Date: 8 June 2018

Our Ref: Q1679

**FRL/QAM/10 ISSUE 11 - MINOR CLARIFICATIONS AND AMENDMENTS**

This addendum is intended to be read in conjunction with FRL/QAM/10 at Iss 11. None of the information below is considered significant enough to require an up issue of the parent document at this point.

In all instances, unless specifically stated, the wording and intention of FRL/QAM/10 remains unchanged.

**Section 3:**

Advance Notification:

The Supplier Quality Rating is currently under review and will be promulgated in the next issue of FRL/QAM/10.

**Section 4:**

Clarification Note to sub-section 4.1.1.2:

Consistent with sub-section 4.1.1.2; where a sub-assembly or components are a design change classified as an Amendment (AMD), continued use of product at lower minor revision change is permitted where they have been re-inspected to the current drawing.

That is, if the current design requires ‘XXXYYYY Issue Ad’, then sub-assemblies or components in the range ‘XXXYYYY Issue A’ through to ‘XXXYYYYY Issue Ac’ are permitted for use (without re-marking) where they have been re-inspected against ‘XXXYYYY Issue Ad’.

Clarification Note to sub-section 4.4.1 (3rd para) (added words in italics):

‘The Supplier shall then be responsible for conducting the RCCA analysis and provision of all requested supporting information.’

Clarification Note to sub-section 4.5 (added words in italics):

‘The Supplier shall, within 24 hours notify CMS when identified, or suspected, non-conforming Product has already been shipped to CMS in the form of a formal quality alert.’
Clarification Note to sub-section 4.7 (added words in italics):

‘The Supplier shall provide a Certificate of Conformity (CofC) with all deliveries, the format of this will be agreed with CMS but should include all applicable elements from the list below.’

Clarification Note to sub-section 4.8 item 3 (added words in italics):

‘All electrical connectors on LRUs and looms shall be protected with Black ESD caps, the only exceptions are fibre optical connectors which shall be protected with Pink static-dissipative caps.’

Clarification Note to sub-section 4.9 (added / changed words in italics):

‘All documents, forming or supporting the product quality records, shall be retained for a minimum period equivalent to the life of the platform plus 5 years unless otherwise advised by CMS’ Supplier Quality Director. The supplier shall consult CMS Supplier Quality Director before the disposal of any records that form or support the product quality records.’

Clarification Note to sub-section 4.12.1:

The term ‘sealed data route’ used here is intended to signify that the data will be appropriately configuration controlled and handled with the appropriate level of security to ensure it cannot be intercepted or altered.

Clarification Note to sub-section 4.14 (added words in italics):

‘Aircraft standard COTS and Standard Parts (including Aircraft General Spares) will often not have full traceability back to raw materials as part of the delivery, these may be requested in the event that an issue is found with the product. All COTS/Standard Parts must be sourced from the OEM or through authorised (AS9120) stockists / distributors. The Chain of Custody for these items will generally comprise the OEM CofC and supporting CofCs from the supply chain.’

Clarification Note to sub-section 4.15 (added / changed words in italics):

‘The Supplier shall establish and maintain a Foreign Object Debris and Foreign Object Damage prevention process (FOD). The process shall meet the requirements of AS9146.’
Section 5:

Clarification Note to sub section 5.2.3: (changed words in italics):

'IPC-771A/7721A Rework, Repair and Modification of Electronic Assemblies’ should read:
‘IPC-7711/7721 Rework, Repair and Modification of Electronic Assemblies’

Clarification Note to sub section 5.2.4: (added words in italics):

'Lead free control plans should meet the requirements of CCP-289’

Clarification Note to sub section 5.4.6: (remove words in italics):

‘With reference to section 4.8, CMS will conduct a conformity review on the delivered software.’

Clarification Note to sub section 5.5.11: (added / changed words in italics):

Business Continuity section should be at sub section 5.7 and read:
‘The Supplier shall develop and maintain a Business Continuity Plan to protect CMS and its customers; ISO 22301 provides guidance on this subject.’

Clarification Note to sub section 5.5.12:

Last Article Inspection Report should be held at sub section 4.1.1.5 and read, in total:

'The Supplier shall develop a process to produce a Last Article Inspection Report (LAIR), the requirement shall be instigated by CMS through Purchase Order or Contract’
Supplier Management

Supplier Quality Requirements

Cobham Mission Systems
Brook Road
Wimborne
Dorset
BH21 2BJ
Tel. 01202 882121
Fax. 01202 880096

Applicable to:

All CMS’ Approved Suppliers

This box must clearly define, by job title, those personnel that need to be aware and work to the procedure

<table>
<thead>
<tr>
<th>Authority</th>
<th>Name</th>
<th>Signature/Role</th>
<th>Date</th>
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<tr>
<td>Author</td>
<td>Chris Holland</td>
<td>Electronic signature on file within the document control system</td>
<td>22/11/201716 Nov 17</td>
</tr>
<tr>
<td></td>
<td>Chris Holland</td>
<td></td>
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</tr>
<tr>
<td>Strategic Approval</td>
<td>Ian Beckett</td>
<td>Electronic signature on file within the document control system</td>
<td>23/11/2017</td>
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<td></td>
<td>Ian Beckett</td>
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<tr>
<td>Issuing Authority</td>
<td>Phil Jackson Hughes</td>
<td>Electronic signature on file within the document control system</td>
<td>23/11/2017</td>
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<tr>
<td></td>
<td>Paul Hughes</td>
<td></td>
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### Document Issue Record

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<tr>
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<td>1</td>
<td>New Document</td>
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<td>2</td>
<td>Addition of section 21 DS 18.50 Section 6:</td>
<td>27/01/09</td>
<td>Continuous improvement, and observation during Boeing audit</td>
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<tr>
<td>3</td>
<td>Review Section 6. Appendix 2</td>
<td>24/04/09</td>
<td>Correction of typo errors Boeing audit Continuous improvement Addition of NADCAP approval for DS specs</td>
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<tr>
<td>4</td>
<td>Major Review</td>
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<td>Full re-write</td>
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<tr>
<td>5</td>
<td>Review</td>
<td>15/09/11</td>
<td>Continuous improvement and internal audit findings Amendment to 1.3, 2.3, 4.1, 4.2, 4.6, 4.12, 5.2.3</td>
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<tr>
<td>6</td>
<td>Review</td>
<td>19/02/13</td>
<td>Amendment to section 3, 4.5, 4.8 &amp; 5.5</td>
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<td>Major Review</td>
<td>21/11/14</td>
<td>Full re-write</td>
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<tr>
<td>8</td>
<td>Minor Review and Amendment</td>
<td>12/06/15</td>
<td>Minor update to sections 1.4, 4.3.1 + link to Appendix F, 4.4, 4.6.5, 4.7, 4.8, 4.9 &amp; 5.1 Rewrite of 4.13, 5.1.3 &amp; 5.3.3 Amend Appendix E for clarity plus addition of appendix F</td>
</tr>
<tr>
<td>9</td>
<td>Minor update</td>
<td>25/08/16</td>
<td>Amended section 4.15 to remove incorrect reference to AS9100 and replace with direction to work IAW CMS Standard Terms of Purchase / Framework Procurement Agreement. Addition of paragraph to section 5.1.4, clarifying permitted options on FRS drawings where the OEM or distributor is not exactly that stated in the “obtain from:” box.</td>
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<td>Major Review</td>
<td>28/09/17</td>
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<td>Minor Review</td>
<td>2/11/17</td>
<td>Amendments and clarifications to comply with AS9100 Rev.D &amp; AS9110 Rev C.</td>
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1 General Requirements

1.1 Introduction

This QAM 10 document has been prepared by Supplier Quality (SQ) Department, Cobham Mission Systems, Wimborne (CMS) to detail the requirements on the Supplier for the maintenance of a Quality Management System (QMS) which will assure that materials, Products and services meet the safety, reliability and quality standards required by CMS and its customers.

The Supplier must review this version of this document (QAM10) and acknowledge compliance of receipt and ability to work to work to this version.

1.2 Supplier Quality Management Systems

CMS supplier selection criteria includes the Supplier’s QMS, predominantly CMS chose to work with a Supply Chain that are accredited to aerospace industry quality standards including AS9100 series. Where the service provided does not require the application of aerospace standards, or the company are unable to comply, CMS undertake an assessment prior to approving as a Supplier.

In all cases the Supplier QMS must meet the key Quality Management principles, and demonstrate an approach to customer focus, leadership and engagement of people, a process approach, improvement, evidence-based decision making and relationship management. The Suppliers QMS must be able to identify and manage risks, opportunities within its context and objectives. CMS’ QMS ensures that it appropriately selects, evaluate and periodically re-evaluate the Supplier’s QMS adopting a Risk Based Approach.

As part of the ongoing monitoring process CMS require that all approved suppliers provide copies of the relevant 3rd party QS certificates (showing UKAS Number). The Supplier shall forward a new copy after each change of scope or location. Once approved the Supplier’s QMS will be monitored by CMS SQ Department and actions taken if it is deemed that it falls below the required standard, or previously held QS certifications lapse or are withdrawn.

1.3 Ethical Behaviour Policy

Suppliers shall conduct business in an ethical manner and ensure that a requirement for a similar conduct is flowed down to Sub-tier Suppliers.

1.4 Scope/Applicability

As outlined in the introduction this document forms part of Contract between CMS and the Supplier.

Where it is impossible or unfeasible to comply with any clause of this QAM10 document the Supplier must seek guidance from CMS’ SQ Director who will consider any request for
derogation. Where contractually bound to this document, no deviations are allowed unless derogation is received in writing from CMS SQ Director.

Where a Supplier is unable to comply with all aspects of this requirement, the response to CMS must detail these areas and CMS will take appropriate action and respond to acknowledge in writing.

If there are contradictions between this QAM10 document, AS9100 and other CMS supplied information, the Supplier shall seek clarification from CMS.

If this QAM 10 document does not contain the necessary information, AS9100, AS9110 and AS9120 standard or ISO9001 will take precedence and be adhered to by the Supplier and inform CMS of any actions taken.

For all Contract requirements (including drawing or specification requirements), the CMS procurement department is the first point of contact for any document requests in support of fulfilling Contract requirements.

CMS’ SQ department are there to provide guidance and decision making with regards to quality to the Supplier. Only CMS’ authorised procurement and commercial personnel can make commercial or contractual decisions on behalf of CMS. It is the Supplier’s responsibility to address any commercial impact to a quality decision with CMS’ Procurement team in accordance with the Contract.

1.5 Supplier Flow down Responsibilities (to Sub-tier Suppliers)

The Supplier shall be responsible for flowing down all relevant sections of QAM10 to relevant Sub-tier Suppliers and ensuring that compliance against this QAM 10 Document is achieved throughout their supply chain; this includes but not limited to:

a) Ensuring that Conformity for all externally provided processes, products, and services, including from sources defined by the customer.

b) Ensuring Customer-designated or approved Sub-tier Suppliers, including sources (e.g., special processes), are used.

c) Ensuring that the risks associated with the external provision of processes, products and services, as well as the selection and use of Sub-tier Suppliers are managed. (See Section 5.6 Risk Assessments)

d) Require that Sub-tier Suppliers apply appropriate controls to their direct and sub-tier suppliers, to ensure that requirements are met.

Objective evidence of compliance shall be gathered by the Supplier through audit and oversight of Sub-tier Suppliers. Objective evidence shall be made available to the CMS SQ department upon request. Compliance to this requirement shall be assessed as part of the CMS’ audit process.

Sub-tier Suppliers must be aware of the importance and their contribution to: compliance expectations, product safety and standards of ethical behaviour, counterfeit prevention requirements. The Supplier shall flow down relevant parts of QAM 10 document as well as their own clauses to ensure that Sub-tier suppliers achieve best practice in all the areas listed above.
1.6 Access Clause

Subject to CMS providing at least 10 days’ notice where practical, the Supplier shall provide full rights of access to its premises, facilities, products in production, documents and records (including any sub-tier suppliers) to CMS, CMS’ customers and any regulatory representatives for the purposes of demonstrating compliance with the Contract. The period and scope of the access is referred to hereafter as the “Appointment”.

CMS, our customers and regulatory representatives reserve the right to undertake activities which may include, but not limited to: surveys, audits and assessments, inspection of facilities, reviewing goods during the manufacturing process or audits (including Sub-tier Suppliers and processors). The Supplier will provide all required and requested support as reasonably required during the Appointment.

The Supplier shall provide the same rights of access as described for the Appointment before a Contract is issued for the purposes of ensuring that the Supplier has the capability, capacity and any requisite accreditations to undertake the work.

CMS representatives, customers and regulatory representatives may be assigned on a resident or itinerant basis at the Supplier’s facility as a result of new supplier selection, supplier improvement activities, new product introduction or following poor quality performance.

The responsibilities and authority delegated to these representatives may include, but are not limited to the following:

- Co-ordinate responses against unsatisfactory conditions exhibited
- Conduct initial and periodic QMS audits or product based evaluations
- Review and approve First Article Inspection Reports (FAIR)
- Inspect hardware against design data
- Authorisation for the shipment of products and supporting data, following source inspection
- Reviewing documentation required to adhere to the Traceability/Chain of Custody Section 4.14
- Ensure compliance against the QAM 10 document.

The review of products or services by CMS, its customers or regulatory representatives does not absolve the Supplier of responsibility to provide conforming product, nor shall it preclude subsequent rejection by CMS.

Notwithstanding anything mentioned herein CMS shall be entitled to enter the Supplier premises immediately following a serious quality failing, an aviation authority directive or an incident involving the Supplier’s goods or services with CMS’s customers or regulatory representatives. The Supplier will provide all required and requested support during such visit.
1.7 Changes to Quality System, Management, Facilities or Ownership

The Supplier shall notify CMS’ procurement department and/or CMS’ SQ department in writing of changes to their QMS, management, facilities or ownership prior to making changes. Changes requiring notification shall include, but are not limited to:

- Change in location of facilities or manufacturing equipment. Notification must be before the change takes place and must be +90 days for changes affecting hardware, system and process qualification.
- Changes in the Supplier’s senior management, ownership or name changes to the business
- Changes in resource levels that impact negativity in process productivity levels or supporting the Supplier’s quality management integrity.
- Change of any site or location to which Special Process qualification has been granted
- Changes to quality leadership, certification status including suspension or withdrawal.
- Change of holder of the design authority or design office location
- Loss or suspension of quality accreditation(s)

Where there has been a change in equipment, location, process or personnel a delta or full FAIR may be required in accordance with AS 9102 procedures.

The changes discussed above shall be notified to CMS using the Communication of Manufacturing and Management Evolution form (CMME) a copy can be found in Appendix A of this document and at the following website http://www.cobham.com/cms/wimborne/Suppliers.

1.8 Abbreviations / Definitions

<table>
<thead>
<tr>
<th>ADS</th>
<th>Aerospace Defense and Securities (formally SBAC)</th>
</tr>
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<tr>
<td>ATP</td>
<td>Acceptance Test Procedure</td>
</tr>
<tr>
<td>C of C</td>
<td>Certificate of Conformity</td>
</tr>
<tr>
<td>Chain of Custody</td>
<td>Chronological documentation or paper trail, showing the paper trail, custody, control, transfer, analysis, and disposition of physical or electronic evidence.</td>
</tr>
<tr>
<td>CLP</td>
<td>Classification Labelling and Packaging</td>
</tr>
<tr>
<td>CMS</td>
<td>Cobham Mission Systems, Wimborne Business Unit</td>
</tr>
<tr>
<td>CP</td>
<td>Chemical Processing</td>
</tr>
<tr>
<td>Contract</td>
<td>A purchase order issued to the Supplier by CMS together with this document, the requirement (Statement of work, specification, quote or any other document which details the requirement i.e. what CMS is purchasing) and the applicable terms and conditions.</td>
</tr>
<tr>
<td>Counterfeit Part/s</td>
<td>An unauthorised copy, imitation, substitute, or modified part which is knowingly misrepresented as a specified genuine part of an original or authorised manufacturer</td>
</tr>
<tr>
<td>CSR</td>
<td>Supplier review process before a quotation is released (where applicable) and the</td>
</tr>
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</table>
Design and Build contract acceptance process as per its ISO9001 accreditation

Means where the Supplier is making equipment to its own drawings.

DDP Declaration of Design Performance

DMS Document Management System

DPPM Defective Parts Per Million

EC European Community

EPA ESD protected area

ESD Electrostatic Discharge

ETSO European Technical Standard Order

External Provider Interchangeable herein with Supplier: a provider of goods, services or products

FOD Foreign Object Debris / Foreign Object Damage (See AS9146 standard)

FAI First Article Inspection (See AS9102 standard)

FAIR First Article Inspection Report

FRS Flight Refuelling Specification

Grade 1 A definition used to define safety or operation critical parts. The term also covers those parts identified as Grade A

Heat Treatment

HT

IAW In accordance with

ITAR International Traffic in Arms Regulations

IPC Association Connecting Electronics Industries (formerly known as the Institute for Interconnecting and Packaging Electronic Circuits)

LAIR Last Article Inspection Report

LRU Line Replaceable Unit

Make-To-Print A Contract whereby a product is manufactured using CMS’ owned drawings

MRB Material Review Board

MRO Maintenance, Repair & Overhaul

MSDS Material Safety Data Sheet

NADCAP National Aerospace Defence Contractors Accreditation Programme. A Quality Standard to control non-standard processes such as Wire Erosion, Spark Erosion, Surface Treatment, NDT and Welding

NCR Non-Conformance Report

NDT Non Destructive Testing
NMSE  Non-conventional Machining & Surface Enhancement
PAT  Product Acceptance Testing
PCN  Personnel Certification in Non-Destructive Testing
PCP  Process Control Plan
PLM  Product Lifecycle Management
Product  For the purpose of this document a Product is a deliverable item, it may be a Part / 
               / Sub Assembly / Assembly or Material
QA  Quality Assurance
QMSQS  Quality Management System
QAM 10  Quality Systems
This document ref FRL/QAM/10
REACH  Registration, Evaluation, Authorisation and restriction of CHemicals
RCCA  Root Cause and Corrective Action
RoHS  Restriction of Hazardous Substances
Special Process  A process to establish properties of a product or material during the manufacturing 
               process, the nature of which can usually only be verified at a specific point is the 
               manufacturing process
Standard Part  A part that conforms to an established industry or government specification.
SQ  Supplier Quality
SQE  Supplier Quality Engineer(ing)
SVHC  Substance of Very High Concern
WEEE  Waste Electrical and Electrical Equipment
Certifying Staff  As per the definition provided in 5.5.3 paragraph 1
Standard Catalogue  Materiel that conforms to an established industry or national authority published 
               specification, having all characteristics identified by text description, 
               National/Military Standard Drawing, or catalogue item
Items
Supplier  A Company providing a service to and/or working to drawings, specifications, etc. 
               supplied by CMS. Also includes the term External Provider
Sub-tier  A company providing materiel or a service to the Supplier in connection with a 
               CMS Contract
Supplier
SOP  Standard Operating Procedures
Traceability  A clear and auditable “Chain of Custody” from raw material to final delivery.
Vendor Part  Commercial off the shelf parts which are referenced in CMS drawing
UKAS  United Kingdom Accreditation Service
2 Supplier Approval Process

2.1 Supplier Selection Process

The Supplier selection process is led by CMS Procurement and supported by other functions as necessary.

2.2 Scope of Supply

All Suppliers will be assessed to determine the scope of supply; this will be rolled out through the normal audit / assessment process. All current suppliers may continue to provide services to CMS as previously authorised unless informed in writing of restriction of services.

To ensure Special Process adherence and the Supplier ability to meet specific CMS needs; the Supplier scope of approval shall be process and location specific.

2.3 Quality Management System Requirements

The CMS requirement for QMS approval within its supply chain is as follows:

- All
  - Manufacturers
  - Maintenance & Repair
  - Stockists & Distributors

AS 9001
AS 9100
AS 9110
AS 9120

In the event that Supplier does not hold the above certifications, CMS SQ department will undertake an assessment on the Supplier. If this assessment is successful the SQ Director will add the Supplier to its Approved Supplier list however such approval may be conditional or maybe for a limited scope.

The Supplier must ensure that the Contract requirements are adequately flown down to Sub-tier Suppliers. If the Supplier is managing Sub-tier Suppliers, CMS reserve the right to assess and, where necessary, audit the supply chain.

If the Supplier holds QS Certifications, the Supplier’s QMS shall ensure that the standard and the additional clauses as defined in this QAM 10 document are met.

2.4 Approval Evaluation – Audits / Assessments

After selection, the Supplier performance may be evaluated and where appropriate, an audit or assessment shall be conducted. The format of the audit / assessment will be tailored to the Supplier.

Where a Supplier does not maintain an acceptable quality standard (see Section 3 Table 2) their approval shall be re-evaluated at frequency determined by CMS’ SQ Director.
2.5 Audit / Assessment Findings

The Audit/assessment results will be documented within an audit report and presented to the Supplier for action as required.

Failure by the Supplier to provide acceptable corrective and preventive actions to findings within agreed or in reasonable timescales may result in failure to approve the Supplier QMS or lead to the Supplier having its CMS approval suspended or revoked.

The classifications of corrective and preventive actions are as follows:-

<table>
<thead>
<tr>
<th>Classification</th>
<th>Quality System</th>
<th>Product Implementation</th>
<th>Corrective Action Implementation</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAJOR</td>
<td>A non-conformance which may result in the partial or total failure of an element of the QMS or Multiple Minor non-conformances which may be considered as a Systemic Failure.</td>
<td>- stops the development process and questions the qualification criteria; - stops the production process and questions the airworthiness criteria; - leads to a breakdown in service.</td>
<td>Within 5 working days</td>
</tr>
<tr>
<td>MINOR</td>
<td>A failure that may cause non-conformances that are not considered MAJOR</td>
<td></td>
<td>Within 1 calendar month or within a period, agreed with CMS</td>
</tr>
<tr>
<td>Observation</td>
<td>An opportunity for improvement identified to improve the effective operation of the Quality System or business</td>
<td>Although advised, no formal response required</td>
<td></td>
</tr>
</tbody>
</table>

2.6 Third Party Approvals

Where the Supplier’s scope of approval is accredited by a third party, this will be stated on the issued third party approval certificate.

It is the Supplier’s responsibility to decline work that does not fall into this description of activities unless authorised in writing by the CMS SQ Director in advance.

If a third party accreditation / approval is withdrawn, lapsed or suspended, the Supplier shall inform CMS at the earliest opportunity. If requested the Supplier shall immediately create an action plan to mitigate any risk to the supply of products and/or services to CMS quality department. CMS’ SQ Director will approve any action plan necessary with regard to CMS scope of supply.
3 Supplier Rating Policy

CMS’ supplier rating system is designed to measure, evaluate and improve the Supplier’s performance, enabling CMS to make informed quality and procurement decisions.

The rating system is intended to meet the specific objectives and priorities of the business, with the Supplier being measured against a standardised scale. An example of this scale is detailed below in Table 2 and is based on percentage product delivered to CMS defect free calculated and referred to as SDPPM.

The Supplier is required to achieve a rating of Gold status in accordance with the table 2 below. If the Supplier falls below Gold Status it may be contacted by CMS to ensure a suitable action plan is generated to achieve Gold Status for future deliveries. The action plan will be monitored and tracked by CMS and during this time the Supplier may be expected to maintain and report upon certain controls. Failure to do so may result in actions being imposed on the Supplier by CMS and the Supplier shall be contractually bound to undertake such actions. Where the Gold status of the Supplier is lost, affected parts will be subject to increased levels of on-receipt inspection at CMS.

The Supplier will receive notification of rejects (which directly affect Supplier rating scores) by receipt of a Non-Conformance Report (NCR). The Supplier is required to provide an initial response to the NCR within 5 days with an initial containment response and corrective action resolution within 28 days or as required by CMS should the defect be of airworthiness, product safety concern or to meet CMS’ customer delivery schedule. Where the Supplier has objective evidence to show that they have been incorrectly rated or reclassified objective evidence must be provided in support of the formal NCR response and as a result, if agreed, the NCR liability will be amended.

Table 2

<table>
<thead>
<tr>
<th>Vendor Rating</th>
<th>Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>GOLD RATED SUPPLIER</td>
<td>≥99.9%- 100% ≤1,000 SDPPM</td>
</tr>
<tr>
<td>SILVER RATED SUPPLIER</td>
<td>≥99.5% to &lt;99.9% ≤5,000 SDPPM</td>
</tr>
<tr>
<td>BRONZE RATED SUPPLIER</td>
<td>≥98% to &lt;99.5% ≤20,000 SDPPM</td>
</tr>
<tr>
<td>UNRATED SUPPLIER</td>
<td>&lt;98% &gt;20,000 SDPPM</td>
</tr>
</tbody>
</table>

All data is based upon a 3 month rolling average
4 Requirements

4.1 Inspection Requirements

Where required under the Contract (Purchase order or Drawing requirement) the Supplier shall perform full inspection on all design features for FAI in accordance with ISO9102.

The Supplier is responsible for assuring completion of the FAIR to AS9102 requirements and approving all Sub-tier Supplier FAIRs to AS9102 requirements.

CMS reserves the right to request additional copies of the FAIR from the Supplier at no charge.

The following points supplement the AS9102 standard which the Supplier must comply with for all FAIRs submitted to CMS:

- Any associated non-conformance reports shall be appended to the FAIR.
- Approved copies of any PAT/ATR or additional test data shall be maintained and appended to the FAIR.
- Material & test certificates/reports (including chemical and mechanical analysis) and manufacturing layout (job cards) shall be collected and appended to the FAIR.
- Associated C of C's shall be annotated to state that the parts are subject to a FAIR.
- For specific CMS FAIR completion requirements please see Appendix B of this document which details the completion requirements against each AS9102 form.
- For Design and Build Suppliers see additional notes in Para 5.3 and note below

CMS reserves the right to witness/buy-off FAIR’s on-site at the Supplier’s premises. To allow CMS to execute such right the Supplier must notify CMS Supplier Quality and/or CMS Procurement team with at least 5 days in advance of planned FAI completion.

Where CMS buy-off does not occur at the Supplier premises, the FAIR, shall be submitted electronically (PDF copies) via email to the following email address:

cms.wimborne.fair@cobham.com

Goods will not be deemed delivered unless such paperwork is provided; risk for the goods will remain with the Supplier until such paperwork is received by CMS.

Further detail on the requirement for FAIs are provided in Section 4.1.1 below.

Any CMS determined inspection plan shall be applied to all delivered Products; sampling is not permitted unless otherwise agreed by CMS SQE. The use of statistical techniques (e.g. SPC) for Product acceptance and related instructions for acceptance shall be agreed with CMS.

Personnel performing inspection operations shall be subject to and pass an eye examination in accordance with defined national standards biennially. Each eye examination shall include colour perception appropriate to the tasks being performed. Records of eye examinations are to be retained and form part of the Supplier quality records.
4.1.1 First Article Inspection Detailed Guidance

The following information is given for guidance only and any contractual requirement takes precedence; if any doubt exists on the requirement for FAIR the supplier shall seek guidance from CMS.

The purpose of the FAI process is to provide objective evidence that all design and specification requirements are correctly understood, accounted for, verified and recorded.

All FAIRs shall be carried out in accordance with AS9102 FAI requirements; it is the Supplier’s responsibility to obtain a controlled copy of the AS9102 standard and to provide evidence of conformance in the AS9102 prescribed format.

Only CMS Supplier Quality Director holds authority to accept delivery of product without a FAI being completed and approved; this must be provided in writing (i.e. email or letter).

4.1.1.1 New Products:

- A FAIR is required for all new Products that are produced to a CMS provided drawing or specification (with minor exceptions outlined below).
- Where a Product is supplied to an FRS drawing (or similar), only drawing features that can be validated and recorded via an AS 9102 FAIR are required to be captured.
- A FAIR is not required for Standard Parts (AGS/COTS).
- A FAIR may not be required for FRS parts where the FRS only calls up a COTS or standard part; any requirement for FAIR on the Purchase Order or drawing set will take precedence over the guidance on this point.

4.1.1.2 Design Changes:

- CMS use 3 modification classification:
  - MOD – Major change is denoted by a Part Number change or Revision change e.g. A to B
  - ALT – Minor change is denoted by a Revision change e.g. A to B
  - AMD – Amendment / correction or clarification is denoted by a Revision change e.g. Aa to Ab
- A full or partial FAIR is required for Products that are subject to a MOD or ALT.
- One FAIR (full /partial) can cover multiple modifications implemented between build standards. For example if last build was at Rev A, and the next build at Rev D, the FAIR would cover all changes between A and D.
- For AMD – Amendments (which have no effect on Form, Fit and Function) a FAIR or partial FAIR are NOT automatically required (e.g. a change from issue ‘Be’ to ‘Bf’).
  - When an AMD change is encountered, the Supplier must conduct a review to assess if the change has any impact on their process or documentation. If as a result of the AMD any part of the approved manufacturing process changes
(either Supplier or sub tier Supplier’s processes), then the requirement for the supplier to comply with the FAI process remains.

- The Supplier must raise, and submit to CMS, a FAIR cover sheet to reflect and document the review undertaken as a result of the AMD implementation.

4.1.1.3 Process Change

Full or partial FAIs are required (as per AS 9102) for significant process changes, for example: first production run or change in process flow. CMS can provide guidance to the Supplier as to when a FAIR is required.

4.1.1.4 Lapse in Production

AS 9102 extract: A lapse in production for two years (or longer) shall require an update for any characteristics that may be impacted by the inactivity. This lapse is from the completion of last production operation to the actual restart of production.

In order to meet the requirements of the extract above, the Supplier must conduct an assessment to identify any characteristics that may be impacted by the inactivity. This assessment must be documented and reported to CMS using the AS9102 forms.

If it is determined that the lapse has had no impact on the characteristics of the product this must be reported to CMS using the AS9102 Partial FAIR stating what assessment activities have been undertaken and a clear statement made as to the outcome of the assessment. Any requirement for FAIR on the Purchase Order or drawing set will take precedence over the guidance on this point.

Should any doubt exist, CMS SQ department should be contacted for clarification and/or guidance on this matter.

4.2 Grade 1 Part – Approved Manufacturing Plans

Where Grade 1 parts are to be manufactured, the Supplier shall comply with CCP/03/05/08 – Grading of Parts/Assemblies – copies available from the CMS procurement team.

4.3 Process Control Plans

Key characteristics and critical features as defined by the drawing shall be recorded via a CMS approved Process Control Plan (PCP).

- All Supplier completed PCP’s and associated data/documentation shall be provided with each delivery, and the reference annotated on the applicable CofC(s)
- All Supplier completed PCP’s shall include actual measurements/results for all features identified within the Plan
- Supplier completed PCP’s shall cover 100% of features on the parts delivered
The Supplier shall request a PCP from CMS Supplier Quality or submit a prepared PCP before the manufacture of Grade 1, 2 or 3 parts. CMS Supplier Quality shall review, amend and approve said PCP as applicable and will allocate a unique reference number. All PCPs submitted for approval by Supplier will include all identified critical features.

4.4 Control of Non-Conformance and Reporting (NCR)

CMS expects that all parts and assemblies to be provided in a condition that complies with design requirements and specifications. Hence CMS will only consider a request for Supplier liability deviations to CMS specifications in exceptional circumstances.

It is the Suppliers responsibility, through their own Contract review process, to notify CMS of any design feature or specification that are unclear before Contract acceptance.

NCRs shall be used to request approval to supply parts where the design specification is unclear, not available, or not accurate.

NCR can only be acted upon once approved by CMS Engineering; by exception the CMS SQ Director may, at his/her sole discretion, permit the Supplier to deliver Products without appropriate NCR coverage. Nothing in the forgoing shall limit the Supplier's right of rejection once the Product is received.

4.4.1 Reporting Non-Conformance

The Supplier shall identify goods that are deemed non-compliant to drawing or specification; the Supplier shall quarantine and control such goods to prevent unintended use or delivery to CMS or its customers.

Before an NCR will be considered by CMS, the Supplier must have investigated the possibility of re-working or re-making the parts before submission. The Supplier shall provide written notification of the investigation including the rationale behind the reason for not re-working or re-making the product to the CMS Procurement and CMS Quality departments.

Where a non-conformance is identified by CMS’ Customer, the issue shall be raised by CMS with the Supplier. The Supplier shall then be responsible for conducting the associated RCCA analysis.

CMS will assess the reported non-conformance(s) against Contract requirements and advise the Supplier if such non-conformance(s) are accepted or rejected.

4.4.2 NCR Generation and Process

CMS utilises a Document Management System (DMS) to manage non-conformances. From the point of origination the DMS uses a workflow process to manage the progress of the NCR from origination through to final closure.
An NCR is raised by CMS within the DMS to manage a non-conforming Product, in the following circumstances:

- Supplier is seeking a concession to deviate from the controlling specification/engineering drawings, following manufacture/assembly/test of a part.
- Supplier is seeking a production permit to deviate away from the controlling specification/engineering drawings, in advance of manufacture/assembly/test of a part.
- When a non-conformance is identified during internal processing of the product at CMS (Supplier escape) to manage the disposition of the non-conforming part.

The DMS utilises electronic signatures and therefore an NCR shall only be considered approved for Product delivery once assessed by CMS Engineering and QA. On the hard copy NCR this will be identified by a name and date being present in the QA field.

Where a manufacturing error occurs, the Supplier shall immediately notify CMS (Supplier Quality and Procurement team). Within a reasonable time frame of receiving such notification, but in no event longer than 28 days, the Supplier must provide a full Root Cause and Corrective Action (RCCA) statement. CMS will not close any NCRs without a RCCA being provided. The non-conforming product shall be quarantined at the Supplier facility until the NCR has been formally approved by CMS.

Where an error is identified against the CMS design (e.g. drawing, specification) the Supplier shall immediately notify CMS. At point of delivery of Products to CMS, the Supplier must be in possession of either a formally amended Drawing/specification or an approved NCR.

CMS reserves the right to reject an NCR request at any time including the point of submission by the Supplier.

The Supplier shall follow all applicable instructions given by CMS for disposition of the part prior to delivery. This shall include in all instances annotation of NCR numbers on associated C of C's. Where an NCR has been dispositioned as a Major, the NCR number must be recorded on the parts affected. The Supplier shall agree the required method for marking in advance with CMS Engineering or CMS Quality.

### 4.4.3 Product Rejection

Where parts are formally rejected by CMS, the Supplier must provide full RCCA statement within a maximum of 28 days from receipt of the NCR or rejected goods. The Supplier shall retain title and risk of such goods.

### 4.5 Occurrence Reporting – Notice of Escape

Where a Product is formally rejected by CMS, the Supplier must provide full RCCA statement within a maximum of 28 days from receipt of the NCR or rejected Product. Occurrence Reporting – Notice of Escape
The Supplier shall, within 24 hours, notify CMS when non-conforming Product has been identified which has already been shipped to CMS in the form of a formal quality alert. Where it is likely that the non-conforming part may increase hazard risk the Supplier must notify CMS immediately.

This notification shall include, as a minimum, part number, serial number (where applicable), quantities, Certificate of Conformity, CMS purchase order number, detailed description of non-conformance and conformation that the non-conformance has been contained at the Supplier (or its Sub-tier Supplier) premises.

Once notified, CMS will determine the correct course of action to be taken and report the decision back to the Supplier.

4.6 Handling, Storage, Maintenance and Calibration of CMS Owned Equipment

The Supplier is responsible for ensuring the continued calibration of CMS owned tooling, equipment and gauges while retained at the Supplier premises. Items of CMS owned equipment or gauges are not to be used if the calibration period on the certificate has expired. The calibration method and frequency shall be agreed in advance with CMS metrology and subject to oversight and audit. Calibration in all cases shall be traceable back to the agreed UK National or International Standard.

The Supplier shall maintain, protect and preserve any tooling, equipment or gauges retained at its facilities in support of CMS Contracts. The Supplier should report any loss, theft, damage or destruction of CMS owned tooling, gauges or equipment while in its possession.

No modifications or changes shall be undertaken on any CMS owned tooling or equipment without CMS’ prior written approval.

The Supplier is not permitted to use CMS owned tools, gauges or equipment on any of its other customer contracts.

Any equipment susceptible to ESD shall be calibrated in an EPA with an ESD Control Plan in place for the organisation performing the calibration that meets the requirements of ANSI/ESD S20.20 or equivalent.
4.7 Certification and Release

The Supplier shall provide a Certificate of Conformity (C of C) with all deliveries and shall identify the following as a minimum (where applicable):-

- State that the Product is released in accordance with QAM10 (stating the issue number)
- Refer to the drawing number / specification to which it conforms
- Any DDP / C of D to which it conforms (if applicable)
- Be signed by a person with documented approval to do so
- List any FAI, PCP or NCR references applicable
- Make a statement regarding any ITAR controlled deliveries:
  - In accordance with the directive of ITAR section 123.9(b)(1), the Supplier shall provide a copy of the License for permanent export DSP-5 or Temporary export license DSP-73 in advance of supply to CMS ensuring the full delivery route to the end user is correctly documented
- Reference to applicable QMS accreditation registration number
- A unique reference number from the Supplier, unless otherwise stated
- The statement of work which shall include the words: ‘Manufactured, Inspected and Tested’
- Any prior agreed exceptions:
  - i.e. “released IAW FRL/QAM/10 (Iss XX) with exception of...........”
- Product subject to shelf life control shall have the date of manufacture and expiry clearly stated on the C of C
  - A minimum of 90% shelf life shall remain at point of delivery unless otherwise agreed with the SQ Director prior to dispatch

In accordance with the REACH Regulation, the Supplier shall provide CMS with a REACH Article 33 Declaration including, safe use information if the product contains a REACH Candidate List substance where applicable, of the product on first delivery (FAI) or upon request.

Notes: -

1. For Make-To-Print contracts the Supplier C of C shall provide full traceability with associated sub level activities C of C references (e.g. treatments) annotated on the delivery C of C.
2. The use of staples shall be discouraged from delivery paperwork. A combined C of C and Delivery note may be used
3. For ease of release where manufactured parts are supplied the Supplier shall be able to supply evidence of traceability to source upon request and provide the statement "Manufactured" on the certificate of release
4. For ease of release where standard parts are supplied (parts against International standards), the Supplier must be able to supply evidence of traceability to source upon request and provide a Statement that parts are manufactured, inspected and conform in all respects to the relevant specifications or drawings.

4.8 Packaging

The Supplier shall ensure that all packaging is selected and used to prevent damage and deterioration during the handling, storage and shipping processes.

When provisioning packaging materials, the Supplier shall consider the following points and take action where appropriate:-

1. Materials used are specifically produced and procured for sealing, bagging cushioning and protecting goods whilst in transit.
2. Selection of materials and cartons used for each consignment shall afford adequate protection when taking into consideration fragility, ESD requirements, surface finish, size, weight and method of transportation and shall be suitable for the purposes of ensuring that the goods arrive at the customer premises undamaged and packed appropriately to prevent unplanned movement during transit.
3. All electrical connectors on LRUs and looms shall be protected with appropriate ESD caps, the only exceptions are fiber optical connectors which shall be protected with pink ESD caps.
4. Cartons for shipping transportation do not have to be new, but shall be clean, free from Foreign Objects and Debris (FOD) and be fit for its intended purpose.
5. All electrical LRUs and looms susceptible to ESD shall be fully enclosed in metalised ESD sealed bags.
6. All electrical/electronic equipment and components (e.g. printed circuit boards) and Looms marked as ESDS shall be fully enclosed in a sealed metallised shielding bag which meets the shielding requirements of ANSI/ESD S541. Paperwork associated with the packaged item shall not be placed inside the shielding bag.
7. The packaging for looms containing fibre-optics shall meet the additional Storage and Packaging requirements of CCP-226.
8. All electrical/electronic equipment and components (e.g. printed circuit boards) and Looms marked as ESDS, shall be handled and packaged in an EPA with an ESD Control Plan in place for the organisation performing the handling/packaging that meets the requirements of ANSI/ESD S20.20 or equivalent.
9. Bags shall be sealed by taping, heat sealed or be self-sealing; staples not to be used.
10. Orifices of all components to be blanked and transparent polythene bags used to initially seal and protect the component, unless otherwise specified.
11. Used or shredded paper and packing that could cause a potential FOD issue is forbidden.
12. Polystyrene balls or chips will only be used in conjunction with fully sealed bags (see above) or as a secondary packaging to prevent primary wrapped parts from moving.
13. Pallets are to conform to standard Euro sizes and loaded no higher than 1.22m (48").
14. Where appropriate all pallet loads are to be strapped and sealed with either heat-shrunk polythene or stretch film.
15. Labeling is as specified in the contract.
16. Delivery of components in kit form are supplied using trade pack materials, the exact method of packing is subject to an agreement between the CMS and the Supplier. In all cases the above requirements are applicable.

17. Where practical, bulk packing methods are used, each package is identified with its contents and quantity. The overall contents of the package will be listed on the dispatch documentation.

18. Where transportation / packaging is part of the CMS design data full traceability back to OEM is not required. In order to satisfy the compliance, the Supplier C of C shall state that the part numbers of Transportation and packaging materials conform to design intent.

19. CMS reserve the right to reject items received deemed to be inappropriately packaged or without ESD protection where required.

**Note:**

*Where a dangerous or hazardous substance or mixture is supplied direct to CMS, the Supplier shall comply with the Classification Labelling and Packaging (CLP) European Regulation (EC) No 1272/2008.*

**CMS reserves the right to request and define special packaging requirements, the details of which shall be defined on the Purchase Order, in the Contract or other approved CMS document.**

### 4.9 Retention of Quality Records

All documents shall be retained for a minimum the life of the platform plus 5 years unless otherwise advised by CMS’ Supplier Quality departments. All records shall remain archived, retrievable and legible for the required duration. This requirement must be flowed down to any sub-tier suppliers.

CMS reserves the right to adopt and preserve Supplier records as deemed necessary.

### 4.10 Serial Numbering and Part Marking

The Supplier shall part mark Products in accordance with Part Marking Specification DS 01.14 unless otherwise stated on the drawing. Any Product(s) identified on controlling drawings which require serial numbers MUST be annotated by a permanent and unique serial number. This is usually Line Replaceable Units (LRU) however CMS reserve the right to require the Supplier to annotate unique numbering on its Products.

Supplier shall manage the serial numbering system in line with their company controlled procedures. To prevent duplication, the Supplier shall notify CMS of the proposed serial numbering system for CMS Design or Manufacturing Engineering approval.

### 4.11 Continuous Improvement and CMS Supplier Development

There is a requirement to continually improve the effectiveness of CMS’s supply chain. In order to meet these requirements it is expected in accordance with ISO9001/AS9100 that the Supplier will support this by independently engaging in recognised continuous improvement
activities. Recognised improvement tools & techniques include but are not limited to FMEA, Lean, Six Sigma, DMAIC, Kaizen and 5S programmes.

4.12 Design Data

CMS utilises a DMS for the approval and control of all drawings, processes and procedures. The DMS is used to manage the formal transmission of approved design data to Supplier.

Within CMS drawings regular reference is made to processes being completed to the relevant DS specifications. An up to date list of CMS specifications and their current revision status can be found at the following website: http://www.cobham.com/cms/wimborne/Supplier.

The Supplier shall ensure availability of such specifications and where they are unavailable the Supplier shall contact CMS for their formal transmittal prior to commencement of work.

Where DS specifications are up issued, the Supplier will embody the up issued DS specifications at the start of next discrete order or at the launch of the next manufacturing batch for schedule orders. The Supplier shall clearly mark parts that are requested to be manufactured to Preliminary ($) drawings to indicate that they are non-production items, i.e. red banded iaw CCP-129.

Prior to commencement of work, the Supplier shall verify that they are in possession of, and able to work in accordance with, the correct revision design data which has been formally released and accompanied by a Cobham consignment note. Should the Supplier be unsure of a drawings design control then they should contact the CMS Procurement or Supplier Quality department for clarification.

4.12.1 Digital Design Data

The Supplier shall be responsible for ensuring the integrity of digitally received and transmitted data through a Sealed Data Route. The sealed data shall ensure that there is no possibility of unauthorised changes being made to the data. The Supplier shall ensure that any flow down of digital data within their Supplier chain. In the event that 3D CAD data is to be translated, a Translation Verification Programme shall be utilised to ensure that the integrity of the data is maintained.

4.12.2 Preliminary Drawings

A drawing required for discussion, estimating, design review, experimental or other NON-PRODUCTION or QUALIFICATION activity may be released by CMS as a preliminary issue. This will be indicated by ($) in the issuing column. Preliminary drawings should include one of the following notes, dependent upon intended use.

- RELEASED AT PRELIMINARY ISSUE FOR ADVANCED PLANNING/COSTING PURPOSES ONLY. DO NOT MANUFACTURE'
• ‘RELEASE OF PART FOR ‘AT RISK’ MANUFACTURE, PENDING FINAL ANALYSIS AND FULL TECHNICAL DRAWING APPROVAL.’

• ‘RELEASED AT PRELIMINARY ISSUE FOR PROTOTYPE MANUFACTURE “AT RISK” (TEST LOOM DEVELOPMENT USE ONLY)’

• ‘FOR EXPERIMENTAL MANUFACTURE ONLY (R&T DEPARTMENT EXPERIMENTAL USE ONLY)’

• ‘RELEASED AS BASELINED DATA FOR PCB DESIGN DEVELOPMENT ONLY’

4.13 Materials Hazardous to Health or Environment

It is CMS’ policy to eliminate, mitigate or remediate the environmental impacts of the Company’s activities.

The Supplier shall ensure compliance with all relevant national and/or international environmental regulations as amended from time to time.

Where a dangerous or hazardous substance or compound is supplied direct to CMS, the Supplier shall make available the associated Material Safety Data Sheet (MSDS) and to comply with the European legislation on Classification Labelling and Packaging (CLP)

When a MSDS is updated for a hazardous substance or mixture supplied direct to CMS, (within the preceding 12 months) the Supplier shall supply the new updated version of the MSDS to CMS.

In accordance with European Regulation (EC) No. 1907/2006 (REACH), the Supplier shall:

• Notify CMS via an Article 33 Declaration where the Supplier is aware that a supplied product contains Candidate List Substances of Very High Concern (SVHCs) in relevant concentrations.
• Provide sufficient information to allow safe use of the product in relation to the SVHC content.
• Ensure products supplied to CMS comply with the REACH Annex XVII restrictions.
• Agree to continue to advise CMS on the inclusion of Candidate List Substances in goods supplied to CMS, as and when they appear on the REACH Candidate list as required under Article XVII of REACH.

4.14 Materiel Chain of Custody

Materiel Chain of Custody is required to satisfy National Airworthiness Authorities Conformity and FAI in accordance with AS9102. CMS require that Supplier is able to provide “Chain of Custody” for all deliveries.
The Chain of Custody requires that from the moment the material is utilised for production purposes, starting with the producer of the raw material to make the item; every transfer of evidence from company to company be documented.

The Supplier shall demonstrate the above Chain of Custody for all sub-components and raw materials in accordance with the AS9100 standards and ensure that each document is linked so as to establish a clear Chain of Custody. The Supplier shall enable a clear Chain of Custody path from raw material to final delivery. This shall include but not be limited to: Material Certs, Mill Certs, Process Certs, Cast Numbers, Heat Numbers, Lot Numbers, Batch Numbers, C of C Numbers, Purchase Order Numbers etc.

Full Chain of Custody shall always be a CMS requirement in line with QAM 10, PO requirements and AS9100, AS9001, AS9110, AS9102 and any more rigorous standards applied as a Contract requirement. For the avoidance of doubt any and all certifications which the supplier holds shall become a Contractual requirement.

Additional Chain of Custody requirements shall be in accordance with the traceability clause in CMS’ Standard Terms and Conditions located at http://www.cobham.com/cms/wimborne/Suppliers. Unless CMS have signed a framework agreement with the Supplier which contains a Traceability of Chain of Custody clause framework agreement this shall govern the Chain of Custody requirements.

4.15 Foreign Object Debris and Foreign Object Damage Prevention Process

The Supplier shall establish and maintain a Foreign Object Debris and Foreign Object Damage Prevention Process (FOD). The Process shall be in accordance with AS9146. The level and extent of the process and training shall be commensurate and applicable to the level of FOD risk identified by the Supplier.

The Supplier shall categorise their various production areas and ensure that the risk of FOD is controlled according to risk to product. Typically FOD Zones are identified as:

- **FOD Critical** – Elevated potential for FOD occurrence, limited ability to identify FOD due to complexity of product and ability to inspect
- **FOD Controlled** – Medium potential of FOD occurrence, reduced ability to spot potential FOD escapes
- **FOD Aware** – Low level of potential FOD occurrences and high ability to spot potential FOD escapes

The Supplier shall define the level of training, restrictions placed on access, tooling and materials to be enforced upon all personnel entering the specific FOD zone.

The Supplier shall ensure that all personnel within their organisation understand the potential risk that FOD poses to product reliability and safety. This understanding shall be extended to visitors, contractors and customers.
The Supplier shall ensure that there are processes in place for the identification, reporting and investigation of possible FOD escapes. The Supplier shall inform CMS of any potential FOD escapes and ensure the RCCA are utilised in order to eliminate potential causes of FOD.
5 Commodity Specific Requirements

5.1 Make-To-Print Contracts (Mechanical)
This clause only applies to Make-To-Print Contracts for mechanical components only.

5.1.1 Sub-Tier Supplier Control

The Supplier shall select Sub-tier Suppliers as per section 2 of the latest version of QAM 10.

The Supplier shall evaluate and ensure that all required quality certifications by a UKAS accredited certification body are maintained for all Sub-tier Supplier utilised for materials, goods or services for the life of the Contract. This should include any Sub-tier Supplier where CMS or its customers have directed the Supplier to use. The Supplier shall maintain a list of approved Suppliers used in support of CMS Contracts.

It is the Supplier’s responsibility to ensure the flow-down and compliance with CMS design and purchasing requirements including this QAM 10 document.

5.1.2 Special Processes

Any processes for production and service provision where the resulting output cannot be verified by subsequent monitoring or measurement will be managed through the imposition of special processes. (See Section 5.6 Risk Assessment)

All special processes completed in support of a Contract shall be performed by organisations holding NADCAP, or similarly recognised approvals. Any deviations to this requirement shall be referred to CMS SQ Director for written approval prior to commencement of work. Special processes include but are not limited to:

- Non-destructive Testing (NDT)
- Heat Treatment (HT)
- Coatings including painting (CT)
- Composite Manufacture (CM)
- Chemical Processing (CP)
- Welding (WLD)
- Non-Conventional Machining & Surface Enhancement (NMSE) Surface Enhancement, e.g. shot peening (SE)

CMS reserves the right to either approve or refuse the use of any Special Process Sub-tier Supplier at any time based on but not limited to unacceptable Quality, Cost or Delivery performances or specific CMS customer instruction.

The Supplier shall document its procedure and criteria for the qualification of Special Processes. This shall include validation and verification. The Supplier shall also define the criteria and frequency for the requalification of Special Processes.
5.1.3 Material independent validation

When requested by CMS, the Supplier shall provide copies of all material certifications including stockists and mill certs (chemical and mechanical analysis).

5.1.4 Vendor Parts

Where CMS drawings currently reference Vendor Parts, the Supplier shall use CMS approved part identified by DS-013. This can be done without the need for a non-conformance (NCR) being generated.

In some instances the Supplier may be authorised by CMS to continue using the Vendor Part identified in this DS via concession (NCR). This will be considered on a case by case basis by CMS and any approval does not set precedence for future decisions.

Any significant change to a Vendor Part process (that has a potential to affect form, fit and function) shall be communicated in advance to CMS.

In the event that a Vendor Part is shown with a European Technical Standard Order (ETSO) reference the Supplier can continue to use the Vendor Part without the need for a NCR.

Where a standard catalogue item has been identified as a replacement to the Vendor Part it will negate the need for an FRS part number. If the Supplier wishes to continue using stock of a Vendor Part the Supplier shall submit an NCR to allow CMS engineering to accept or reject it.

For parts on an FRS drawing, where the Supplier address is stated as ‘obtain from:’ the following shall apply:

- Where the Supplier uses multiple sites/campus to manage manufacturing, distribution and order processing, the Supplier is permitted to fulfil an order by using a different site or company name than that listed on the FRS, provided always that the company used is part of the same group or parent organisation.

- This must not be used to permit a change of manufacturing source which may affect interchangeability.

- The Supplier is permitted to order a Vendor Part from an OEM’s authorised distributor, providing that the manufacturing organisation on the distributor’s C of C, is the same as that stated on the FRS drawing.
5.1.5 Obsolescence Management.

In the event that obsolescence is discovered in component parts for CMS designed sub-assemblies and assemblies, the Supplier shall immediately contact CMS Obsolescence using e-mail: CMS.Wimborne.Obsolescence@cobham.com

The Supplier shall adopt and implement a pro-active obsolescence management process which meets the requirements of CCP-037. The management shall include monitoring of the supplied product bill of material for obsolete components and its impact to the supplied product. The Supplier shall have robust processes to determine mitigation of obsolescence (e.g. Lifetime buy, redesign etc).

The Supplier shall contact CMS Obsolescence using e-mail: CMS.Wimborne.Obsolescence@cobham.com regarding part or component obsolescence as soon as information becomes available including the mitigation activity the Supplier is taking. Obsolescence issues shall include cases in which the supplier possesses adequate part inventory to meet contractual delivery obligations, but there is a known issue with future procurement of components. Obsolescence issues shall include all cases in which a component manufacturer/Supplier has announced an End of Life (EOL) or Last Time Buy (LTB).

The Supplier shall send a copy of the Obsolescence Monitoring Report to CMS.Wimborne.Obsolescence@cobham.com on a quarterly basis. In addition the subject of known obsolescence issues should be tabled at the regular order book/Supplier performance meeting.

5.1.6 Counterfeit Parts

The Supplier shall implement and enforce a written Counterfeit Parts Prevention and Control Plan designed to preclude, detect, and remove any counterfeit components from all deliveries to CMS & its associated Supplier’s & Customers.

- Counterfeit (EEE) Parts Control Plan
- Personnel Training
- Parts Availability
- Purchasing Process
- Verification of Purchased Parts
- Investigation activities
- Material Traceability & controls
- Reporting
- Auditing
Cobham requires that all Suppliers review AS5553 and AS6081, see Table 3; these references provide best practice review, and should be used to confirm internal procedures are appropriate and effective.

Table 3. Counterfeit Parts Detection Road Map

<table>
<thead>
<tr>
<th>DISTRIBUTOR</th>
<th>USER</th>
<th>TEST PROVIDER</th>
</tr>
</thead>
<tbody>
<tr>
<td>AS6081 Fraudulent/Counterfeit Electronic Parts: Avoidance, Detection, Mitigation, and Disposition, Distributors.</td>
<td>AS5553 Counterfeit Electrical, Electronic, and Electromechanical (EEE) Parts; Avoidance, Detection, Mitigation, and Disposition.</td>
<td>AS6171: Test Methods Standard; General Requirements, Electrical, Electronic, and Electromechanical Parts.</td>
</tr>
<tr>
<td>ARP678 Compliance Standard/Guide (Includes Audit Checklist)</td>
<td></td>
<td>AS6171 Compliance Standard/Guide (Includes Audit Checklist)</td>
</tr>
<tr>
<td>ARP678 - Fraudulent/Counterfeit Electronic Parts Tool for Risk Assessment of Distributors</td>
<td>AS5553 Compliance Standard/Guide (Includes Audit Checklist)</td>
<td></td>
</tr>
</tbody>
</table>
5.2 Make-To-Print Contracts (Electrical and Electronic)

5.2.1 Sub Tier Supplier Control

The requirements of this clause are that of clause 5.1.1

5.2.2 Special Processes

The requirements of this clause are that of clause 5.1.2

5.2.3 IPC Standards

The Supplier shall use industry standards associated with the manufacture of electronic assemblies (listed below) in all instances when manufacturing CMS designed products, unless otherwise directed in writing by CMS. CMS SQ department reserves the right to review processes and controls from the standards listed below at the Supplier site which the Supplier shall support.

In all instances the below listed standards would be superseded if any CMS drawing and or supporting process specification were to be issued. If at any time it is unclear as to what standard is applicable, the Supplier must inform CMS Supplier Quality immediately prior to the commencement of manufacture;

- IPC–A–600 Acceptability of Printed Boards (Class 3)
- IPC–A–610 (Lead) Acceptability of Electronic Assemblies (Class 3)
- IPC/WHMA–A–620 Requirements & Acceptance for cable/Wire Harness Assemblies (Class 3)
- IPC–771A/7721A Rework, Repair, and Modification of Electronic Assemblies
- IPC/EIA J STD-002 Solderability Tests for Component Leads, Terminations, Lugs, Terminals and Wires
- IPC–J–STD–001 Requirements for Soldered Electrical and Electronic Assemblies (Class 3)

5.2.4 Restriction of Hazardous Substances (RoHS) and Waste Electrical and Electronic Equipment (WEEE)

Unless defined by Contract the Supplier shall ensure compliance with the latest ROHS & WEEE regulations to prevent hazardous substances from entering the production process and thereby keep them out of the waste stream.

5.2.5 Vendor Parts

The requirements of this clause are that of clause 5.1.4
5.2.6 Obsolescence Management

The requirements of this clause are that of clause 5.1.5.

5.2.7 Counterfeit Parts

The requirements of this clause are that of clause 5.1.6
5.3 Design & Build and Design Support Contracts

5.3.1 Design Life Cycle Management

If the Supplier is providing design support either as an independent service or as part of a Design and Build Contract then the Supplier shall operate a Design Assurance Lifecycle management Process in accordance with BS EN 61160 and a Configuration Management process in accordance with Quality management systems Guidelines for configuration management BS EN 10007.

5.3.2 Declaration of Design Performance (DDP) & Compliance to FRS documents

In addition to Section 4.7 of this QAM 10 document (certification and release), the Supplier’s C of C shall make reference to the applicable approved DDP (this may be also be a Certificate of Design (CofD)) for the Products being verified by the Supplier. For Products where verification is being performed by CMS, the Supplier shall provide a compliance statement against the applicable equipment specification as listed on the FRS drawing.

5.3.3 Product / Production Assurance Testing (PAT)

Applicable outline specification documents defined by CMS will make reference to performance and ongoing testing. Where defined within the CMS specification, the Supplier shall ensure that goods are subject to PAT procedures.

Each set of PAT results shall include the following:

- Supplier name
- Date of testing
- Signature or stamp of individual performing the test
- Test procedure document number and revision letter
- Cobham part number, including the dash number
- Minimum and maximum test limits
- The actual numerical test results
- Serial numbers of the unit tested, such that the results for each unit are known and traceable.

A copy of the test results shall be supplied with the product at point of delivery to CMS unless otherwise agreed in advance in writing with CMS SQ Director.
5.3.4 Delegated Material Review Board (MRB) Authority

Where agreed in the contract and as approved by CMS Design and Engineering; Design and build Supplier shall use their own MRB process to approve internal deviations providing that the non-conformance does not impact or deviate from the CMS controlling specification or affect the following aspects of the product, (or impact or deviate from the CMS controlling specification):

- Function
- Reliability
- Maintenance
- Interchangeability
- Life
- Strength
- Safety

There may be instances whereby delegated MRB authority is not granted as stated above; in such circumstances, the CMS Purchase Order will detail the CMS requirement which will take precedence.

5.3.5 Product Safety

The Supplier shall plan, implement, and control the processes needed to assure product safety during its “Chain of Custody”, as appropriate to the Supplier and its services.

5.3.6 Quality Plan

Where quality requirements in the Contract are outside of the Supplier quality accreditations and this QAM 10 document, the Supplier shall provide a quality plan to outline the controls to manage the additional Contract quality requirements. Supplier quality plans shall be in accordance with: ISO 10005 Quality management systems guidelines for quality.

5.3.7 Design and Build FAI requirements

Where the content of assembly or detail FAIR includes IPR related information, or the size of the FAIR pack makes it difficult for the Supplier to submit as a full FAIR pack, then a revised content of the FAIR pack may be agreed with the allocated CMS SQ Engineer before submission. The complete FAIR pack may be subject to approval at the Supplier facility.

5.3.8 Notification of Design Change

The Supplier shall notify CMS of any design changes and, if required, seek approval from CMS via a change proposal.

Changes shall be notified using the Supplier own change documentation or as per the Contract. Where CMS approval is required, the Supplier shall not proceed until written approval has been granted by CMS.
Where a material/chemical contained in approved design/production/maintenance data is no longer available, the Supplier shall obtain approval from the design organisation responsible for the original data for the use of substitute materials/chemicals.

Alternative materials/chemicals offered by Sub-tier Supplier and stockists should only be accepted by the Supplier where objective evidence of design organisation acceptance (such as a formally issued alternative materials list) is available.

5.3.9 Obsolescence Management

The requirements of this clause are that of clause 5.1.5

5.3.10 Counterfeit Parts

The requirements of this clause are that of clause 5.1.6

5.3.11 Lead-Free Control Plans

Suppliers of Design & Build airborne electronic hardware shall have a Lead-Free Control Plan (LFCP) in accordance with the requirements of GEIA-STD-0005-1-A or IEC/TS 62647-1
5.4 Software (Including use within Complex Electronic Hardware)

Supplier providing software writing or testing services should be approved to ISO 9001 TickIT plus, using ISO 9001 for Software Quality Management System Construction, Certification and Continual Improvement, and should have previous experience in software projects to the requirements of RTCA/DO-178 (Software Considerations in Airborne Systems and Equipment Certification).

All Supplier software activities and deliverables shall be subject to full verification and approval upon receipt at CMS.

Any queries regarding software activities shall be referred to the CMS Software Quality Engineer for review and approval.

If designing or developing components that use complex hardware Suppliers must ensure they do so in accordance with guidance provided in the following:

RTCA DO-254/ Design Assurance Guidance for Airborne Electronic Hardware
EUROCAE ED-80

5.4.1 Quality Management System Requirements

For software the term Manufacturers in respect of suppliers of a bespoke or configured software product shall be interpreted as developers or suppliers of as set out in the sections below.

5.4.2 Supplier Scope of Approval

Additional appropriate considerations shall apply as appropriate to the categories of software identified below.

Depending on the category, shown with examples in the table below, the selection criteria will vary appropriate to where and how and software is sourced, and guidance on applicable processes.
### Category: Safety critical product

<table>
<thead>
<tr>
<th>Category</th>
<th>Safety critical product</th>
<th>Support product</th>
<th>Test</th>
<th>Tools</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internally developed software</td>
<td>Refuelling Control Unit CCP-225 DO-178</td>
<td>Ground Support Software CCP-225 DO-178</td>
<td>Automatic Test Equipment DO-178*</td>
<td>DO-178*</td>
</tr>
<tr>
<td>COTS</td>
<td>VxWorks RTOS DO-178</td>
<td>VxWorks IDE</td>
<td>NI / TestStand</td>
<td>Word/Excel</td>
</tr>
<tr>
<td>Bespoke externally developed software</td>
<td>Boot Loader DO-178</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Open source software</td>
<td>N/A</td>
<td>GNU (Compiler)</td>
<td>Cygwin</td>
<td>Eclipse</td>
</tr>
</tbody>
</table>

DO-178* means that depending on the purpose/use of the tool DO-178 or one of its supplements may or may not be applicable: verification vs development tools, and tool qualification.

Safety critical & Support = things we supply to customers  
Test = for example ATE software used in-house for test purposes  
Tools = things we use in-house only

**General selection criteria (considerations) which applies to all:**

- How long does it need to be supported for? (Product life time)
  - What mechanisms need to be in place to facilitate support
  - Who is responsible?
  - Upgrades? Compatibility? Obsolescence?

- Licencing considerations, such as:
  - Ability to sell it
  - Ability to modify it
  - Ability to transfer it
  - On-going costs

The following licencing categories should be considered:

<table>
<thead>
<tr>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Tools (not directly involved in producing the executable code, e.g. editors)</td>
</tr>
<tr>
<td>2. Tools (directly involved in producing executable code, e.g. compilers)</td>
</tr>
<tr>
<td>3. Libraries and utilities (not delivered but needed to run some delivered code)</td>
</tr>
<tr>
<td>4. Libraries and utilities (built into internal only code, e.g. test frameworks)</td>
</tr>
<tr>
<td>5. Libraries and utilities (built into released code)</td>
</tr>
</tbody>
</table>
5.4.3 Approved Software Development Plans

CMS Software Development standards shall apply.

5.4.4 Control of Non-Conformance and Reporting (NCR)

Corrections to software failing to meet its design requirements shall be tracked by the NCR processes.

5.4.5 Occurrence Reporting

If the supplier of safety critical software becomes aware of any reason that the proposed delivered software may result in unsafe conditions they shall make CMS aware at the earliest opportunity.

5.4.6 Certification and Release

With reference to section 4.8, CMS will conduct a conformity review on the delivered software prior to acceptance of the software and any CMS release activities. CMS has the right to request additional supporting evidence and/or reject the delivered software.

5.4.7 Obsolescence Management

For software Obsolescence Management, refer to CCP-225 - Software Maintenance.

5.4.8 Counterfeit Products

The requirements of this clause are that of clause 5.1.6.
5.5  Maintenance, Repair & Overhaul (MRO)

5.5.1  Facilities

The Supplier shall determine, provide, and maintain the environment necessary for the operation of its processes and achieve conformity of products and services.

The Supplier shall provide segregated areas to ensure that there is no contamination between new build parts and tooling with repaired or reworked items. This area shall be appropriate for the tasks being completed.

The Supplier shall ensure that it has secure, restricted access storage facilities and those serviceable/new aircraft components and materials are segregated from unserviceable aircraft components and materials.

5.5.2  Personnel

The Supplier shall establish personnel competency records for all personnel involved in product realisation which may include, but is not limited to, development, design, manufacturing, testing, MRO and certification activities. Specific records of training, approval and re-evaluation shall be maintained for all affected staff.

Factors affecting the performance of personnel shall specifically be considered and acted upon by the Supplier. These are commonly referred to as “Human Factors” on which there are widely available awareness and training programmes for organisations. (See Sections: 2.3 Audit Results, 3. Supplier Rating Policy, Risk Assessment 5.5.8 & 4.5.2 NCR Generation and Process.)

The Supplier shall ensure that all personnel undertaking Non-Destructive Testing (NDT) shall be accredited to national standards, PCN Level 2 as a minimum (exception shall be with prior approval).

5.5.3  Certifying Staff

The Supplier shall identify specific staff that have responsibility for certification of products or services supplied in support of MRO specific contracts (herein referred to as Certifying Staff).

The Supplier shall ensure that Certifying Staff shall have adequate understanding of the products or services and that all Certifying Staff are subject to ongoing assessments to confirm that he or she is competent, holds the correct qualification and has the capability to carry out their intended duties effectively (See section 4.1 for eye examinations).

The Supplier shall maintain Records for the selection, training, authorisation (Allocation or reallocations of responsibilities and authorities) and ongoing assessment of Certifying Staff.
5.5.4 Equipment, Tools and Materials

The Supplier shall be in possession of all necessary equipment, tools and materials that are specified within design data or required to complete the task. All these tools and equipment shall be controlled in terms of servicing and/or calibrated to a national standard see Para 4.6. Traceability shall be maintained for all materials which will form part of the final repaired goods.

Upon receipt of goods, the Supplier shall conduct and document a Performance/Strip Survey on the equipment, tools and materials and supply such document to CMS which identifies the activities required to be performed to ensure that parts are returned to a serviceable standard. If the Supplier identifies at any time during the repair activity it received a component in a condition that could seriously hazard the safe operation of the equipment or aircraft to the Supplier shall report this to CMS immediately.

5.5.5 Maintenance Data

The Supplier shall ensure that all applicable original design or maintenance data shall be available to all personnel undertaking maintenance tasks.

5.5.6 Maintenance Records

The Supplier shall create Route Cards and records for all maintenance tasks undertaken. These records shall include:

- Performance/Strip Survey reports
- Records and details of works carried out
- Details of all parts and materials used or replaced during repair
- Evidence that requirements have been met
- Evidence that sub-contract companies comply with the above
- Archived, retrievable and legible for the defined retention period (See Section 4.9)
- Backed up every 24 hours for computer records

5.5.7 Procedures and Quality Management System

Where MRO quality requirements in the Contract are outside of the Supplier quality accreditations and this QAM 10 document, the Supplier shall provide a quality plan to outline the controls to manage the additional Contract quality requirements.

5.5.8 Suspected Unapproved Parts

The Supplier shall quarantine and control any article that might not have been, or is suspect of not having been produced or maintained in accordance with the approved design data and applicable statutory, and customer requirements. This shall also be read in accordance with clause 5.1.6 (Counterfeit Parts).
5.5.9 Control of Maintenance Data

The Supplier shall ensure that maintenance data is preserved to ensure that aircraft components and related operational and emergency equipment can be maintained in a condition to ensure continued airworthiness. This data shall include maintenance programs, airworthiness directives, service bulletins, repairs / modifications, operator maintenance manuals, drawings, maintenance manuals and technical orders.

5.5.10 Maintenance Process Verification

The Supplier shall ensure that the first application of a maintenance process (e.g. new repair scheme) shall be evaluated, verified and documented. This is prime objective of this is to verify that new processes, personnel, documentation and tooling are capable of performing the maintenance in compliance with established requirements.

5.5.11 Business Continuity

The Supplier shall develop and maintain a Business Continuity Plan in accordance with ISO 22301. This plan shall protect CMS and its Customers.

5.5.12 Last Article Inspection Review

The Supplier shall develop a process for Last Article Inspection Review (LAIR). The requirement will be instigated by CMS on the last shipped product prior to the end of an existing contract where no further orders are expected at that location.

5.6 Risk Assessment

5.6.1 Scope

The Supplier shall manage risk to meet the requirements of the AS9100, AS9110 and AS9120 standards. Risk should influence every aspect of the Supplier’s operations.

5.6.2 Communication of Risks

The supplier shall operate a BMS which considers the internal and external communication of the risks identified. Internal communication is necessary for all appropriate personnel should be aware of the remaining risks even after implementing risk control measures.

5.6.3 Outsourced Processes

In some instances the CMS contract may allow Supplier’s organization to delegate the provision of some processes or the manufacture of components, subassemblies or entire units. In order to maintain an appropriate level of control over the processes, the Supplier’s organization shall incorporate risk management activities ensuring risk control measures are appropriately applied.
5.6.4 Risk Evaluation Process
Risk evaluation should become embedded into the Suppliers day-to-day operations. The overall aim of risk evaluation should ensure that the Supplier’s capabilities and resources are employed in an efficient and effective manner to manage opportunities and threats and be able to demonstrate.
6 Appendix A - CMS Communication of Manufacturing and Management Evolution Form

Communication of Manufacturing and Management Evolution (CMME)

<table>
<thead>
<tr>
<th>1. Product Identification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supplier:</td>
</tr>
<tr>
<td>Plant Location:</td>
</tr>
<tr>
<td>Parts Number:</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2. Description of Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>2a Type of Change:</td>
</tr>
<tr>
<td>Plant Location or Layout</td>
</tr>
<tr>
<td>Change of Suppliers Third Party Approval (Incl Special Processes)</td>
</tr>
<tr>
<td>Enterprise Resource Planning (ERP)</td>
</tr>
<tr>
<td>Top Level Organisation and/or Personnel at Key Position</td>
</tr>
<tr>
<td>Major Process (Manufacturing, Assembly, Testing, Inspection or Tooling)</td>
</tr>
<tr>
<td>Major Supplier (Including Subcontractors)</td>
</tr>
<tr>
<td>Design Changes (Design and Build Suppliers Only)</td>
</tr>
<tr>
<td>Change Description:</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2c Reason for Change:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>3. Submitted By:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name:</td>
</tr>
<tr>
<td>Date:</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4. Risk Identification &amp; Mitigation Action:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>5. Additional Information:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>6. Is Customer Notification Required?</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>7. Approval:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Procurement</td>
</tr>
<tr>
<td>Quality</td>
</tr>
<tr>
<td>Title:</td>
</tr>
<tr>
<td>Name:</td>
</tr>
<tr>
<td>Date:</td>
</tr>
</tbody>
</table>

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7 Appendix B - FAI Requirements AS9102

Form 1: Part Number Accountability

*Note: If any of the Fields are Non Applicable to your First Article, then you must insert N/A into that respective Field. Do not leave it Blank*

<table>
<thead>
<tr>
<th>Field Number</th>
<th>Required Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sheet 1 of _</td>
<td>Normally this would be Sheet 1 of 1, but if you need to use more than 1 sheet, then number accordingly. For example if you need 2 sheets, then the first sheet would be numbered 1 of 2. The second sheet would be numbered 2 of 2.</td>
</tr>
<tr>
<td>1: Part Number</td>
<td>As stipulated on the Drawing.</td>
</tr>
<tr>
<td>2: Part Name</td>
<td>As stipulated on the Drawing.</td>
</tr>
<tr>
<td>3: Serial Number</td>
<td>If applicable then quote the Serial Number here. If not applicable then you must state N/A. <strong>Do not leave the Field Blank!</strong></td>
</tr>
<tr>
<td>4: FAI Report Number</td>
<td>This Field can be used (for traceability purposes) by the Supplier/Manufacturer preparing the FAI as their own unique FAI Report Number. If you choose not to use it, then insert N/A. <strong>Do not leave it Blank!</strong></td>
</tr>
<tr>
<td>5: Part Revision Level</td>
<td>This is the latest Revision Level as stated on the Drawing.</td>
</tr>
<tr>
<td>6: Drawing Number</td>
<td>Taken from the Drawing (It’s usually the same as Field 1)</td>
</tr>
<tr>
<td>7: Drawing Revision Level</td>
<td>As per Field 5.</td>
</tr>
<tr>
<td>8: Additional Changes</td>
<td>For Example: A NCR Number. If there are no additional changes then insert N/A. <strong>Do not leave it Blank!</strong></td>
</tr>
<tr>
<td>9: Manufacturing Process Reference</td>
<td>This can be the Reference Number of the Work Order, Traveller, Method of Manufacture or Route Card.</td>
</tr>
<tr>
<td>10: Organization Name</td>
<td>The Full Name and Address of the Supplier/Manufacturer performing the FAI.</td>
</tr>
<tr>
<td>11: Supplier Code</td>
<td>The Supplier ID Number as given by the Customer who has issued the Purchase Order.</td>
</tr>
<tr>
<td>12: PO Number</td>
<td>The Purchase Order Number for the part Number shown in Field 1.</td>
</tr>
<tr>
<td>13: Detail FAI Or Assembly FAI</td>
<td>You must indicate if this is a &quot;Detail FAI&quot; or an &quot;Assembly FAI&quot; by either 'ticking' or placing an ‘X’ in the appropriate box. <strong>See also Note a) and b) on page 3.</strong></td>
</tr>
<tr>
<td>14: Full FAI Or Partial FAI</td>
<td>You must indicate if this is a &quot;Full FAI&quot; or a &quot;Partial FAI&quot; by either ‘ticking’ or placing an ‘X’ in the appropriate box. <strong>Please Note: If you indicate that this is a Partial FAI then you must also state the Baseline Part No (Including Revision Level) and Reason for the Partial FAI in the field provided.</strong></td>
</tr>
<tr>
<td>Note a)</td>
<td>If the part number stated is a Detail FAI, then go straight to Field 19.</td>
</tr>
<tr>
<td>Note b)</td>
<td>If the part number stated is an Assembly FAI, then you must go straight to the INDEX shown in Field 15.</td>
</tr>
<tr>
<td>15: Part Number</td>
<td>List all Part Numbers (on individual lines) that make up the Assembly FAI.</td>
</tr>
</tbody>
</table>
### Form 2: Product Accountability – Raw Material, Specifications and Special Process(s) and Functional Testing.

Includes Standard Hardware (Nuts, Bolts, and Rivets etc.)

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>16: Part Name</td>
<td>List all the Part Names (on corresponding individual lines) that make up the Assembly FAI</td>
</tr>
<tr>
<td>17: Part Serial number</td>
<td>If the part has a Serial Number, then list it here. If not, then insert N/A. <strong>Do not leave Blank!</strong></td>
</tr>
<tr>
<td>18: FAI Report Number</td>
<td>If applicable, this Field can be used (for traceability purposes) by the Supplier/Manufacturer preparing the FAI as their own unique FAI Report Number. If you choose not to use it, then insert N/A. <strong>Do not leave Blank!</strong></td>
</tr>
</tbody>
</table>
| 19: Signature | Mandatory Requirement: Printed Name (or Unique Identification) and Signature of the person approving the FAIR (author). Note: Although it does not stipulate, it is a **Good Working Practice (GWP)** to print your name in **Block Capitals** – and then sign it. If the signatory has a Quality Assurance Stamp, then once again it is considered to be a **GWP** to "stamp" this Field as well. **Note 1)** Please note that a Signature is mandatory and by signing this form you are indicating that: -  
  - All characteristics are accounted for.  
  - They meet the Drawing Requirements  
  - And/or are properly Documented for Disposition  
  **Note 2)** You must also indicate by means of a 'tick' or 'X' that the FAI is Complete or Not Complete  
  **Chap 4.4 Refers (If NCR applies "FAI not complete" must be chosen)** |
| 20: Date | Complete the Date in the following format only: -  
  - Day/ Month/Year  
    - Day = Two Digits.  
    - Month = The first three letters of the Month  
    - Year = The last two digits of the year  
  For example: the 9th of April 2009 would be written like this: -  
  - 09 Apr 09 |
| 21: Reviewed By | This Field is not mandatory – however if the FAI is reviewed (and this is considered to be a **GWP**) then it cannot be reviewed by the same person stated in Field 19.  
  If the FAI is reviewed then once again - although it does not stipulate it - it is also **GWP** to print your name in **Block Capitals** – and then sign it. If the signatory has a Quality Assurance Stamp, then once again it is considered to be a **GWP** to "stamp" this Field as well. |
| 22: Date | Complete as stipulated in Field 20 |
| 23: Customer Approval | This Field will be completed (as indicated) by the Customer upon Approval of the FAI |
| 24: Date | To be completed the same as Field’s 20 & 22 |
### Supplier Quality Requirements - Page 47 of 49

**Note:** If any of the Fields are Non Applicable to your First Article, then you must insert N/A into that respective Field. **Do not leave it Blank.**

<table>
<thead>
<tr>
<th>Field Number</th>
<th>Required Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sheet 1 of _</td>
<td>Normally this would be Sheet 1 of 1, but if you need to use more than 1 sheet, then number accordingly. For example if you need 2 sheets, then the first sheet would be numbered 1 of 2. The second sheet would be numbered 2 of 2.</td>
</tr>
<tr>
<td>1: Part Number</td>
<td>As stipulated on the Drawing.</td>
</tr>
<tr>
<td>2: Part Name</td>
<td>As stipulated on the Drawing</td>
</tr>
<tr>
<td>3: Serial Number</td>
<td>If applicable then quote the Serial Number here. If not applicable then you must state N/A. <strong>Do not leave the Field Blank!</strong></td>
</tr>
<tr>
<td>4: FAI Report Number</td>
<td>This Field can be used (for traceability purposes) by the Supplier/Manufacturer preparing the FAI as their own unique FAI Report Number. If you choose not to use it, then insert N/A. <strong>Do not leave it Blank!</strong></td>
</tr>
<tr>
<td>5: Material or Process Name</td>
<td>As the title suggests, in this Field you must list the Process and/or Material as detailed in the applicable specification.</td>
</tr>
<tr>
<td>6: Specification Number</td>
<td>Taken from the Drawing and (if applicable) must include the Revision. For example DS26.00 D6A</td>
</tr>
<tr>
<td>7: Code</td>
<td>If applicable – here you would insert the Process and/or Material Code as per the Customer’s system. For example: If the spec calls out DS26.00 D6A as above, you must make reference to either the Def Stan 03-18 or Mil-DTL-5541F, whichever was used.</td>
</tr>
<tr>
<td>8: Supplier</td>
<td>Identify Supplier name, address, and code performing special processes or supplying material. Supplier name and address may be used, when Supplier code is not available or not adequate for identification. <strong>Do not leave this field Blank.</strong></td>
</tr>
<tr>
<td>9: Customer Approval Verification (Yes / No / N/A)</td>
<td>Based on Field 8, if you have submitted the Name, Address and Approval Number in Field 8, then simply insert the word “Yes”. Once again if there are no Special Processes, then insert N/A. If process source is not approved insert “No”. <strong>Do not leave this field Blank.</strong></td>
</tr>
<tr>
<td>10: Certificate of Conformity</td>
<td>Here you must quote the actual number taken from the Certificate of Conformity (CoC) as supplied by the Supplier who supplied the Process and /or Material listed previously in Field 5. You must also include copies of each CoC as documentary evidence.</td>
</tr>
<tr>
<td>11: Functional Test Procedure Number</td>
<td>If you have performed any Functional Testing, then you must do 2 things: - 1. Insert the Functional Test Procedure Number in this field. 2. Provide documentary evidence. If there has been no Functional Testing, then simply insert N/A. <strong>Do not leave it Blank.</strong></td>
</tr>
<tr>
<td>12: Acceptance report number, if applicable</td>
<td>If you have an Acceptance Report, then simply insert the number here – and include documentary evidence. If there has been NO acceptance check carried out by the Supplier/Manufacturer preparing the FAI, then insert N/A. <strong>Do not leave it Blank.</strong></td>
</tr>
<tr>
<td>13: Comments</td>
<td>Free Text box for any associated Comments – if none – then state “NONE”</td>
</tr>
</tbody>
</table>
UNCLASSIFIED
Not ITAR controlled

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14: Prepared By
(Mandatory Requirement: Printed Name (or Unique Identification) and Signature of the person approving the FAIR (author). Note: Although it does not stipulate, it is a Good Working Practice (GWP) to print your name in Block Capitals – and then sign it. If the signatory has a Quality Assurance Stamp, then once again it is considered to be a GWP to “stamp” this Field as well.

15: Date
Complete the Date in the following format only: -

Day/ Month/Year

Day = Two Digits.
Month = The first three letters of the Month
Year = The last two digits of the year

For example: the 9th of April 2009 would be written like this: - 09 Apr 09

Form 3: Characteristic Accountability, Verification and Compatibility Evaluation

Note: If any of the Fields are Non Applicable to your First Article, then you must insert N/A into that respective Field. Do not leave it Blank

<table>
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<th>Field Number</th>
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</tr>
<tr>
<td>2: Part Name</td>
<td>As stipulated on the Drawing</td>
</tr>
<tr>
<td>3: Serial Number</td>
<td>If applicable then quote the Serial Number here. If not applicable then you must state N/A. Do not leave the Field Blank!</td>
</tr>
<tr>
<td>4: FAI Report Number</td>
<td>This Field can be used (for traceability purposes) by the Supplier/Manufacturer preparing the FAI as their own unique FAI Report Number. If you choose not to use it, then insert N/A. Do not leave it Blank!</td>
</tr>
<tr>
<td>5: Char No</td>
<td>This should be a unique identification number such as the “Bubble Number” taken from the Drawing.</td>
</tr>
<tr>
<td>6: Reference Location</td>
<td>This should be the exact grid reference location of the “Char No” (as indicated in Field 5) taken from the drawing, DPD model or specification callout.</td>
</tr>
<tr>
<td>7: Characteristic Designator</td>
<td>If applicable, for example and Key or Critical Characteristic shown on the drawing. If none then insert N/A, do not leave it Blank.</td>
</tr>
<tr>
<td>8: Requirement</td>
<td>Insert the actual requirement as taken from the drawing (and/or engineering document) including tolerances. Please note that every design characteristic requirement has to be accounted for, uniquely identified and must have the inspection results traceable to each unique identifier – this includes all Standard Notes, Part Notes from all engineering documents.</td>
</tr>
<tr>
<td>9: Results</td>
<td>Here you must display the measured results and how they were measured. (Note: if there are multiple requirement locations, then list each individual result or a range of results ‘Min to Max’</td>
</tr>
</tbody>
</table>
10: Designed Tooling

If specially designed tooling was used in the manufacturing process, you must state the Name of the Owner and Tool Identification Number here. For example if you have used a Rolls-Royce owned tool, simply insert "Rolls-Royce and the Serial Number" if no specially designed tooling was used, then insert N/A. **Do not leave Blank**

11: Non-Conformance Number

If a Non Conformance has been discovered and approved for non-conforming characteristics, then you would insert the Number here. If not applicable, then insert N/A. **Do not leave it Blank.**

12: Prepared By

Mandatory Requirement: Printed Name (or Unique Identification) and Signature of the person approving the FAIR (author). Note: Although it does not stipulate, it is a Good Working Practice (GWP) to print your name in Block Capitals – and then sign it. If the signatory has a Quality Assurance Stamp, then once again it is considered to be a GWP to "stamp" this Field as well. Note: The Signature indicates that all characteristics are accounted for; meet drawing requirements or are properly documented for disposition.

13: Date

Complete the Date in the following format only: -

- Day/ Month/Year

- Day = Two Digits.
- Month = The first three letters of the Month
- Year = The last two digits of the year

For example: the 9th of April 2009 would be written like this: - 09 Apr 09

14: Optional Fields

Insert additional columns as required by the Organisation or Customer

**General Note:** This guide/instruction is in accordance with the requirements of the AS/EN/SJAC9102 Rev B.

However, there are numerous areas where we have requested additional information – these are simply defined as Good Working Practices.