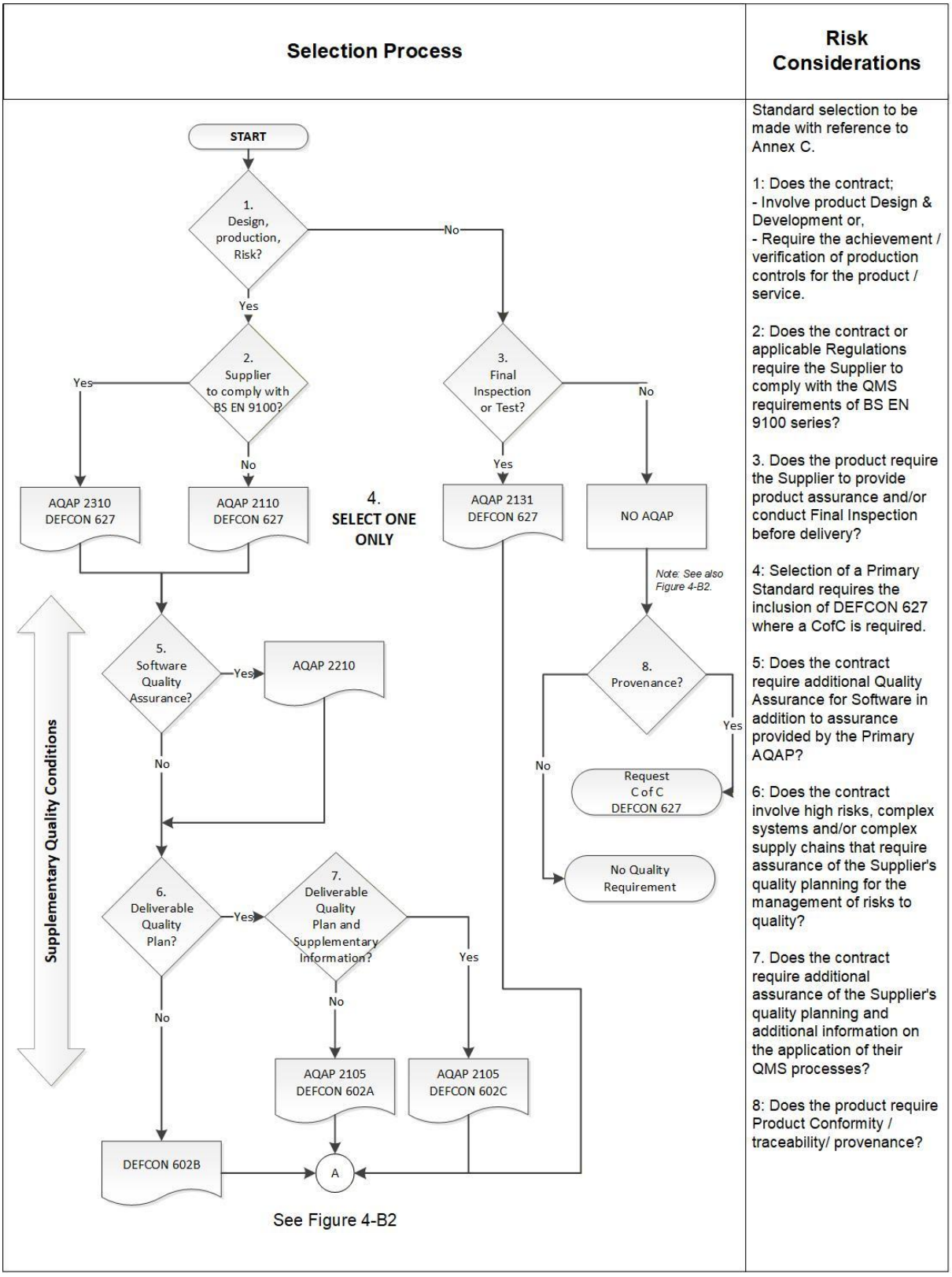


Figure 4B- 1: Selection of NATO Primary and Supplementary Quality Contract Conditions

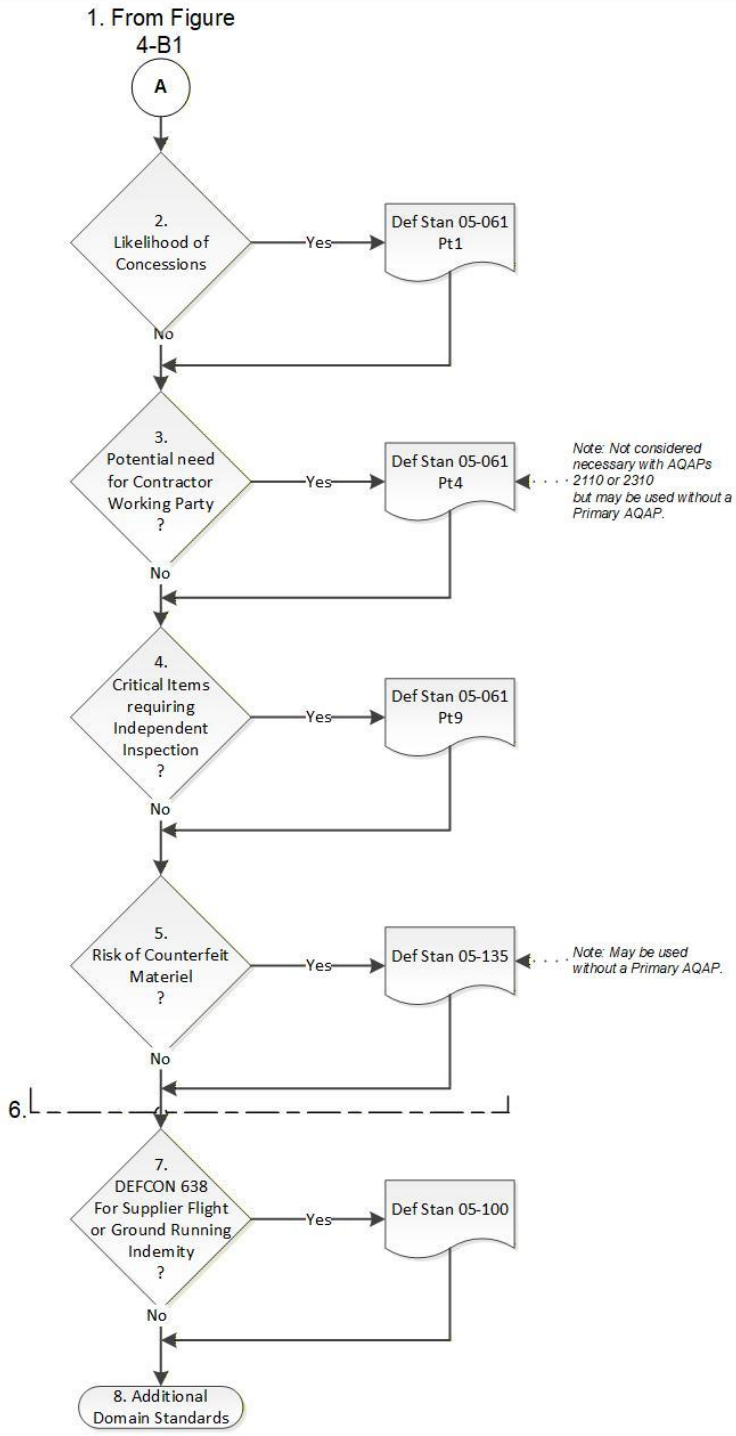
Selection Process	Risk Considerations
	Standard selection to be made with reference to Annex C. 1: In addition to the standards identified from 4-B1, the following additional Supplementary standards are also to be considered. 2: Does the achievement of contractual requirements require the Supplier to categorise arising non-conforming product (with respects to concessions) and is the Supplier considered technically competent to do so? 3: Does the achievement of contractual requirements require the Supplier to conduct work activities at MOD establishments and/or external premises? 4: Does the achievement of contractual requirements require risk mitigation for activities involving Safety Critical Items? 5: Does the achievement of contractual requirements require the Supplier to manage risk of counterfeit materiel entering the supply chain? 6: In addition to the Standard Contractual Quality Conditions the following is also to be considered for the contract where applicable. 7: Does the achievement of contractual requirements require the Supplier to operate allotted military aircraft under MOD indemnity for conducting flight authorisation and/or engine ground running? 8: In addition to consideration of the Primary and Supplementary standards featured within this JSP, the Authorised Signatory is to include domain quality standards as necessary.

Figure 4-B2: Standard MOD Supplementary Quality Conditions

MOD PRIMARY AND SUPPLEMENTARY QUALITY CONTRACT REQUIREMENTS

TABLE OF STANDARD CONTRACTUAL QUALITY CONDITIONS – Primary AQAPs (only select one per contract)

Standard	Title	Comments/Application
AQAP 2110	NATO Quality Assurance Requirements for Design, Development and Production.	To be applied in contracts with the requirement for Design / development and / or achievement / verification of production controls and where the Supplier is expected to meet the requirements of ISO 9001.
AQAP 2131	NATO Quality Assurance Requirements for Final Inspection and Test.	To be applied in contracts where assurance of final inspection and production test processes are required.
AQAP 2310	NATO Quality Assurance Requirements for Aviation, Space and Defence Suppliers.	To be applied in contracts with the requirement for Design and/or Development work; where the Supplier QMS is to meet the requirements of BS EN 9100.

TABLE OF STANDARD CONTRACTUAL QUALITY CONDITIONS – Supplementary Standards (select as required)

Standard	Title	Comments/Application
AQAP 2210	NATO Supplementary Software Quality Assurance Requirements to AQAP 2110 and AQAP 2310	For MOD contracts that include development or maintenance of either deliverable or non-deliverable software and require additional Quality Assurance; AQAP 2210 **shall** be included. AQAP 2210 **shall** only be invoked with AQAP 2110 or 2310.
AQAP 2105	NATO Requirements for Quality Plans	Where risks to achieving contract requirements warrant a 'Deliverable' Quality Plan, the contract will need to include AQAP 2105 and DEFCON 602A. *This may be linked to a contractual and or financial milestone.*
DEFCON 602A	Deliverable Quality Plan	Where risks to achieving contract requirements warrant a 'Deliverable'

Standard	Title	Comments/Application
		Quality Plan, the contract will need to include AQAP 2105 and DEFCON 602A. *This may be linked to a contractual and or financial milestone.*
DEFCON 602B	Quality Assurance (Without Deliverable Quality Plan)	Where a Primary AQAP is used in a contract but the risks to achieving contract requirements do not warrant a Deliverable Quality Plan, the contract **shall** include DEFCON 602B.
DEFCON 602C	Quality Assurance (With Deliverable Quality Plan and QA information)	Where risks to achieving contract requirements warrant a 'Deliverable' Quality Plan and supplementary information for the application of the Supplier's QMS processes, the contract will need to include AQAP 2105 and DEFCON 602C. *Note: DEFCON 602C additional information is aligned to the requirements of the Key Performance Indicator for Quality, which is detailed in Managing Quality on the KiD.*
DEFCON 627	MOD requirements for a Certificate of Conformity	DEFCON 627 **shall** be included in all contracts which invoke the Primary AQAPs 2110, 2310 or 2131. Where risks do not warrant the inclusion of an AQAP, but design provenance or traceability is a requirement, the contract **shall** include DEFCON 627.
Def Stan 05-061 Part 1	Quality Assurance Procedural Requirements – Concessions	To be applied in contracts where the Supplier may need to request a concession and is considered technically competent to categorise arising nonconformities.
Def Stan 05-061 Part 4 *Not considered necessary with AQAP 2110 or AQAP 2310*	Quality Assurance Procedural Requirements – Contractor Working Parties	To be applied in contracts where the Supplier may be required to field Contractor Working Parties.
Def Stan 05-061 Part 9	Quality Assurance Procedural Requirements – Independent	To be applied in contracts which require Independent Inspections.

Standard	Title	Comments/Application
	Inspections Requirements for Safety Critical Items	
Def Stan 05-135	Avoidance of Counterfeit materiel	The MOD Acquisition Organisation **shall** undertake Project Acquisition Risk Review to assess the risk potential of counterfeit materiel entering the supply chain and the associated impact on the safety and performance of equipment procured by the MOD. Def Stan 05-135 (and DEFCON 524A) **shall** be included, except where the risk of Counterfeit Materiel is recorded as being very Low.
	Air Domain Only	
Def Stan 05-100	Ministry of Defence Requirements for Aircraft Flight and Ground Running	When DEFCON 638 is determined to be included in the contract, it stipulates that Industry **shall** follow the processes set out in DEFSTAN 05-100 in order to receive the Indemnity. Therefore, DEFSTAN 05-100 **shall** be included in a contract that will contain DEFCON 638.

Note: *Issue state of the standards is not supplied here; refer to QA Checklist or DStan site for latest edition. The Quality Assurance Requirements Checklist is published as a downloadable Checklist in Managing Quality on the KiD.*

MANAGEMENT OF NON-CONFORMING PRODUCT AND CONCESSIONS PROCESS

D1. Determining Contractual Requirements

When determining contractual requirements, the Authorised Signatory **shall**:

a. determine if a prospective Supplier is required to manage a concession process for non-conforming products to deliver contractual requirements.

b. determine the appropriate method of contractually managing concessions (if required).

c. where AQAP 2110 or 2310 is selected, ensure that Defence Standard (Def Stan) 05-061 Part 1 'Quality Assurance Procedural Requirements - Concessions' [the primary method of contractually managing concession applications for MOD contracts] is included in the contract if the Supplier is Technically competent and authorised.

D2. During the Tender Stage

During the Tender Stage, and prior to contract award, a Competent GQA Practitioner **shall** determine if prospective Supplier(s) have the design authorisation / technical competence to categorise and manage non-conforming product. Refer to Defence Standard 05-061 Part 1 Section 7.1.

If the Supplier is considered to have the authorisation / technical competence, ensure the Def Stan 05-061 Pt.1 is included within the contractual conditions.

If the Supplier is not considered to have the authorisation / technical competence, ensure the MOD Acquisition Organisation and Supplier agree an alternative process for non-conformances against specified technical requirements; ensuring that the appropriate processes are in place to assure domain requirements. For contracts where the Supplier does not hold design authorisation or delegated design authorisation for the equipment, the Competent GQA Practitioner will need to consider if the Supplier is technically competent to categorise nonconformities. If not considered technically competent, Def Stan 05-061 Pt.1 **should not** be invoked in the contract.

Note: The assessment of technical competence is required as, under the requirements of Def Stan 05-061 Pt.1; the initial assessment of the impact of a non-conformance is conducted by the Supplier. The output of this assessment will be the categorisation of the non-conformance as either 'Major' or 'Minor'.

Only 'Major' nonconformities will require the Supplier to raise an MOD concession application.

If the Supplier **is not** considered technically competent to categorise nonconformities, the MOD Acquisition Organisation and Supplier will need to agree an alternative process for non-conformances against specified technical requirements; ensuring that the appropriate processes are in place to assure domain requirements.

D3. During Contract Execution

During the term of the contract the MOD Acquisition Organisation **should**:

a. implement/have in place an auditable process for the management of all their concession activity.

b. ensure that the Supplier applies the appropriate processes for the control of non-conforming products, inclusive of corrective action, identification and segregation of non-conforming products.

c. monitor and manage any risks associated with non-conforming product (see section D5).

d. maintain auditable records of all MOD concession activity.

e. periodically review the MOD Acquisition Organisation concession management process.

Note: Reviews enable trends to be monitored and aid the measurement of Supplier and MOD Acquisition Organisation performance.

D4. Supplier Concession Applications

The MOD Acquisition Organisation's Team Leader is responsible for approving or rejecting an application for concession. Authority to sign concession requests may be delegated, however, in all cases:

a. the signatory **shall** be Suitably Qualified and Experienced Personnel (SQEP) to assess the application and decide its merits.

b. the signatory **shall** be formally Delegated and/or Authorised to approve concession requests.

c. where a concession application affects safety, the MOD Acquisition Organisation's Team Leader may need to indicate agreement by signing the application or seek appropriate approval in order to meet regulatory requirements.

Note: SQEP requirements are to be detailed in the MOD Acquisition Organisation's documented information.

Upon receipt of Supplier concession applications MOD Acquisition Organisations **shall**:

a. conduct an assessment of the benefit for acceptance of a concession request to the MOD against the criteria of time, cost and performance.

Note: Commercial staff are responsible for negotiation of price adjustments resulting from concession applications.

b. involve the relevant stakeholders in the decision-making process when assessing concession applications.

c. ensure that the Supplier conducts root cause analysis to identify the cause of the non-conformance and applies effective corrective actions.

d. establish a thorough understanding of any through life impact of the concession application.

e. make an assessment of any cumulative effect the concession may have with other granted concessions.

f. ensure that the appropriate approvals / authorisations exist when granting a concession.

g. ensure that the Supplier is provided with the appropriate information when providing the 'MOD Decision' on the concession application form.

h. ensure the Supplier has defined requirements for remedial / rectification work where a limited concession (e.g. against a specific quantity, batch or time) is granted.

i. liaise with MOD commercial staff to take appropriate contract action when a concession is granted.

Note: MOD approval of a Supplier's application for concession will be regarded as an amendment to contract that **shall** be limited to the extent set out in the concession. All concession applications will need to be examined carefully to ensure that the MOD's contractual rights are maintained and protected.

j. ensuring that outstanding concessions are subject to periodic review at an appropriate interval; as determined by domain requirements and the nature of the concessions.

Note: Figure 4-D1 provides a simplified overview of the concessions process in accordance with Def Stan 05-061 Pt.1.

Note: An example 'Concession Approval Checklist' is provided in Managing Quality on the KiD, for MOD use, in support of MOD Acquisition Organisation's records.

D5. Risk Considerations

Where it is determined that a Supplier will be required to manage a concessions process to deliver contract requirements, the Competent GQA Practitioner will need to assess and manage any risk this might pose to the MOD. This might include, but not limited to, the following:

a. risks that the Supplier may not be competent to assess the effects of the non-conformance or proposed recovery action.

b. risks where the Supplier may not be aware of, such as adverse impacts on associated systems.

c. risks in the Supplier's categorisation of a non-conformance.

d. risks associated with the Supplier's supply chain.

The Competent GQA Practitioner **should** consider Government Quality Assurance Representative (GQAR) tasking in support of their risk management for the concessions process where (to include but not limited to):

a. the contract requirements are for complex systems.

b. there is a potential risk with the Supplier’s categorisation of nonconformities.

c. it has been considered that there is risk associated with the Supplier’s management of their supply chain.

d. there is a potential risk within the Supplier’s supply chain.

e. to provide assurance for ‘a’ to ‘d’ above.

f. you are not able to establish that any risk exists and that lack of knowledge creates risk.

If it is determined that the Suppliers concessions process is low risk and not warranting GQAR surveillance, the Competent GQA Practitioner may consider having the Supplier's nonconformities list (sometimes known internally as the companies Concession Register) reviewed periodically, such as at project meetings.

Note: It may be possible to either agree a joint nonconformity categorisation process with the Supplier or, with agreement of the Supplier, take part in their nonconformity evaluation and categorisation process.

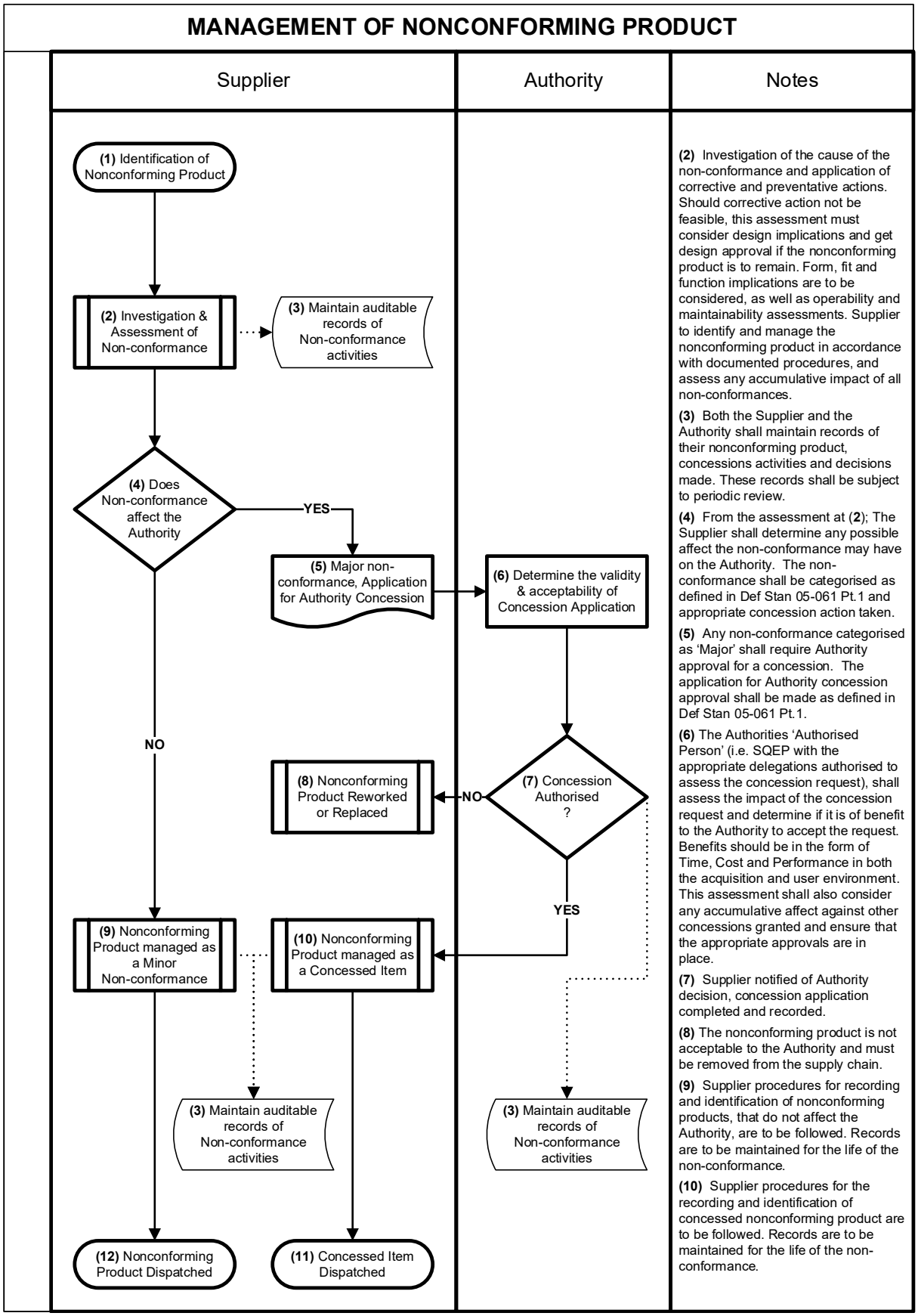


Figure 4-D1: Management of Non-conforming Product and Defence Standard 05-061 Pt 1

GQA FOR CONTRACTS INVOLVING SAFETY-CRITICAL PRODUCTS

Competent GQA Practitioners will need to consult with the MOD Acquisition Organisation's appropriate Technical and Safety SQEP to determine whether a contract contains SCP and ensure that they obtain relevant information regarding the SCP and associated risks. Once it has been established (by the relevant Safety and / or Technical Subject Matter Experts) that the contract involves SCP MOD Acquisition Organisations **should** ensure that:

a. contracts involving SCP are placed with suppliers holding Appropriate Certification, whose scope covers the provision of the contracted requirements.

b. the appropriate Government Quality Assurance Representative (GQAR) Organisation is consulted for all contracts involving SCP and an assessment of the requirement to carryout risk-based surveillance documented.

c. where GQARs are tasked:

(1) this tasking will need to include activities directed at performing Government Quality Assurance Surveillance (GQAS) throughout the supply chain. GQAS will need to be conducted as far down the supply chain as necessary to ensure product compliance.

(2) the GQAR is made aware of the existence of SCP by including the phrase 'This contract involves Safety Critical Products' within the tasking to the GQAR.

(3) reports raised by the GQAR are retained as project records.

d. Def Stan 05-061 Part 9 'Independent Inspection Requirements for Safety Critical Items' is included within contracts where it is determined that independent inspections are required.

e. contracts involving SCP will need to have the requirement for a Deliverable Quality Plan (DQP) reviewed, should this review determine that a DQP is not required the justification for not having it **should** be documented.

f. where items affect safety (safety related), they **should** be identified as configured items and managed under formal Configuration Management principles (reference Def Stan 05-057 - Configuration Management of Defence Materiel and JSP 945: MOD Policy for Configuration Management).

g. Configuration Management and Safety Management requirements for SCP will need to be defined in the contract via the inclusion of the appropriate standards and conditions.

h. where a SCP is being acquired, a Certificate of Conformity alone may not be an adequate means of ensuring the product meets all contractual requirements. The Supplier is to produce and maintain adequate records to provide traceability assurance of SCP, to ensure traceability and assure the conformance to contracted requirements. Once delivered by the Supplier, the MOD Acquisition Organisation is

responsible for the maintenance of these records which will form part of the project / product document set.

i. SCPs are identifiable and accountable in accordance with the requirements of the Defence Logistics Framework (DLF) as well as any single Service requirements.

j. the Prime Supplier is responsible for ensuring that SCP meet contract requirements throughout the supply chain.

k. any additional activity required for the provision of assurance for SCP should be planned and tailored according to the SCP in question, this may include Pre-Contract Award Evaluation (PCAE), GQAS, independent inspection and product verification.

l. records of decisions and reports concerning assurance activities in contracts involving SCP are retained.

m. where it is identified that quality failures could adversely compromise safety, they are to be reported through the appropriate Hazard Log (for example in accordance with Project Oriented Safety Management System (POSMS)).

n. where SCPs are managed by one delivery team and supplied to other delivery teams, all relevant delivery teams are to be consulted where there are changes that impact on the SCP. This consultation will enable assessment of any changes and potential impact to the respective equipment, including the Safety Case or Safety Assessment Report.

Note: It may be determined that, to manage product risk effectively, independent product qualification approval is required. This may be gained through contractually requiring the Supplier to implement Product Conformity Certification (refer to the Product Conformity Certification topic within Managing Quality on the KiD for further guidance).

Further advice on domain requirements for SCP can be found in Managing Quality on the KiD.

PROCESS FOR THE AVOIDANCE OF COUNTERFEIT MATERIEL

F1. Assessing the Risk of Counterfeit Materiel in the Supply Chain

To understand the risk probability and impact of counterfeit materiel in the supply chain and to provide an appropriate tailored response on avoidance, the MOD Acquisition Organisation **shall** assess the risk of counterfeit materiel entering the supply chain by considering the capability of potential Suppliers.

There is an increased probability of counterfeit materiel in equipment capability where:

a. the equipment is complex.

b. the materiel is of a type known to be vulnerable to counterfeiting (*this may include raw material, through to components or assemblies*).

c. the materiel has long lead times (*which increase attractiveness of acquisition from secondary markets and other more vulnerable supply chains*).

d. the design requires the sourcing of parts that are obsolescent or are foreseen to become obsolescent during the lifecycle of the equipment (*which can incentivise use of riskier secondary markets*).

e. there is a lengthy / multi-tiered indirect supply chain (*noting OEM / official distributor / franchisee sourced is lower risk than brokers, aftermarket suppliers, and open market sources*).

f. traceability of the materiel is not otherwise mandated (*such there is potential for reduced assurance from supporting provenance and traceability information*).

g. the design includes:

1) high value items (*e.g. impure silver or copper, simply attractive due to profit*).

2) electrical, electronic, and electro-mechanical parts (*ease of recovery and ability to misrepresent for quick profit*).

3) programmable parts (*includes PCBs, Microprocessors, Microchips, i.e. high-end components which can be particularly attractive targets due to both scarcity and market price*).

h. the Supplier does not have a history of pro-active counterfeit avoidance arrangements and a positive culture of alerting and reporting suspect materiel (*such as through industry and wider customer alerts*) or their history is unknown.

i. the Supplier history is unknown / there is not a positive outcome from initial examination of: the supplier and their past performance / trading history, their counterfeit avoidance arrangements, national practices and requirements, and basic checks of the Supplier's premises via online mapping tools highlight inconsistencies / they only appear to trade online.

j. Obsolete parts being sourced from unverified and traceable sources to meet production and maintenance needs without carrying out appropriate due diligence and testing.

The MOD Acquisition Organisation **shall** assess the potential impact of counterfeit materiel entering the supply chain, including:

a. Programmes / Supplier's ability to compliantly meet milestones, commitments, and associated PTC (Performance/Time/Cost) parameters.

b. performance of fielded equipment caused by effects such as poor or unpredictable reliability through to outright performance failure,

c. operational impacts caused by quarantine, additional controls, or withdrawal of capability from military use such as impact on training and compromise of operation needs,

d. safety including the increased risk of harmful incidents and accidents during, storage, handling and use, affecting people, infrastructure, and equipment,

e. system or equipment vulnerabilities that enable data breaches, systems compromise or cyber-attack.

f. other broader considerations such as MOD and Industry reputational damage, regulatory and legal ramifications and action, and associated consequences such as detrimental effects on exportability, modularity and reuse, and supply chain resilience / wider programme impacts.

g. the Supplier (where selected / known) has measures to support the detection of, and deter would be counterfeiters, such as; high security packaging with complex hard to replicate designs, product authentication measures e.g. unique markings, holograms, secure QR codes and unique serial numbers, use of registered trademarks, monitoring of online platforms including cease and desist actions.

Figure 4-G1 is a simple illustration the drivers of risk in relation to the Source of Supply and Product and Application.

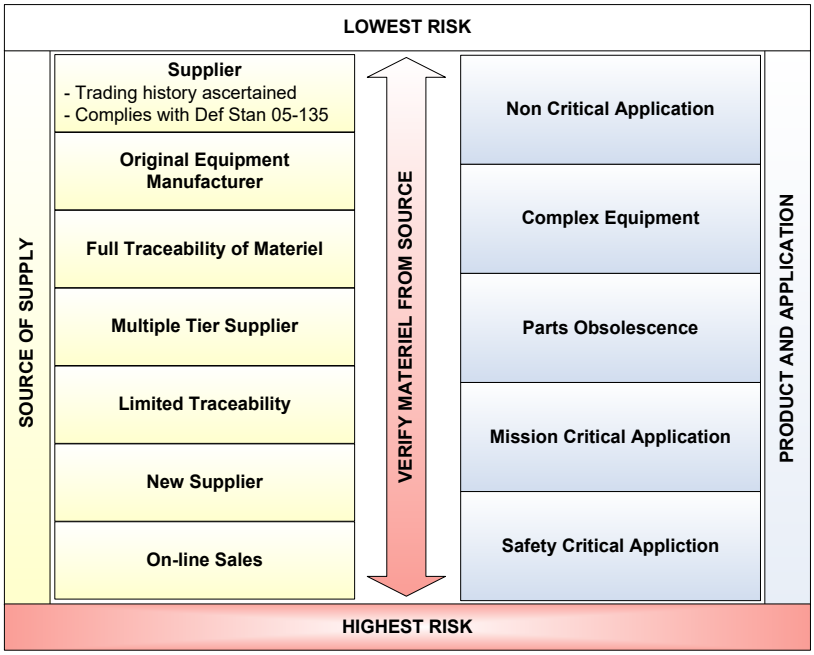


Figure 4-F1: Supply Chain Risk Levels

Only where the risk of counterfeit materiel being supplied and entering the supply chain is both low probability and low impact, the Def Stan and DEFCON may be omitted; and a clear record retained of this decision in accordance with Part 2 Para 4.4.4.4. Otherwise, contract planning **shall** include selection of Def Stan 05-135 and DEFCON 524A.

F2. Preventative actions and Counterfeit Avoidance activities in the Supply Chain

Through invoking Def Stan 05-135, Suppliers have responsibility to take various steps designed to prevent counterfeit through proactive risk reduction and management - which include a clear CA Policy and Management Plan, implemented and maintained CA arrangements / processes including promotion throughout their supply chain, clear oversight of risk and reporting mechanisms. This also includes inspection & test, investigation, reporting and dispositioning of suspect materiel. More detail is contained in Def Stan 05-135.

As the Acquirer, as with any other aspect of Quality, MOD acquisition teams **shall:**

a. Continue to monitor and manage the risk of counterfeit and misrepresented goods.

b. Maintain documented arrangements to support counterfeit avoidance in the QMP and Acceptance Plans.

c. Maintain suitable and proportionate oversight and validation activities during production to monitor conformity.

d. Undertake appropriate assurance of Suppliers' CA (and Config. Mgmt.) arrangements, such as their Management System and processes, and promulgation/flow down of these in their supply chain.

e. Dependant on size, value, complexity, and risk; use a Quality Assurance Group (QAG) (or CA group) to coordinate and monitor counterfeit avoidance activities / provide assurance.

f. Consider the need for appropriate GQA tasking to provide proportionate of both the management of conformity and CA.

g. Undertake proportionate validation and acceptance activities that ensure materiel presented is conformant with contractual requirements and specifications.

h. Consider Counterfeit Awareness training requirements for MOD personnel accepting deliverables, as they are often the first line of detection in the MOD.

The list above amplifies and contextualises key JSP 940 requirements. Acquisition teams should regard counterfeit avoidance as a consideration within all elements and requirements of JSP 940.

Note: Acquisition teams are reminded of the relationship between counterfeit avoidance activities and suspect materiel and the dependency on robust configuration management arrangements - which provide a clear baseline against which to judge, concessions, nonconforming and suspect materiel to determine where it may be suspect or counterfeit.

F3. Identification of Suspect Materiel

Materiel may be suspected of being counterfeit, having been identified through routes which include reports of suspect / counterfeit from allies and global supply chains, reports from an indigenous supply chain, unexpected equipment performance issues or behaviours and whistle blowing.

Where material is Under Ministry Control (UMC), in the event of premature or unexpected equipment failure, including incidents and accidents, the initial investigation **shall** consider if the failure may have been due to counterfeit materiel, following the arrangements detailed below.

Where suspect materiel is contained within the industry supply chain actions, as per Def Stan 05-135, sit with the Supplier including the obligation to immediately inform the MOD Acquisition Organisation.

Commercial Officers **shall** be informed of any instances where suspected counterfeit materiel has been identified in delivered equipment to enable any legal and contractual implications to be addressed.

F4. Quarantine of Suspect Materiel

In the event materiel is suspected as being counterfeit, including as the sole or a contributory cause of incidents and performance issues, the materiel **shall** be dispositioned as below and the process for managing counterfeit material followed with regards to segregation.

The MOD Acquisition Organisation **shall** not return any suspect material to the supplier, except under controlled conditions, and only in limited quantity, for validation or testing, remaining materiel **shall** be quarantined from use.

Where material is Under Contractor Control (UCC), use of Def Stan 05-135 in the contract places clear requirements for quarantine and control to prevent entry into the supply chain including activities relating to the notification and recall of previously delivered materiel also at risk (See Def Stan 05-135 for further detail with respects to contractual requirements).

Where any suspect materiel is UMC (wholly or in part, i.e. industry may also have a volume UCC, where materiel is manufactured in batches) the MOD acquisition team is responsible for ensuring UMC materiel is suitably quarantined in store and/or recalled/quarantined where it has been issued to units or establishments, to prevent use whilst the materiel remains suspect.

The MOD Acquisition Organisation **shall** consider, where UMC materiel is held, the severity of any potential risk to determine whether temporary constraints or bans are required (e.g. use in training), whilst initial investigations are ongoing.

Principles related to operational risk and safety may need to be applied in consultation with the Safety Manager, Principal Engineer, and Commands, with the support of Industry - as operational imperative may outweigh the risk of continued use in the interim. Equipment and materiel which remains in theatre **shall** be tracked to ensure traceability in the event of a required withdrawal.

Relevant reporting systems for reporting material failure **shall** also be followed to alert other MOD users to the potential problem.

F5. Investigation of Suspect Materiel

All parties working closely together will need to investigate the issue, failure, or occurrence, to determine whether the materiel is deficient, noncompliant, or confirmed counterfeit.

For UMC the MOD Acquisition Organisation **shall** instigate a technical review and risk assessment of the implications of allowing the materiel to remain in use, and to examine further whether the materiel is counterfeit which may range from visual article inspection to more detailed examination and testing. Cognisant that counterfeiting techniques available today are often able to bypass formative tests and algorithms.

Working with the supply chain and industry the MOD Acquisition Organisation is responsible for establishing verification, validation and test requirements to determine whether the material is counterfeit or simply deficient, this may include limited return of materiel to facilitate this evaluation. This **shall** not include complete return of materiel.

In the event materiel UCC is suspected as counterfeit, Def Stan 05-135 also makes clear, the responsibilities for investigation and management of limited returns to suppliers, for test and validation including activities relating to notification and recall of previously delivered material also at risk. (See Def Stan 05-135 for further detail with respects to contractual requirements).

The MOD acquirer **shall** fully support these activities through assisting with, disseminating and promulgating, alerts, notices and recalls, facilitating recalls and quarantine by the MOD acquirer during investigation. This includes managing limited controlled returns of materiel UMC which are subject to commercial and legal agreement. A sample of the materiel may be returned to the Supplier, under controlled conditions, for test and

verification and, where it is appropriate, suspected counterfeit materiel may be sent to an independent test house for test and verification of authenticity.

Where counterfeiting has involved an infringement of intellectual property rights (e.g. the application of a false trademark) QCM Policy will consult with the Defence Irregularity Reporting Cell (DIRC) to inform the rights owner.

Note: Industry are to maintain documented evidence of inspection, testing and assurance activities which is to be available upon request.

Where materiel is suspected as counterfeit, QCM-Policy **shall** also be notified, this allows QCM Policy to collaborate with other parties to determine whether a risk of counterfeit exists across the wider defence enterprise. Where this is the case QCM Policy will alert other potentially affected acquirers, who may need to undertake further investigation and action.

Confirmed counterfeit materiel and Suspect counterfeit materiel UMC identified by any employee of the MOD or member of the Armed Forces **shall** be notified to QCM Policy Helpdesk on the QCM Policy intranet page. QCM Policy will notify the Confidential Hotline and relevant enforcement agencies of any confirmed counterfeit materiel (i.e. not suspect).

During the course of investigations, it may be necessary for acquisition teams to place new or additional bans / constraints or quarantines should initial investigatory activity suggest the risk of counterfeit materiel is greater than originally perceived (e.g. whilst a particular batch was suspected initial investigation suggests further batches have been compromised).

The outcome of the review is to be documented, including all risks and risk management actions, the decision whether to replace the materiel or not and, where appropriate the activities planned to replace the materiel.

F6. Final Dispositioning of Suspected Materiel

Investigations will confirm whether the materiel was counterfeit or not.

In the case investigations have determined materiel is not counterfeit and in no other way demonstrating deficiencies, defects, conformity or performance issues (e.g. it looked wrong, paperwork was suspicious etc.) it can be returned to use, including removing removal of bans, quarantine, and the notification of stakeholders.

In the case the materiel is not counterfeit but it demonstrates deficiencies, defects, conformity, or performance issues it must continue to be treated as nonconformant materiel and dealt with as nonconforming products (see Annexe D - Management of Non-Conforming Product and Concessions).

For confirmed case of counterfeit subject to completion of the investigation and agreement from MOD commercial and legal:

a. Materiel held UMC and confirmed as trademark (beyond confirmatory samples) **shall** not be returned to the Supplier to prevent counterfeit materiel re-entering the supply chain and the Supplier is to be informed.

b. Confirmed counterfeit materiel **shall** be destroyed (i.e. rendered unusable) in accordance with disposal regulations and instructions.

c. The acquirer **shall** ensure materiel is not sold as scrap, as part of disposal activities, as this increases the risk that counterfeit materiel may be reintroduced into the supply chain.

d. The acquirer **shall** advise and update QCM Policy summarising the status and outcome. This supports national and international heat mapping and risk profiling and confirms the disposition as complete for corporate assurance purposes.

e. Commercial officers must be updated advising the outcome so that any legal and contractual implications can be addressed, likewise financial officers to ensure appropriate accounting treatments and logistics personnel to accurately reflect stock holdings and conditions.

At the conclusion of the investigation and dispositioning activities, it may (depending on how late it was detected) be necessary to examine whether controls and activities earlier in the process for counterfeit avoidance provided sufficient preventative measures.

The investigation and outcome of the review **shall** be documented and retained as a record, including all risks and risk management actions, the decision whether to replace the materiel or not and, where appropriate the activities planned to replace the materiel.

5 Quality Improvement

5.1 Introduction

Quality Improvement (QI) is an essential aspect of Quality Management and Government Quality Assurance (GQA). This Guidance has been produced to assist Top Management and Quality Practitioners across the MOD in their roles and aims to explain the benefits of QI and why is it necessary to **continually strive for improvement**. Although it needs to be recognised that QI is applicable to all MOD personnel and not just the Quality Practitioner.

This Guidance introduces a number of Tools and Techniques (T&T) that can be utilised to improve quality, manage change and deliver capability. The T&T introduced in this chapter will require varying levels of training, dependent upon the T&T used and 'scale' of its application. This Guidance does not attempt to provide an exhaustive list, but merely aims to highlight a small number that can be used by the Quality Practitioner in their role.

Finally, this Guidance encourages the Quality Practitioner to **promote improvement** as a key feature of the progressive Governance and Assurance approach and part of MOD business.

5.2 Why Should we Continually Strive to Improve?

It is crucial to the Quality profession that we strive towards Continual Improvement (CI). Striving for Improvement means continuing to eliminate the problems that keeps a process, product or service from surpassing the expectations of the customer. CI is defined as a gradual never-ending change which is focused on increasing the effectiveness and/or efficiency of an Organisation to fulfil its policy and objectives. CI is about identifying best practices, adapting them, and continually improving them. The MOD should strive for CI because new processes, behaviours and opportunities can eventually become the norm.

5.3 Make Quality Easy to Improve

Complexity is often the enemy of improvement and effectiveness. The more variables and issues we face in our work, the more difficult it becomes to deliver. When focussing on QI, remember to keep it simple. The aim should be to establish, at the project, programme or organisational levels, what improvement can be made.

5.4 Learning from Experience

Learning from Experience (LFE) is a key development tool at Organisation, team and individual levels. Learning from past experience helps avoid repeating mistakes and is a vital part of improving ways of work throughout the life cycle. LFE involves the identification, capture and exploitation (through use and sharing) of lessons based on past experience. These lessons provide knowledge and expertise that can be used to improve our delivery of objectives and the way in which we work. It is through building on successes and exploring different, more appropriate ways of working and the ability to deliver is improved. LFE is an important enabler of CI and can help enhance the reputation of the MOD through more effective and efficient working. LFE and Improvement should be part of the way we operate. In order to be effective, it needs to become part of the way we work. The selection of tools includes Plan, Do, Check, Act (PDCA), The Quality Interview,

the Check Sheet and the Control Chart. In particular PDCA, or the 'The Deming Cycle', is a tool or Quality Planning process. PDCA is a repetitive four-stage model for CI that encourages the Quality Practitioner to be methodical in the approach to problem solving and implementing solutions. All the tools and techniques recommended in this Guidance are all designed to achieve the same output: *Improvement.* They are all tools and techniques to improve performance throughout the lifecycle.

The Quality Practitioner should ensure that root causes of problems and issues are identified, effective solutions implemented and that feedback loops are established. An important enabler of CI is LFE. Correct implementation of LFE throughout the life cycle, can help enhance the reputation of the MOD through more effective and efficient working.

5.5 Competences for Quality Improvement

In order to effectively promote and conduct QIs, a level of competence is required. This Guidance briefly describes QI techniques that can be applied by all MOD Organisations, with further supporting guidance and training to be featured in Managing Quality on the KiD, necessary to complete this role effectively.

Note: The CQI recommends that to effectively promote and conduct QI the Quality Practitioner should gather Insight, evaluate measures and results and implement change.

Note: The Chartered Quality Institute is the external body to which MOD Quality principles and competences are aligned.

5.5.1 Gather Insight

The Quality Practitioner should use appropriate methods to understand all stakeholder needs and to identify any changes to the Organisation's context including changes to the market, customer requirements and other factors impacting on the Organisation. The Quality Practitioner should use benchmarking and other appropriate tools and techniques to evaluate performance and improvement priorities.

5.5.2 Evaluate Measures and Results

The Quality Practitioner should facilitate the development and use of appropriate measures of operational performance and product / service Quality across the Organisation to ensure fact-based decision making. The Quality Practitioner should help establish priorities for change.

5.5.3 Implement Change

The Quality Practitioner should evaluate the nature and magnitude of change required (incremental, step change, transformational) and how to achieve the required changes through the development of the Organisation's people, processes, tools, technologies and/or infrastructure. The Quality Practitioner should identify any issues associated with the Organisation's culture with respect to achieving and sustaining the desired levels of operational performance and product/service quality.

5.6 Promoting Quality Improvement

It is recommended that improvement is promoted as a key part of the progressive Governance and Assurance approach. QI involves both prospective and retrospective reviews. It is about measuring where you are and figuring out ways to make things better.

Attributing blame should be avoided, with the focus on creating systems to prevent errors from happening.

5.7 Root Cause Analysis

Root Cause analysis is an iterative process and a tool of CI. The process is typically used as a reactive method of identifying event causes, revealing problems and solving them. Analysis is done after an event has occurred and the process can be used to solve problems at their root, rather than just fixing the obvious. Root Cause Analysis often leads to possible Organisational change, rather than just change at team level. The benefits of Root Cause Analysis are that it uncovers relationships between causes and symptoms of problems, the process works to solve issues at the root itself and provides tangible evidence of cause and effect and solutions.

Root Cause Analysis can be utilised to locate the 'defect' in the system and as an improvement tool to identify new ways to do things.

5.7.1 Methods of Root Cause Analysis

There are a number of methods that the Quality Practitioner can adopt to identify the root cause of a problem or understand a process. The methods include The Brainstorming Exercise, The Cause and Effect Diagram and The 5 Whys.

5.7.2 The Brainstorming Exercise

This is probably the most simple of all the QI tools. Brainstorming is a group technique of solving specific problems, stimulating creative thinking and generating a large number of ideas quickly. Brainstorming may be used in a variety of situations. Every participant is encouraged to think aloud and suggest as many ideas as possible no matter how 'outside the box'. Wild ideas are welcomed, and no criticism or evaluation occurs during brainstorming, all ideas should be recorded for subsequent analysis. The process continues until no further ideas are forthcoming and this increases the chance for originality and innovation.

5.7.2.1 When would you use Brainstorming?

Brainstorming can be used by the Quality Practitioner to solve all kinds of problems and areas for improvement, however, it is important to have a problem that is specific and can be made into a question.

5.7.3 The Cause and Effect Diagram

Professor Kaoru Ishikawa created Cause and Effect Analysis (also referred to as the fishbone diagram or Ishikawa diagram [see Figure 5-1]) in the 1960s. The technique uses a diagram-based approach for thinking through all of the possible causes of a problem. This helps the Quality Practitioner carry out a thorough analysis of the situation.

There are four steps to using the tool. Identifying the problem, work out the major factors involved, identify possible causes and analyse the resulting diagram.

5.7.3.1 When would you use a Cause-and-Effect Diagram?

The Quality Practitioner would use this tool to identify the possible causes of problems or the factors that affect a desired outcome or goal. Each fishbone in the diagram represents a category.

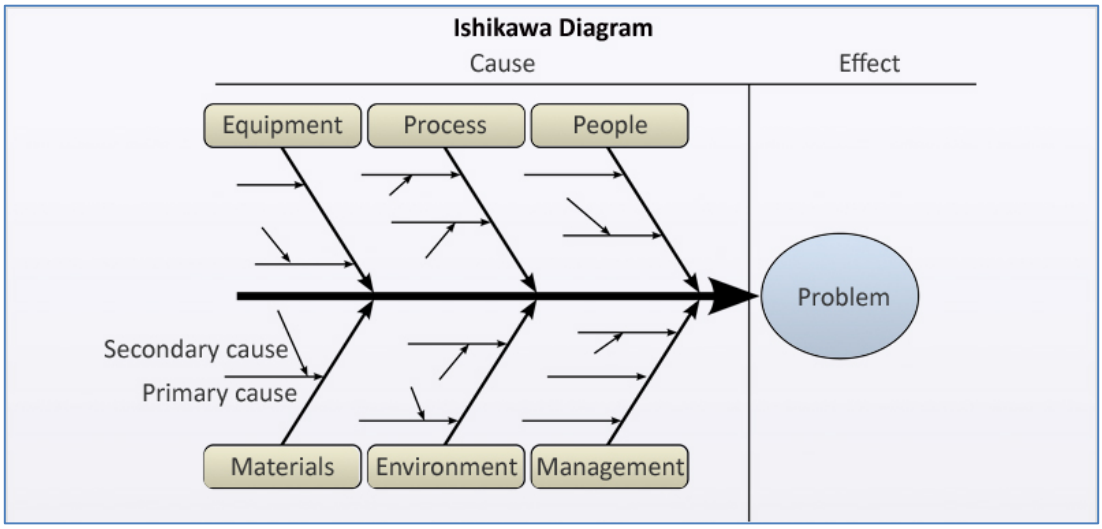


Figure 5-1: Fishbone or Ishikawa Diagram

5.7.4 The 5 Whys

The '5 Whys' (see Figure 5-2) is an iterative interrogative technique which the Quality Practitioner can use to explore the cause and effect relationships underlying a particular problem. To solve the problem properly, the Quality Practitioner would need to drill down through the symptoms to the underlying cause. The aim of this method is to determine the root cause of a defect or problem by repeating the question 'Why?' Each answer forms the basis of the next question. Not all problems have a single root cause. If the aim is to uncover multiple root causes, the method will be repeated asking a different sequence of questions each time.

The method provides no hard and fast rules about what lines of questions to explore, or how long to continue the search for additional root causes and when the method is closely followed, the outcome still depends upon the knowledge and persistence of the people involved.

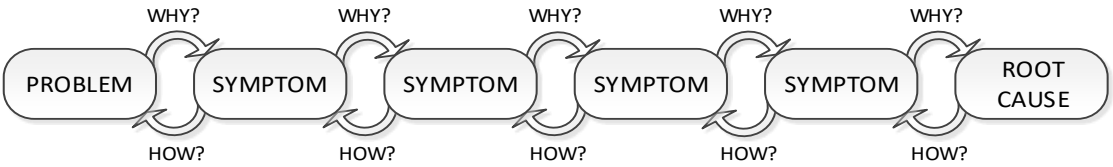


Figure 5-2: Example of the '5 Whys'

5.7.4.1 When would you use The 5 Whys?

The 5 Whys is an excellent tool for QI and problem solving, but it is best for simple or Moderately difficult problems.

5.7.5 Plan, Do, Check, Act

PDCA is also known as the Deming Cycle (see Figure 5-3). This is an excellent technique for CI and very useful when implementing a change or starting a new improvement project.

When change or improvement is necessary it is wise to have a process that you can follow, and this technique is a four-step process used for the control and CI of processes and products. The main benefit of PDCA is that it ensures that you plan, test and incorporate feedback before you commit to implementation. It is recommended that a review is conducted at the end of each stage to capture any lessons learnt and allow that learning to be implemented as appropriate in the next stage.

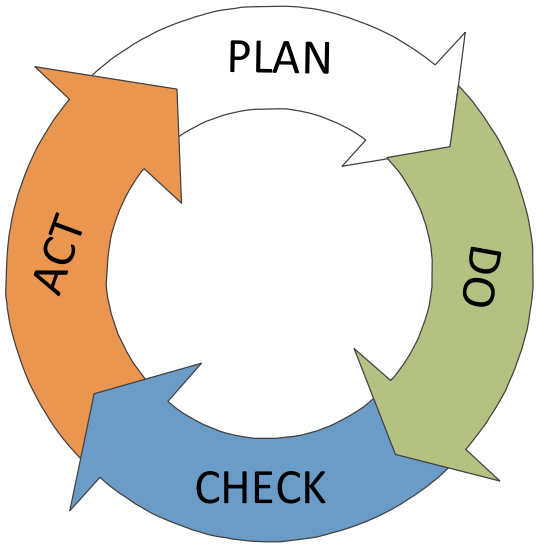


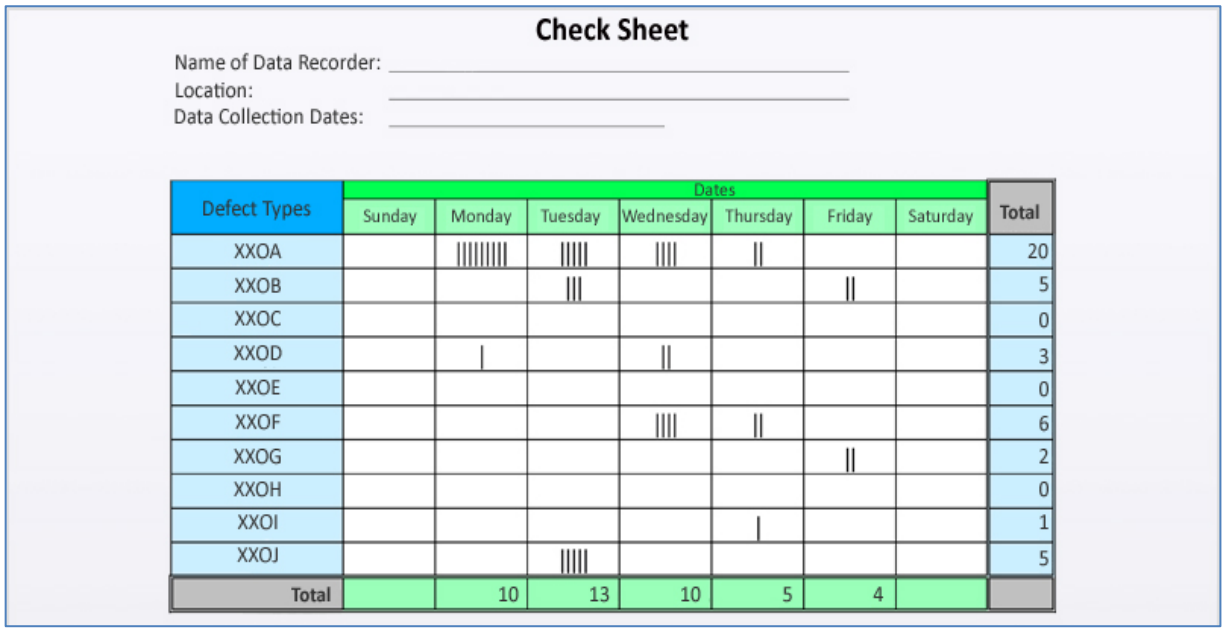
Figure 5-3: Deming's Plan, Do, Check, Act Cycle

5.7.5.1 When would you use Plan-Do-Check-Act?

PDCA is a technique for continuous improvement and best used when starting a new improvement project. It can be used when developing a new or improved design of a process, product or service, when defining a repetitive work process, or when implementing any change.

5.7.7 Check Sheet

The Check Sheet (see Figure 5-4) is used for collecting data in the present time and in the actual location of the data. The chart is useful for both quantitative and qualitative data. When quantitative data is being obtained, it is referred to as the tally sheet. Basic formats are followed that entail proper placement of pertinent information like who, what, when, where, and why. It can be used as a measure of probability distribution, as a checklist, and to quantify defects.



Check Sheet

Name of Data Recorder: _____

Location: _____

Data Collection Dates: _____

Defect Types	Dates							Total
	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	
XXOA		||||||||	|||||	||||	||			20
XXOB			|||			||		5
XXOC								0
XXOD		|		||				3
XXOE								0
XXOF				||||	||			6
XXOG						||		2
XXOH								0
XXOI					|			1
XXOJ			|||||					5
Total		10	13	10	5	4		

Figure 5-4: Check Sheet Example

5.7.7.1 When would you use a Check Sheet?

A check sheet is a structured, prepared form for collecting and analysing data. It is a generic tool that can be adapted for a wide variety of purposes. However, it is best used when data can be observed and collected repeatedly by the same person or at the same location, when collecting data on the frequency or patterns of events, problems, defects, defect location, defect causes, etc.

5.7.8 Control Chart

A control chart (see Figure 5-5) is often used in QI. This chart is used for monitoring and ensuring statistical control. It will have certain measurements and limits, and when the measurements go beyond limits, this will signal a variation. The chart is also useful for tracing the cause of any possible variation.

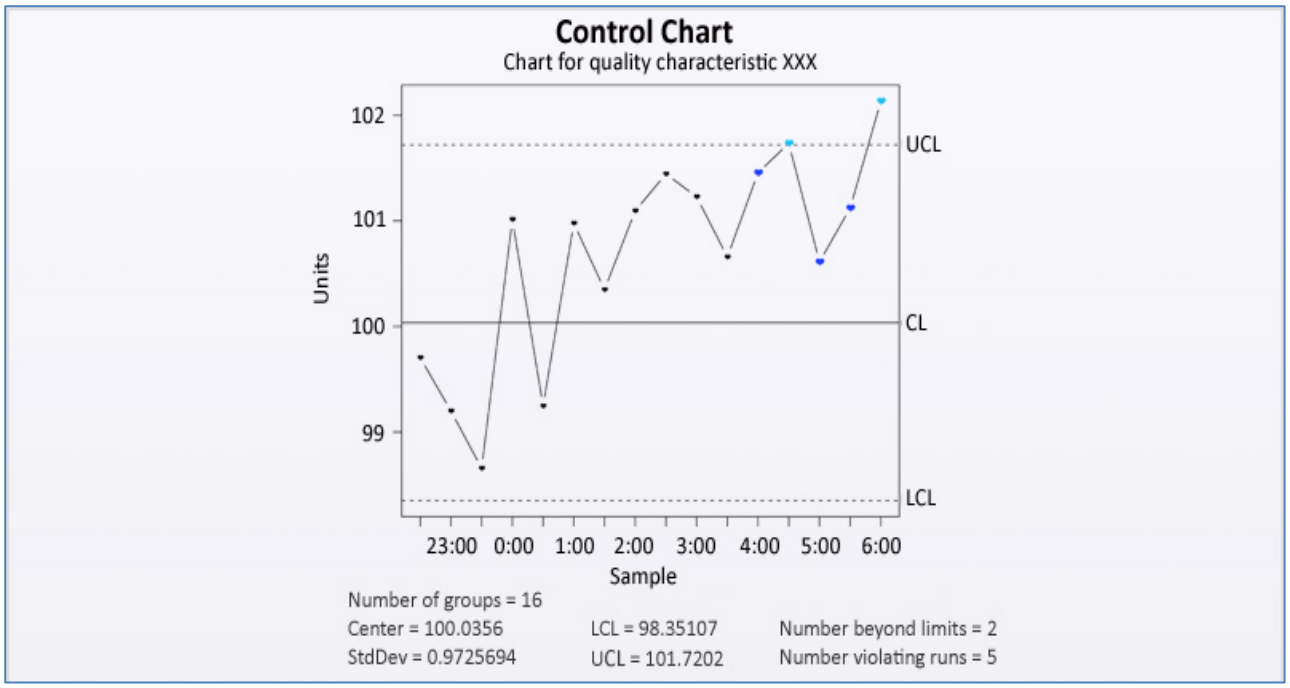


Figure 5-5: Control Chart Example

5.7.8.1 When would you use a Control Chart?

The Control Chart is a graph used to study how a process changes over time. It is best used when analysing patterns of process variation from special causes (non-routine events) or common causes (built into the process) or when determining whether your QI project should aim to prevent specific problems or to make fundamental changes to the process.

5.8 Improvement Tools and Techniques

In order to effectively **identify, analyse and improve** existing processes, the Quality Practitioner should be aware of the improvement techniques. These improvement techniques can be used by the Quality Practitioner meet new goals and objectives. The most commonly used include:

a. DRIVE (Define, Review, Identify, Verify, and Execute).

b. process mapping.

c. Six Sigma techniques:

(1) DMAIC process (Define, Measure, Analyse, Improve, Control), and

(2) DMADV process (Define, Measure, Analyse, Design, Verify).

d. Statistical Process Control (SPC).

e. simulation.

5.8.1 DRIVE

DRIVE is a continuous improvement tool commonly used in process improvement. DRIVE helps the Quality Practitioner analyse the problem from a number of angles. The tool involves evaluating problems so they can be broken down into simple, actionable steps. Potential solutions to the problem can then be identified and the Quality Practitioner can then evaluate what changes are required to sustain these improvements.

5.8.2 Process Mapping

Process Mapping is one of the initial steps to understand or improve a process. By gathering information, the Quality Practitioner can construct a 'dynamic' model - a picture of the activities that take place in a process. Process maps are useful communication tools that help improvement teams understand the process and identify opportunities for improvement. Mapped processes cans be evaluated through a Value Stream Mapping (VSM) activity to identify improvements. Refer to 5.8.3 Six Sigma for more on process improvement.

5.8.3 Six Sigma

Six Sigma is a set of techniques and tools for process improvement. Improvement is accomplished through the use of two Six Sigma methodologies; DMAIC and DMADV. Six Sigma is a disciplined, data-driven methodology for eliminating defects in any process. It is a measurement-based strategy for process improvement and problem reduction completed through the application of improvement projects.

5.8.3.1 DMAIC

The Six Sigma DMAIC process is an improvement system for existing processes falling below specification and looking for incremental improvement. DMAIC is an intensive solution approach that focusses only on cold, hard facts and not intuition. The DMAIC methodology, should be used when a product or process is in existence but is not meeting customer specification or is not performing adequately. DMAIC is the more well-known and most-used Six Sigma methodology and is focused on improving an existing process, rather than creating a new product or process like DMADV**.**

5.8.3.2 DMADV

The Six Sigma DMADV process (define, measure, analyse, design, verify) is an improvement system used to develop new processes or products at Six Sigma quality levels. DMADV focuses primarily on the development of a new service, product or process as opposed to improving a previously existing one. This can be especially useful when implementing new strategies and initiatives because of its basis in data, early identification of success and thorough analysis. The DMADV methodology should be applied when a non-existent product or process needs to be developed at a company and when an existing process or product already exists but still needs to meet a Six Sigma level or customer specification.

5.8.4 Statistical Process Control (SPC)

SPC is a strategy for reducing the variability in processes which are the cause of most Quality problems. Decisions and actions are all based on the analysis of data, so establishing a thorough data recording system is at the heart of this methodology. Quality

Practitioners can use SPC to monitor and control a process to ensure it is optimised. The most common application of SPC is quality control in manufacturing.

5.8.5 Simulation

A simulation is a computer model that mimics the operation of a real or proposed system. The simulation is time based and takes into account all the resources and constraints involved, as well as the way these things interact with each other as time passes. Simulation also builds in the randomness you would see in real life. With simulation software you can quickly try out your ideas at a fraction of the cost of trying them in the real Organisation. And, because you can try ideas quickly, you can have many more ideas, and gain many insights, into how to run the Organisation more effectively.

5.9 Choosing a Quality Tool or Technique

The selection of tools and techniques by a Quality Practitioner will be dependent on the situation or task. All the tools and techniques are means to achieve the same thing: *Improvement.* They are all forms of ongoing effort to improve performance.

5.10 Continual Improvement as a Key Enabler

CI is a key part of the progressive Governance and Assurance approach and should be part of the way we operate. In order for an Organisation to be effective, CI needs to become part of the way we work. It is recommended that if we endeavour to continually improve, in time improvement will become just like any other process and form an integral part of the way the MOD works.