



# COUNTERFEIT AVOIDANCE MATURITY MODEL

**UK MOD Counterfeit Avoidance Working Group (CAWG) support document** for auditors assessing compliance with the requirements of Defence Standard 05-135 Avoidance of Counterfeit Material

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# DOCUMENT STATUS

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## Document history

#	Date	Issue	Description of change
1	03-Jul -15	v 1.0	Initial issue authorised for use
2	14-Jun-17	v 2.0	Inclusion of obsolescence management within Annex A. Introduction of Annex C to provide guidance on assessment of maturity levels based on the applicable supplier tier group

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## 1.

# COLLABORATING ON COUNTERFEIT AVOIDANCE

## 1.1 Counterfeit Avoidance Working Group (CAWG)

This Maturity Model and associated guidance has been developed through Industry and UK MOD collaboration at the Counterfeit Avoidance Working Group (CAWG) working alongside obsolescence management specialists. The CAWG provides Policy and Guidance for the UK defence sector response to the threat of counterfeit materiel supply within defence acquisition.

The CAWG promotes collaboration across a network of Subject Matter Experts (SME) in order to determine and share good practice, propose continual improvement to current practice and raise awareness on the topic of the avoidance of counterfeit materiel across the defence community.

## 1.2 Collaborators and contributors

	Aerospace, Defence, Security and Space industries UK Trade Body
	Anti-Counterfeiting Forum
	Astute Electronics Ltd
	Axis Electronics
	Babcock UK
	BAE Systems UK
	Cranfield Defence and Security
	e-Standards
	GE Aviation UK
	General Dynamics Mission Systems UK
	International Institute of Obsolescence Management
	Leonardo MW
	MBDA
	Rochester Electronics UK
	Thales UK
	UK Ministry of Defence

## 2.

# UK MOD COUNTERFEIT AVOIDANCE POLICY

## 2.1 Policy Aim

Counterfeit materiel in the defence supply chain can seriously impact the performance of defence equipment in terms of safety and reliability which in turn may increase through life costs and reduce capability. To combat the threat MOD is working with suppliers and SMEs to provide Policy and Guidance focusing on prevention and detection using a risk based approach.

In relation to counterfeit avoidance this will be achieved by:

- raising awareness across the defence community
- determining and sharing of good practice
- taking a standardised improvement approach commensurate to risk
- proposing continual improvement to current practice

## 2.2 Defence Standard 05-135 - Avoidance of Counterfeit Materiel

UK MOD in collaboration with UK Industry and SMEs has published Defence Standard 05-135. The standard introduces a risk based approach to counterfeit avoidance requiring the supplier to assess the criticality of the equipment they provide and to understand the capabilities of their supply chains. The intention is that suppliers will make more informed and effective decisions that will deliver positive outcomes and protect reputation.

## 2.3 Mandatory Requirements for MOD Delivery Teams

The MOD Acquisition System Guidance (ASG) - Managing Quality website - Avoidance of Counterfeit Materiel topic provides advice for MOD Teams on the actions they should take to prevent counterfeit materiel entering the supply chain, or if such materiel is suspected, detected or reported.

The ASG Mandatory requirements are:

- MOD Teams shall assess and record the risk of counterfeit materiel entering the supply chain.
- Defence Standard 05-135 Avoidance of Counterfeit Materiel shall be included in the requirements for all tenders unless it is considered the risk of counterfeit materiel in the equipment being procured is low risk in relation to equipment criticality or safety to life.

## 2.4 Raising Awareness, Sharing Good Practice and Continual Improvement

This will be achieved by:

- Collaborating and sharing good practice at the MOD / Industry Counterfeit Avoidance Working Group (CAWG).
- Publishing MOD / Industry good practice on the MOD ASG - Managing Quality website - Avoidance of Counterfeit Materiel topic.
- Hosting annual MOD Counterfeit awareness events for the defence acquisition community.
- Communicating internally across MOD using Defence intranet announcements, Quality notices, and Quality forums.
- Using Defence Standard 05-135 - Avoidance of Counterfeit Materiel, in MOD contracts where appropriate (see 2.3 above).
- Monitoring supplier application of Defence Standard 05-135 and using the Counterfeit Avoidance Maturity Model to share good practice and promote continual improvement.

## 3.

# MATURITY MODEL INTRODUCTION

## 3.1 Aim

This publication is intended to support a consistent interpretation of Defence Standard 05-135 and does so through the use of a maturity model with supporting guidance that reflects good practice from across industry.

## 3.2 Purpose

The maturity model ([Annex A](#)) is available for use by MOD and Suppliers to assess compliance with Defence Standard 05-135 in the supply chain.

## 3.3 Scope

This publication is to be used in conjunction with Defence Standard 05-135. The assessment of arrangements against the maturity model should be performed by competent individuals who have the auditing skills necessary to assess performance against management system requirements and have knowledge of the environment the organisation operates within. The key parts of this document are:

- **ANNEX A** - COUNTERFEIT AVOIDANCE MATURITY MATRIX: used to assess maturity levels of suppliers against the requirements of Defence Standard 05-135.
- **ANNEX B** - GUIDANCE FOR ASSESSORS: used to provide advice and interpretation guidance for assessors against the maturity levels outlined in [Annex A](#).
- **ANNEX C** - ASSESS MATURITY LEVEL: used to assess the required maturity level of the supplier based on risk and environmental context.

## 3.4 Background

Defence Standard 05-135 is not industry sector specific though it does recognise that organisations may have arrangements in place that meet other published standards. The Defence Standard introduces a risk based approach and requires suppliers to demonstrate the appropriateness of their risk assessment, arrangements, supply chain management and understanding of the criticality of the materiel they supply.

## 3.5 Feedback and improvement

This publication will be improved over time using real life experiences and frequently asked questions submitted by auditors/assessors who have used the Maturity Model Matrix to assess suppliers against the requirements of Defence Standard 05-135.

Version 2 of this publication further enhances the maturity model through the inclusion of guidance for assessing maturity against optimal levels defined for the applicable supplier tier group. ([Annex C](#)). Defence Standard 05-135 Issue 1 does not have a specific requirement for obsolescence management but it is widely accepted that the risk of counterfeit materiel being procured is heightened where organisations lack robust processes with respect to obsolescence management.

The final page of this paper provides details on how to submit feedback and questions on the subject matter.

## 3.6 Definitions

The MOD definition of both Counterfeit Materiel and Supplier are contained within Defence Standard 05-135. Further explanation is provided in the MOD Acquisition System Guidance (ASG) website - Managing Quality. Available via: [www.gov.uk](http://www.gov.uk). If any of the terms in the maturity model in this publication require clarification then the general definitions in BS EN ISO 9000:2015 shall apply.

A list of terms and abbreviations used within this publication along with their definition can be found at [Annex D](#).

## 3.7 References

1. Defence Standard 05-135 – Avoidance of Counterfeit Materiel
2. BS EN ISO 9000:2015 – Quality management systems – Fundamentals and vocabulary
3. BS EN ISO 9001:2015 – Quality management systems – Requirements

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## 4.

## ANNEX A – COUNTERFEIT AVOIDANCE MATURITY MATRIX

Defence Standard 05-135 Requirement Questions	Counterfeit Avoidance Maturity Level			
	Note: The maturity level of individual key elements is the highest level achieved with no preceding gaps in level criteria			
	Level 0 (immature)	Level 1 (minimal)	Level 2 (improving)	Level 3 (mature)
<b>6.1 Policy Statement.</b>				
<b>6.1.1</b> How has Management Intent or Policy on Counterfeit Avoidance been defined?	Information has <b>not</b> been considered or defined.	Information has been considered, defined, and articulated at a draft level.	Information has been defined, and published as a coherent document.	Evidence exists demonstrating that published information has improved over time, incorporating industry good practice.
<b>6.1.2</b> How is Management Intent or Policy made available to customers upon request?	Information is <b>not</b> available.	Information is available but only when requested.	Information is freely available and easy to access (e.g. via website no request necessary).	Information is freely available, easy to access, with links to other relevant information and standards.
<b>6.1.3</b> What controls are in place to manage the risk of counterfeit materiel in the supply chain?	The risk has not been recognised.	A simple risk assessment exists but it has not been clearly linked to internal or external supply chain arrangements.	Risk assessments have been used to influence internal policy only. The approach has not been fully extended to cover the whole supply chain.	Active management of the risk in the supply chain is proactively used to inform the periodic review of the supplier's policy including internal and external arrangements across the whole supply chain.
<b>6.2 Roles and Responsibilities.</b>				
<b>6.2.1 Top Management.</b> How have Top Management ensured that Management Intent or Policy for the avoidance of counterfeit materiel is available, communicated, understood and implemented by relevant staff at all levels?	Policy has not been articulated or communicated within the organisation at any level.	Policy has been articulated and communicated within the organisation.	Policy is understood within the organisation and is being implemented.	Policy implementation is supported by Top Management. For example records of meetings, the appointment of a management representative, active risk management, allocation of funding to manage counterfeit, etc.

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<b>6.2.2 Management Representative.</b> Has the supplier appointed a management representative, and do they have responsibility and authority within the organisation for managing the risk, reporting concerns internally and for promoting supply chain awareness?	No management representative has been appointed.	Management representative has been appointed but has yet to address the full range of responsibilities in Defence Standard 05-135.	Management representative is actively involved with reviewing internal arrangements to manage the risk of counterfeit materiel, reporting internal concerns to Top Management and working with the supply chain to raise awareness and understanding of the topic internally and externally.	Management representative has a clear understanding of the multi-functional processes that constitute counterfeit avoidance arrangements, is aware of wider Supply Chain interactions and arrangements including performance metrics. Reports to Top Management reflecting wider Supply Chain concerns and actively participates and collaborates in supply chain activities including sharing of good practice and championing improvement.
<b>6.3 Competence, training and awareness.</b>				
<b>6.3.1</b> How has the supplier determined the awareness level requirements appropriate to each functional role, individual staff competence level, and how the training needs will be met?	The risk of counterfeit materiel has not been considered in the context of staff competence.	Supplier has identified the basic training requirements and competence levels for specific staff related to their activities, functions and processes but have not implemented subsequent plans and actions.	Supplier has fully determined awareness levels appropriate for the organisation Requirements are reflected in a training and development plan.	Organisation has identified processes that contribute to the avoidance of counterfeit materiel and relevant staff within these functional areas are able to demonstrate appropriate levels of awareness and competence.
<b>6.3.2</b> How are records of training, skills and competence maintained?	There are no records of counterfeit materiel training, skills or competence.	A draft training and awareness plan is in place but has not been implemented.	Records relating only to general counterfeit materiel awareness training are maintained.	Records related to counterfeit materiel training, skills and competence levels for specific staff related to their activities, functions and processes are maintained and are actively used to match the right resource to deliver the requirement.

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<b>6.4 Purchasing</b>				
<b>6.4.1</b> How has the supplier assessed the risk of procuring counterfeit materiel taking into account the criticality of the materiel in relation to performance and safety?	The risk of counterfeit materiel is not specifically considered within the Purchasing process.	The risk of counterfeit materiel assessment is based on generic commodity type with no consideration to criticality or end-use.	The risk of counterfeit materiel assessment is based on counterfeit incidents of counterfeit materiel in the supply chain. Purchasing processes direct staff to utilise tools i.e. dynamic in-house or online databases to specifically address counterfeit avoidance.	The risk of counterfeit materiel assessment is influenced by final use scenarios including potential working environments and extremes. In the context of final use, the risk assessment recognises criticality of the materiel, and this influences sourcing and verification activity accordingly.
<b>6.4.2</b> Where risk has been identified, how has the supplier ensured that counterfeit avoidance requirements are flowed down the supply chain?	No evidence of counterfeit avoidance requirements being flowed down the supply chain e.g. on purchase order, contracts, or instructions.	Evidence that ad-hoc counterfeit avoidance requirements being flowed down the supply chain. Activity is reactive and is not established or documented.	Evidence that a process or procedure is in place to ensure that counterfeit avoidance requirements are being flowed down the supply chain in a consistent repeatable manner.	Evidence that a systematic risk based process is established with measures to ensure that proportional counterfeit avoidance requirements are being flowed down the supply chain in a consistent repeatable manner and are verified for effectiveness.
<b>6.4.3</b> As part of the risk based evaluation of sub-suppliers where final product integrity is considered critical in relation to performance and safety, how does the supplier trace the source of supply of the materiel through the supply chain to the manufacturer?	Final product integrity and criticality requirements are not considered or recognised as a supply chain risk, and no traceability mechanisms exist.	Final product integrity and criticality requirements are recorded but not in the context of supply chain risk. Traceability mechanisms take a broad brush approach not necessarily focusing on the traceability of critical components through the supply chain.	Final product integrity and criticality requirements are controlled via a risk based supply chain management plan. Traceability mechanisms focus on the critical components requiring authentic documentation that identifies the provenance of the materiel through the supply chain to the manufacturer.	Final product integrity and criticality requirements across the supply chain are managed using a systematic risk based process. Traceability mechanisms are measureable and proportionate to the risk. All critical components requiring authentic documentation that identifies the provenance of the materiel through the supply chain to the manufacturer are available to the customer upon request.

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<b>6.4.4</b> Where traceability of materiel cannot be established, how does the supplier demonstrate that the materiel fulfils the acquirer's specified requirements?	Traceability problems are not recognised as an additional risk, and additional materiel qualification testing is not considered during the purchasing process.	Traceability problems are recognised as an issue, and additional materiel qualification testing is sometimes considered during the purchasing process.	Traceability problems are managed via a risk based procedure with specific materiel qualification test requirements defined so that they are considered and used consistently during purchasing process.	Traceability problems are managed via a systematic risk based process. Specific materiel qualification test requirements are defined and integrated to the extent that requirements and expectations are clearly identified up-front and are applied consistently during the purchasing process.
<b>6.5 Test and Verification</b> How does the supplier determine the rigour of inspection and test requirements for the acceptance of materiel?	Counterfeit materiel not recognised as an issue. No supply chain intelligence is available to inform a risk assessment, and no enhanced on-receipt inspection methods are available.	Counterfeit materiel recognised as an issue. Personnel have received counterfeit awareness training but the rigour of enhanced acceptance checks are limited to visual inspection of materiel and paperwork (e.g. certificate of conformity). Enhanced methods are ad-hoc and variable.	Counterfeit materiel recognised as a risk determined through supply chain intelligence. On-receipt procedures make use of reference information and are tailored to address the risk level determined. Personnel are trained to use an array of appropriate in-house enhanced repeatable methods.	Systems and processes use an array of joined up information to determine the counterfeit risk and test or verification assessment levels based on criticality of materiel and supply chain intelligence. Predetermined on-receipt inspection routines and verification processes are in place. Suitably qualified and experienced personnel are deployed and use enhanced repeatable methods (including in-house or external) appropriate to risk identified.

Defence Standard 05-135 Requirement Questions	Counterfeit Avoidance Maturity Level			
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<b>6.6 Control of Non-conforming Materiel.</b> How is suspect or confirmed counterfeit materiel (including associated documentation / packaging) handled?	The standard company operating procedure for control of non-conforming materiel is used. There are no enhancements to address the counterfeit risk.	Controls are in place to quarantine suspected counterfeit materiel (including documentation and packaging). Procedure does not explain next steps such as return or disposal arrangements.	Procedure explains segregation and management of suspected and confirmed counterfeit materiel to prevent re-entry to the supply chain. This includes the management of returns to the sub-supplier for validation or testing purposes.	<p>Systems and processes are joined up so that suspected or confirmed counterfeit materiel is dealt with using secure and reliable arrangements to prevent re-entry to the supply chain.</p> <p>- <b>Suspected</b> materiel that is non-conforming is thoroughly investigated in a controlled environment using appropriate tests and experts to determine if it is counterfeit.</p> <p>- <b>Confirmed</b> counterfeit materiel (including evidence, documentation, packaging etc.), is clearly identified and securely segregated. Disposal arrangements are unambiguous and linked to feedback from the counterfeit materiel reporting process.</p>
<b>6.7 Reporting of Counterfeit Materiel.</b> How are employees guided to report occurrences of counterfeit materiel?	No reporting arrangements are in place specific to counterfeit materiel.	Arrangements are ad-hoc and limited to internal, supplier, and customer communications and records.	Procedure explains the steps and reporting arrangements relevant to suspected and confirmed counterfeit materiel. Reporting of confirmed counterfeit materiel meets the requirements of Defence Standard 05-135.	<p>Systems and processes are joined up so that suspected or confirmed counterfeit materiel is reported appropriately (internally and externally).</p> <p>- <b>Suspected</b> counterfeit materiel is reported internally to ensure early effective controls and appropriate actions are cascaded.</p> <p>- <b>Confirmed</b> counterfeit materiel is reported internally and externally to all stakeholders and authorities including all those identified within Defence Standard 05-135.</p>

Defence Standard 05-135 Requirement Questions	Counterfeit Avoidance Maturity Level			
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<b>6.8 Additional Requirements for Suppliers who are Manufacturers</b> . How do suppliers who are original manufacturers manage and implement measures to avoid the misrepresentation of their materiel by others?	Other than secure premises there are no additional arrangements in place.	Registered trademarks and designs are recorded on customs and law enforcement databases. There are no additional specific controls in place to manage the counterfeit risk within the manufacturing environment.	Based on the counterfeit risk in the marketplace, manufacturing processes including unauthorised production overruns, or subcontracted elements are strictly controlled and monitored to prevent the misappropriation of materiel. Controls and monitoring extend to proprietary specifications, tooling, software, components, test equipment etc. required for production. Substandard materiel, including any documentation and packaging are destroyed securely in a controlled manner.	Based on the counterfeit risk in the marketplace systematic processes and procedures are in place to manage all aspects of manufacturing and distribution. Where appropriate, measures may include the use of indelible, encrypted or covert marks on materiel, documentation and packaging. There are measures in place for active enforcement of trade mark and design rights infringements against manufacturers and suppliers of counterfeit materiel.
<b>6.9 Additional Requirements for Obsolescence Management.</b> Within the contract framework and counterfeit materiel criticality, how does a supplier address Obsolescence Management that reduce the risk of receiving counterfeit material?	Obsolescence management addressed reactively and no linkage to counterfeit avoidance exists in the organisation. Customers only made aware at time of placing order for additional item or repair order.	Obsolescence Management addressed and procurement decisions take into account the threat of counterfeits particularly if buying from non-franchised suppliers. Customers only advised of obsolescence issue as communication of last time buy notice	Organisation proactively monitors external information sources for indications of pending obsolescence. Procurement decisions take account of counterfeit risk and increased incoming inspection tests are invoked to check component authenticity. Provides Obsolescence Management report to customer for their consideration.	A pro-active obsolescence management policy is effectively implemented throughout the organisation. Obsolescence management Preventative measures are used i.e. new design device / item selection takes device life into consideration during product design stages, and is a critical element of aftermarket solutions. Original Component Manufacturer notifications are obtained on a regular basis through a variety of means. Obsolescence requirements are cascaded to sub tier suppliers as appropriate.

## 5. ANNEX B – GUIDANCE FOR ASSESSORS

### 5.1 Context to this guidance

Defence Standard 05-135 is risk based and there is a clear expectation that the supply chain is managed. The Prime Supplier Organisation is expected to understand where in the supply chain there will be exposure to the risk of counterfeit materiel. All Supplier Organisations irrespective of their level in the supply chain need to have an understanding of the criticality of the materiel in relation to performance and safety (i.e. where and how the materiel will be used). Assessment of organisations against the maturity model are subject to periodic review as recommended by the reviewer.

Annex B will be improved over time based on feedback from assessors (see [3.5 Feedback and improvement](#)).

#	Annex A – Maturity Matrix Section	<b>Counterfeit Avoidance Maturity Assessment – Guidance for Assessors</b> Advice and interpretation guidance for assessors against the maturity level sections outlined in Annex A
6.1	<b>Policy Statement</b>	<ul style="list-style-type: none"> <li>a. <b>Intentions and direction of an organisation, as formally expressed by its Top Management.</b> Often expressed as “Management Intent” – a statement of approved ways of working reflected in business rules or guidelines that drive systems and the underpinning processes and procedures.</li> <li>b. <b>Policy statement shall be defined specifically for counterfeit materiel</b>, not just non-conforming product and shall recognise the organisations exposure to risk including the supply chain. Details may be captured and disseminated via visual aids, posters, and other media for example bulletin boards, company media.</li> <li>c. <b>Key indicators that the Policy is real</b> are likely to be evidenced by: designated funding, time, and human resource for counterfeit avoidance activity. Other positive indicators may include: avoidance strategy, risk mitigation plan, component and obsolescence management plans.</li> <li>d. <b>Policy example 1.</b> First tier supplier or integrator might adopt a policy of sourcing components from an Original Equipment Manufacturer which clearly limits their exposure to risk.</li> <li>e. <b>Policy example 2.</b> A policy of sourcing only from an Authorised Distributor would also reduce risk, but only if the first tier supplier can demonstrate that the Original Equipment Manufacturer exercises sufficient control over its Authorised Distributors. Such policies would be reflected in their arrangements for materiel selection and procurement.</li> <li>f. <b>Policy example 3.</b> The approaches outlined in examples 1 and 2 would be inappropriate for a supplier involved with through life support with ageing military equipment where obsolescence is an issue and Original Equipment Manufacturers / Authorised Distributors can no longer provide components. In this instance Policy should recognise the increased exposure to risk and it would be reasonable to expect specific arrangements for traceability and validation of sourced materiel. Examples of risk reduction in such circumstances might include: reduced approved supplier base, rigorous supplier selection, active monitoring of the market place, enhanced on receipt screening, increased product qualification in the supply chain etc.</li> </ul>

#	Annex A – Maturity Matrix Section	<b>Counterfeit Avoidance Maturity Assessment – Guidance for Assessors</b> Advice and interpretation guidance for assessors against the maturity level sections outlined in Annex A
6.2	<b>Roles and Responsibilities</b>	<p>a. <b>Top Management.</b> Evaluate whether the Organisations counterfeit avoidance policy has been effectively disseminated by interviewing staff and sub-suppliers as appropriate. Evaluate risk review records to establish whether Top Management are regularly reviewing internal and external arrangements for effectiveness, including risks related to counterfeit materiel. Establish whether improvements are being made by adapting arrangements accordingly.</p> <p>b. <b>Management Representative.</b> Evaluate the effectiveness of the management representative by interviewing management, staff and sub-suppliers as appropriate. Establish whether enduring linkages have been created with other departments e.g. program / project management, procurement, quality assurance, inspection, receiving, manufacturing, and engineering. Verify whether counterfeit risks are communicated and understood, and whether reporting mechanisms are effective. Confirm that there is effective collaboration internally and externally with sub-suppliers and/or industry groups.</p>
6.3	<b>Competence, training and awareness</b>	<p>a. <b>Training of relevant personnel.</b> Determine whether training and awareness is provided to those involved with applicable processes and that it is appropriate to their role and function.</p> <p>b. <b>Review the Organisation's training program and competency records</b> to determine what type of training is being provided for each different task; specifically evaluate training of: program management, projects, procurement, quality, inspection, receiving, manufacturing, and engineering personnel to verify the training and competence is appropriate to their function and that the training covers awareness, avoidance, detection, mitigation and disposition of suspect or counterfeit materiel.</p>
6.4	<b>Purchasing</b>	<p>a. <b>Determine whether documented and controlled source of supply assessment arrangement exists</b> and includes criteria to determine risk of receiving counterfeit materiel. Check that sources of supply are assessed to the criteria and records maintained. Check that those involved with purchasing are aware of the criticality of the material they are procuring.</p> <p>b. <b>Determine how an assessment of potential sources of supply is performed.</b> Ensure that the criteria includes an evaluation to determine the risk of receiving counterfeit materiel and that Subject Matter Expert (SME) agrees that risk criteria is acceptable. Review assessment results for compliance.</p> <p>c. <b>Review the methodology the Organisation uses to confirm sources of supply are maintaining effective arrangements</b> for counterfeit materiel risk mitigation. What methods are used, for example: (1) on-site audits; (2) no known issues with parts previously provided; (3) review of supplier risk mitigation procedures; (4) review of supplier inspection and test data.</p> <p>d. <b>When not purchasing from an Original Manufacture</b> or an Original Manufacture's Authorized Supplier, determine whether arrangements are documented, repeatable, and are adequate in terms of addressing the additional risk. Test by reviewing such a purchase and evaluate the specific risk assessment. Assure that a mitigation plan has been applied that</p>

#	Annex A – Maturity Matrix Section	<b>Counterfeit Avoidance Maturity Assessment – Guidance for Assessors</b> Advice and interpretation guidance for assessors against the maturity level sections outlined in Annex A
		<p>is relevant to the additional risk and addresses product provenance and qualification.</p> <p>e. <b>Flow down of requirements to sub-suppliers.</b> Review arrangements to ensure they require flow-down of requirements on the contract / purchase order. Review a sample of purchase orders and verify the contractual requirements for counterfeit avoidance are invoked in the purchase order and are appropriate for the level of risk involved.</p> <p>f. <b>When traceability cannot be established.</b> Verify that purchasing arrangements require additional risk assessment and controls if traceability information is not available or if documentation is inadequate or suspect.</p>
6.5	<b>Test and Verification</b>	<p>a. <b>Review the inspection and test records</b> to determine if they conform to specified requirements from the risk assessment, including pass/fail criteria and correct sample size used. Verify all inspections and testing determined by the risk mitigation are performed, completed and passed prior to acceptance.</p> <p>b. <b>Review the returned materiel arrangements</b> to ensure handling of returned material includes inspection to validate returned materiel authenticity. If a returned transaction has occurred review the data for compliance and adequacy.</p>
6.6	<b>Control of Non Conforming Materiel</b>	<p>a. <b>Verify control arrangements are in place if suspect or confirmed counterfeit materiel is detected by the supplier</b> and/or their inspection/test labs, after initial receipt, and in the event a customer identifies these items after delivery.</p> <p>b. <b>If a customer has identified suspect or counterfeit materiel</b>, determine how the Organisation responded to the customer's notification.</p> <p>c. <b>Review In-process Failure Analysis arrangements</b> or materiel failure analysis reports to determine if the Organisation performed an evaluation to determine if the failure could be due to counterfeit materiel. A good indication would be predetermined test options for detecting counterfeit materiel or evidence that arrangements are in place with test facilities.</p> <p>d. <b>Review the Material Control arrangements</b>, ensure controls explicitly identifies suspect or confirmed counterfeit materiel and prevents re-entry into the supply chain.</p> <p>e. <b>Review the method used to control suspect or confirmed counterfeit materiel.</b> Verify such parts are properly identified and kept segregated from known good materiel, and a controlled access area has been established.</p>
6.7	<b>Reporting of Counterfeit Materiel</b>	<p>a. <b>Determine if reporting arrangements are adequate.</b> Establish whether the requirements of Defence Standard 05-135 are clearly articulated, available, and flowed down the supply chain. Evaluate the degree of compliance for: <b>(1) Pre-delivery</b> reporting arrangements for an occurrence of suspect or confirmed counterfeit materiel; <b>(2) Post-delivery</b> arrangements for reporting of suspect or confirmed counterfeit materiel that might have been inadvertently delivered.</p>

#	Annex A – Maturity Matrix Section	<b>Counterfeit Avoidance Maturity Assessment – Guidance for Assessors</b> Advice and interpretation guidance for assessors against the maturity level sections outlined in Annex A
6.8	<b>Additional Requirements for Suppliers who are Manufacturers</b>	a. This is specific to industry sectors, manufacturing processes and the likelihood of counterfeit activity. b. The auditor / assessor should however consider the criticality of the material and its intended end use. The manufacturer may not be aware of this context and it may influence their actions if they had this knowledge. c. The auditor / assessor should view the manufacturer's actions in response to this requirement as an indication of the deployment of their stated management intent/policy.
6.9	<b>Additional Requirements for Obsolescence Management</b>	a. <b>Review the methodology used to undertake Obsolescence Management.</b> Review the competence of those involved in the process and the steps undertaken once a change notification is received. Check reporting structures are in place for onward communications of impact to their customer base. b. The auditor/assessor should refer to the appropriate documents and standards for detailed guidance on obsolescence as it should be considered as a factor that may cause counterfeiting.  <b>Note:</b> Defence Standard 05-135 Issue 1 does not have this additional requirement for obsolescence management – refer to Section 3.5 Feedback and Improvement.

## 6. ANNEX C – ASSESS MATURITY LEVEL

### 1. Introduction to the maturity levels

The organisation being reviewed should undertake a self-assessment against the prescribed criteria in advance of a customer/industry partner undertaking the verification of the counterfeit avoidance maturity model findings. There should be an open dialogue between the reviewer and the organisation to determine optimal maturity levels dependent on the applicable tier under review within the supply chain. This dialogue should also place emphasis on the risk-based approach, to align with the intent of ISO 9001:2015.

The counterfeit avoidance maturity assessment report template example has been devised for reviewers to record the maturity level with justifications and comments. A word document of the template example is available for download from DSTAN via Defence Gateway: [www.defencegateway.mod.uk](http://www.defencegateway.mod.uk) under Defence Standard 05-135.

### 6.2 Optimal maturity levels

DS 05-135 Requirement	Maturity Level			
	0	1	2	3
6.1.1	X	X	X	X
6.1.2	X	X	X	X
6.1.3	X	X	X	
6.2.1	X	X		
6.2.2	X	X		
6.3.1	X	X	X	
6.3.2	X	X	X	
6.4.1	X	X	X	
6.4.2	X	X	X	X
6.4.3	X	X	X	
6.4.4	X	X	X	X
6.5.1	X	X		
6.5.2	X	X	X	
6.6	X	X	X	X
6.7	X	X	X	X
6.8	X	X	X	
6.9	X	X	X	X
<b>TIER 1 INTEGRATOR</b>				

DS 05-135 Requirement	Maturity Level			
	0	1	2	3
6.1.1	X	X	X	X
6.1.2	X	X	X	X
6.1.3	X	X	X	
6.2.1	X	X	X	
6.2.2	X	X	X	
6.3.1	X	X	X	
6.3.2	X	X	X	
6.4.1	X	X	X	
6.4.2	X	X	X	X
6.4.3	X	X	X	
6.4.4	X	X	X	X
6.5.1	X	X	X	
6.5.2	X	X	X	
6.6	X	X	X	X
6.7	X	X	X	X
6.8	X	X	X	
6.9	X	X	X	
<b>TIER 2 MANUFACTURER</b>				

DS 05-135 Requirement	Maturity Level			
	0	1	2	3
6.1.1	X	X	X	X
6.1.2	X	X	X	X
6.1.3	X	X	X	X
6.2.1	X	X	X	X
6.2.2	X	X	X	X
6.3.1	X	X	X	X
6.3.2	X	X	X	X
6.4.1	X	X	X	X
6.4.2	X	X	X	X
6.4.3	X	X	X	X
6.4.4	X	X	X	X
6.5.1	X	X	X	X
6.5.2	X	X	X	X
6.6	X	X	X	X
6.7	X	X	X	X
6.8	X	X	X	X
6.9	X	X	X	
<b>TIER 3 COMPONENT PROVIDER</b>				

### 6.3 Definition of the tiers

Tier 1 – Integrator	Tier 2 – Manufacturer	Tier 3 – Component Provider
<p>An entity that integrates multiple assemblies into a final product.</p> <p>Example:</p> <p>Organisations sourcing and integrating product from lower level assembly suppliers for incorporation on to various platforms.</p>	<p>An entity that manufactures a product involving raw materials, components, and/or assemblies.</p> <p>Example:</p> <p>Equipment manufacturers sourcing sub-assemblies with and without lot traceability.</p>	<p>An intermediary entity between the original manufacturer of a component part and higher level assembly provider.</p> <p>Example:</p> <p>Authorised / Independent materiel distributors sourcing materiel with and without lot traceability.</p>

It is recognised that organisations may be involved in the provision of product applicable to more than one of the above. In instances such as this, the reviewer should aim to review against the most stringent criteria applicable, e.g. an organisation is both a Manufacturer and Integrator – they should be reviewed against the Manufacturer criteria.

## 6.4 Counterfeit avoidance maturity model report template example

ASSESSOR: <u>An Other</u>	ASSESSMENT DATE: <u>31/01/2018</u>
COMPANY: <u>XYZ UK Limited</u>	REPRESENTATIVE: <u>Mr F Jones - QA Manager</u>
DEPARTMENT: <u>Quality Assurance</u>	REP EMAIL: <u>-----</u>

Defence Standard 05-135 Requirement Questions	L0	L1	L2	L3	Justification / Comments
<b>6.1 Policy Statement.</b>					
<b>6.1.1</b> Has a Policy on Counterfeit Avoidance been defined?				X	XYZ Group have corporate counterfeit policy XYZ 001 Issue 02. Additionally XYZ UK Limited replicates the corporate policy in their Site Counterfeit Procedure XYX Proc. 01 Issue 02. Both the corporate procedure and site procedure have been subjected to review and amendment in the last year.
<b>6.1.2</b> Is the Policy made available to customers upon request?				X	All policy documents (Quality, Environmental, H&S, Counterfeit Material) are available on the XYZ UK Web site for public access
<b>6.1.3</b> Are arrangements in place to manage the risk of counterfeit material in the supply chain?			X		Procurement is from suppliers or sources approved by the Quality Department and each is required to maintain counterfeit material avoidance measures via the purchase order requirements. Each supplier is visited prior to approval for a Supplier Approval Audit and subsequently at prescribed intervals. The Standard Audit Questionnaire has questions related specifically to measures of counterfeit avoidance.
<b>6.2 Roles and Responsibilities.</b>					
<b>6.2.1 Top Management.</b> Have Top Management ensured that the Policy for the avoidance of counterfeit material is available, communicated. Is it understood and implemented by relevant staff at all levels?			X		Counterfeit Material Policy is available to all employees through the notice boards around the site. The policy is available on the company intranet and interviewed employees were aware of its location and content. General awareness training has been rolled out to all individuals and the specific controls applied to suppliers and internally through flow down of conditions, supplier assessment and Goods Inwards material analysis/documentation/visual checks are documented and executed. Additionally the reporting of concerns is encouraged within the company and methods exist for its escalation to the appropriate levels/departments in the company
<b>6.2.2 Management Representative.</b> Has the supplier appointed a management representative, and do they have responsibility and authority within the organisation for managing the risk, reporting concerns internally and for promoting supply chain awareness?			X		Responsibility for counterfeit material control is allocated to the Quality Manager in the Roles and Responsibilities section of the Site Quality Manual. Reporting diagram indicates direct reporting to the Site Managing Director
<b>6.3 Competence, training and awareness.</b>					
<b>6.3.1</b> Has the supplier determined the awareness level requirements appropriate to each functional role, individual staff competence level, and how the training needs will be met?		X			Only General awareness training is supplied. There is a draft training plan identified for roles or individual staff in areas with responsibilities for counterfeit measures e.g. Goods Inwards, Purchasing, Quality Assurance (Approval and monitoring of suppliers)
<b>6.3.2</b> Are records of training, skills and competence maintained?			X		Yes. In the individuals Training folder retained in Human Resources and in the Departmental skills matrixes

Defence Standard 05-135 Requirement Questions	L0	L1	L2	L3	Justification / Comments
<b>6.4 Purchasing</b>					
<b>6.4.1</b> Has the supplier assessed the risk of procuring counterfeit materiel taking into account the criticality of the materiel in relation to performance and safety?			X		The assessment of risk is generic and based on the industry they operate in i.e. Aerospace. All material supplied is for flight applications and therefore deemed of equal criticality.
<b>6.4.2</b> Where risk has been identified, how has the supplier ensured that counterfeit avoidance requirements are flowed down the supply chain?			X		Generic Counterfeit requirements are flowed down the supply chain requiring suppliers to have measures for the prevention of supply of counterfeit material
<b>6.4.3</b> As part of the risk based evaluation of sub-suppliers where final product integrity is considered critical in relation to performance and safety, does the supplier trace the source of supply of the materiel through the supply chain to the manufacturer?			X		All material supplied is for flight applications and internal traceability requirements are detailed in the Quality Manual. All flight materials are required to have traceability to the manufacturer (including raw materials used in their manufacture). This is a standard requirement on purchase orders but does recognise that this may not always be possible and gives details of acceptance protocols.
<b>6.4.4</b> Where traceability of materiel cannot be established, does the supplier demonstrate that the materiel fulfils the acquirer's specified requirements?			X		Purchase order clause indicates where traceability cannot be demonstrated that it is the supplier's responsibility to demonstrate compliance of material requirements at their expense to the satisfaction of the Company's Quality Assurance Department.
<b>6.5 Test and Verification</b>					
<b>6.5</b> Does the supplier determine the rigour of inspection and test requirements for the acceptance of materiel?	X				There is no goods Inwards Inspection. As the goods are ordered from approved suppliers the company only check the quantity against the purchase order requirement before using the material
<b>6.6 Control of Non-Conforming Materiel</b>					
<b>6.6</b> Is suspect and confirmed counterfeit materiel controlled?		X			The generic non-conforming procedures would be utilised including secure quarantine/labelling and return to supplier. However the process does not recognise the standard requirement of not returning the material to the supplier.
<b>6.7 Reporting of Counterfeit Materiel</b>					
<b>6.7</b> Are occurrences of counterfeit materiel reported?	X				One instance of counterfeit material has been recorded (part number 123) and this was reported internally and to the supplier only. No reporting to the IPR holder, customer, data collection agencies or law enforcement occurred
<b>6.8 Additional Requirements for Suppliers who are Manufacturers</b>					
<b>6.8</b> Do manufacturers make it difficult for their materiel to be copied?		X			No measures other than the control of production processes to prevent overruns and witnessed off site destruction of sub-standard material (production scrap) prevent its unauthorised entry into the supply chain. No other measures for counterfeiters with manufacturing capability are considered
<b>6.9 Additional Requirements for Obsolescence Management</b>					
<b>6.9</b> How has obsolescence been considered whilst reviewing the risk of counterfeit materiel being incorporated to their products?			X		Obsolescence is a known and understood issue within the supplier. Clear lines of communication are evident both to their lower tier supply chain and to their customers. External databases are reviewed by competent personnel on a regular basis, demonstrating a pro-active approach to risk-mitigation.

## 1. SUPPLIER OVERVIEW

XYZ UK Limited is part of a group of companies working from locations in various countries. XYZ UK Limited supply complex fluid management assemblies solely for the Aerospace sector (Civil and Military)

## 2. SUMMARY OF FINDINGS

XYZ UK Limited have determined a policy and communicated to all employees and a Management Representative has been assigned responsibility for the avoidance of counterfeit material.

The approach to counterfeit avoidance appears to be generic as the company only supplies parts for flight and does not distinguish between them for criticality but rather judges them to be all the same. All of the measures introduced are also generic from training where general awareness training is applied, through to standard counterfeit purchase order clauses, standard Quality Audit counterfeit assessment.

Instances where specific requirements specified by the Defence Standard have not been recognised by the contractor were observed e.g. Non-Conforming Material (not returning it to the supplier) and reporting of counterfeit material

XYZ also do not inspect or test any of the material received as it is procured from approved sources and is judged non-conforming against the Defence Standard as it is not commensurate with the risk of the material being counterfeit and the criticality of the material in relation to safety and performance

## 3. CONCLUSIONS

XYZ UK Limited considers the supply of counterfeit material to be a risk and have addressed many of the elements of the Defence Standard through a generic approach to all of the material they supply. Deficiencies against the Standard requirements were identified and are detailed in the Summary Section of the report

### AN OTHER

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## 7.

## ANNEX D – TERMS / ABBREVIATIONS

#	TERM OR ABBREVIATION	DEFINITION
1	ASG	Acquisition System Guidance
2	BS EN ISO	British, European and International Standard
3	BS EN ISO 9000:2015	Quality management systems – Fundamentals and vocabulary
4	BS EN ISO 9001:2015	Quality management system - Requirements
5	CAWG	Counterfeit Avoidance Working Group
6	Criticality	In relation to safety and performance of materiel in the context of its intended use
7	Def Stan	Defence Standard
8	Defence Standard 05-135	Avoidance of Counterfeit Materiel
9	Management Intent	Another way of expressing Policy
10	MOD	Ministry of Defence
11	Policy	Intentions and direction of an Organisation as formally expressed by the Top Management
12	On-receipt	Acceptance of materiel (normally at goods inwards department)
13	SME	Subject Matter Expert
14	Supplier	Refer to Defence Standard 05-135, Section 5.3.

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