



Supplier Quality Requirements Manual

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| ISO 9001.2015 | Quality Management System |
| AS 9100D | Aerospace, Space and Defence Quality Management System |
| AS 9102 | Aerospace First Article Inspection Requirement |
| AQAP 2105 | NATO Requirements for Quality Plans |
| AQAP 2110 | NATO Quality Assurance. Requirements for Design, Development and Production |
| ISO 17025 | Requirements for the Competence, Impartiality and Consistent Operation of Laboratories. |
| ISO 10012 | Measurement Management Systems |
| Def Stan 05-135 | Avoidance of Counterfeit Material |
| ISO 22301 | International Standard for Business Continuity Management |
| IPC J-STD 001 | Requirements for Soldered Electrical and Electronic Assemblies |
| IPC/WHMA-A-620 | Cable and Harnessing Acceptance Criteria |
| ANSI/ESD S20.20 | ESD Requirements |
| AS13000 | Problem Solving requirements for Suppliers |

Glossary

| Item | Definition |
|--------|---|
| ACMP | Anti-Counterfeiting Management Plan |
| COTS | Commercial of the Shelf |
| CES | Cyber Essentials Scheme |
| DFMEA | Design Failure Mode Effect Analysis |
| EEE | Electrical, Electronic & Electromechanical Parts |
| FAIR | First Article Inspection Report |
| GQAR | Government Quality Assurance Representative |
| JOSCAR | Joint Supply Chain Accreditation Register |
| MSDS | Material Safety Data Sheets |
| MTC | Mill Test Cert |
| NADCAP | National Aerospace and Defence Contractors Accreditation Scheme |
| NSN | Nato Stock Number |
| NDA | Non-Disclosure Agreement |
| OEM | Original Equipment Manufacture |
| PFMEA | Production Failure Mode Effect Analysis |
| SME | Subject Matter Experts |
| SQA | Supplier Quality Assurance |
| SCAR | Supplier Corrective Action Report |

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1. Introduction

1.1. Quality of the Product

ELBIT SYSTEMS UK Ltd (ESUK) business depends on a reliable, global network of skilled suppliers that provide the materials, parts, and services to allow ESUK to deliver an outstanding service to our customers where product meets our quality requirements and is delivered on time. It is a key understanding that products supplied by our approved listing of suppliers have a major impact on the quality of the products, solutions, and services we provide our customers. With this intent our document name is aligned with the 7 Core Quality Principles (Q7)

1. Engagement of people
2. Customer focus
3. Leadership
4. Process approach
5. Improvement
6. Evidence-based decision making
7. Relationship management

1.2. Supplier Quality Engineering & Supply Chain Operations

The ESUK supplier quality engineers (SQE) and supply chain operations are a dedicated collaborative team that engage and develop relationships throughout the supply chain. The SQE team have a high level of engineering knowledge and experience in reviewing quality requirements, sub-tier approval and nonconformity problem solving.

2. Scope

2.1. Aim

The aim of this document is to formally communicate the ESUK quality requirements to external providers of processes, products, and services in accordance with ISO 9001 & AS9100D Requirements.

2.2. Distribution

This ESUK Supplier Requirements, hereon know as "Q7", shall be distributed to sub-contractors, suppliers, and the sub-tier supply chain. The supplier is responsible for ensuring that its own organisation, and entire supply chain, provides a product or service which meets the appropriate ESUK quality requirements. This information will be controlled in accordance with relevant contracted security classification of information which is exchanged between ESUK and supplier.

2.3. Definitions

In accordance with normal quality standard documentation the terms "shall" and "must" mean that the described action is mandatory; "should" means that the described action is expected with some flexibility allowed in the method of compliance, and "may" means that the described action is permissible or discretionary.

2.4. Order of Precedence

Any inconsistencies in this document shall be resolved in accordance with the following order of precedence: (1) Statutory and regulatory requirements, (2) the contract (purchase order), including any special terms and conditions, (3) the drawing, design data and any approved concession or production permit, (4) any Statement of Work, (5) Q7.

3. Approved Supplier Minimum Requirements

3.1. Quality Management System

The minimum quality requirement for all suppliers of goods supplied, work performed, and services provided to ESUK shall be within a Quality Management System (QMS) certification to ISO 9001:2015 or, for aerospace programmes, AS9100. Certification will only be considered valid by ESUK if it is issued by a UKAS (or international equivalent) accredited certification body. Exceptions to certification requirements can be applied to suppliers of COTS items with the approval of ESUK SQA, this assessment will be based on risk. In special circumstances, exceptions to certification requirements can be applied to suppliers of non-COTS items if an audit is conducted by the ESUK SQA team to verify that the supplier's quality management system meets the requirements of ISO 9001:2015 or, for aerospace programmes, AS9100:2018.

3.1.1. Supplier Responsibilities

Suppliers shall provide up-to-date copies of quality management certification and the scope for which they apply.

3.2. Security

Suppliers conducting work at UK OFFICIAL SENSITIVE or above are required to abide by a Security Aspects Letter (SAL) Flowdown provided by ESUK, acceptance of the SAL is required before information sharing can begin. ESUK will submit F1686s to allow information sharing (in addition to the SAL) where required. The supplier is responsible for ensuring any sub-contractors used to fulfil the contract are provided with a SAL Flowdown specific to the aspects they are delivering. Suppliers are required to complete Defence Cyber Protection Partnership (DCPP) in line with DEFSTAN 05-138 based on the credentials shared within the SAL, ESUK will conduct a risk assessment on the response if required. Information at OFFICIAL SENSITIVE shall only be stored on electronic system(s) that are MoD CyDR accredited.

3.3. Health, Safety and Environmental

As detailed in the Supplier Questionnaire ESUK is committed to ensure internal systems, policies and procedures are aligned with UK legislation and as such we require all our suppliers to work in an ethical manner as detailed in our Supplier Code of Conduct available on the ESUK website (www.elbitsystems-uk.com). If you do not have a copy of this document, please contact your Supply Chain Representative where it will be furnished to your company POC.

3.4. JOSCAR

JOSCAR is a collaborative tool used by the aerospace, defence, and security industry to act as a single repository for pre-qualification and compliance information. Using JOSCAR can determine if a supplier is "fit for business". All suppliers that are not currently JOSCAR registered are encouraged to request registration invitation via the ESUK supply chain representative.

3.5. Site Visits and Supplier Audits

Where appropriate, suppliers shall be subject to on-site audit and / or site visit by ESUK. In some instances, ESUK will be unable to raise a contract until completion of successful supplier audit. Scheduled verification audits, site visits and business to business meetings shall be supported when required. In some circumstances verification at source acceptance inspection and witness testing by ESUK supplier quality representative shall be required prior to shipment of product.

3.6. Control of Externally Provided Processes, Products and Services

The supplier shall flow down the requirements of Q7 and must:

- Ensure, when required, that ESUK designated or approved external providers, including process sources are used
- Identify and manage the risks associated with the external provision of processes, products, and services, as well as the selection and use of external providers
- Require that external providers apply appropriate controls to their direct and sub-tier external providers, to ensure that requirements are met
- Determine and apply criteria for the evaluation, selection, monitoring of performance, and revaluation of external providers, based on their ability to provide processes or products and services in accordance with requirements. The supplier shall retain documented information of these activities and any necessary actions arising from the evaluations

3.7. Right of Access

Suppliers and their sub-tier suppliers shall provide to ESUK, their customer, regulatory authorities and, if required by contract, the Government Quality Assurance Representative (GQAR):

- The right of access to facilities where parts of the contracted activities are being performed including sub-suppliers' premises
- Information pertaining to the fulfilment of requirements in the contract.
- Unrestricted opportunity to evaluate supplier compliance with this document and conduct verification of product conformity to contract requirements
- Assistance for evaluation, verification, validation, testing, inspection, or release of the product to verify that contract requirements have been accomplished at the supplier's or sub-supplier's premises.
- Working area and facilities and the necessary equipment and staff available for reasonable use for performing verification
- Access to documented information in relation to products and services provided to ESUK to confirm product conformance to specification

4. Purchase Order Quality Conditions

4.1. Q7 Quality Requirements for NATO Contracts

Where "Q7" is indicated on the purchase order or contract documentation for a NATO contract, suppliers must be compliant to AQAP 2110 or AQAP 2310 (as indicated within the contract) as well as the ESUK Q7 supplier requirements. If the requirements of these documents conflict with each other, the following order of precedence applies; AQAP 2310, AQAP 2110, ESUK Q7 Supplier requirements.

4.1.1. Quality Plan

The supplier shall submit a quality plan for high value, high risk or significant NATO contracts when required. ESUK reserves the right to request a quality plan from the supplier, this assessment will be based on risk. If AQAP 2105 is within the contract, a AQAP 2105 compliant quality plan is mandatory.

4.2. Q7 Quality Requirements for non-military contracts

For non-military contracts where 'Q7' is indicated on the purchase order, the following sections can be adapted with agreement from ESUK:

- 3.2. Security
- References to Defence Standards and Defence Conditions

4.3. Q7 Requirements for Business Supplies

Where "Q7" is indicated on the purchase order, statement of work or contract documentation indicates that requirements are for business supplies, works, or services that have no direct or in-direct effect on the goods and services ESUK provide their customer. No quality requirements apply other than goods or services shall conform to purchase order, statement of work and / or contract documentation.

5. Design Performance Specification

5.1 Suppliers who design and manufacture products to a DPS shall establish and maintain control of all associated activities, which include:

- Record of ESUK acceptance
- Records of associated drawings, specifications, and technical instruction (including versions throughout the development phase)
- Controls relating to safety, lifespan, reliability, and maintenance.
- Evidence of Failure Report Analysis Corrective Action System (FRACAS) during development
- Data associated with performance, manufacture, assembly, and testing.
- Bill of Material / parts list
- Material traceability

5.2 Acceptance Testing

- The Supplier shall define the method, sequence, testing parameters and test equipment to be applied to the DPS products.
- Test results shall be forwarded to ESUK engineering department, signed by the relevant supplier authorities, for approval prior to use.
- The test procedures shall not be used for any certification testing until ESUK has approved the content of the procedure.
- Once signed, no changes are permitted without the prior written authorisation of ESUK.

5.3 First Article Inspection (FAI)

- FAI shall be performed in accordance with paragraph 7.4 of this document and AS9102 –First Article Inspection. This shall be applied to the first deliverable unit. An audit may be required on development/ prototypes, and/or prior to FAI product delivery by ESUK QA and/or engineering.

5.4 Configuration & Change Control

The suppliers of DPS controlled items shall maintain a system for configuration and authorised change control (see 5.2), following first signed and accepted design, no change is permitted without prior consultation and consent of ESUK Engineering. The supplier shall notify ESUK of proposed change, along with classification:

- Class 1: Change that affects fit, form, function, safety, reliability, or Interchangeability.
ESUK must formally approved these changes in writing.
- Class 2: Change that does not affect fit, form, function, safety, reliability, or interchangeability.
ESUK must be notified of these changes, but approval is not required.

Requests for change shall be submitted to ESUK supply chain team who will manage communications within ESUK.

6. Product Traceability, Configuration & Certification

6.1. Traceability

Traceability of the entire supply chain shall be maintained, including traceability to Original Equipment Manufacturer (OEM) where requirement applies for contracts where “Q7” is indicated. Traceability reduces risks of counterfeit articles entering the supply chain.

6.1.1. Traceability Requirements Traceability Requirement

Raw Material

Lot traceable to manufacturers part no and batch with original manufacturers MTC (Mill Test Certificate)

Manufactured Parts

Traceability shall be maintained for all product throughout production from raw material to finished product (including product quantities, split orders, nonconforming product etc.) raw material used shall be Lot traceable to manufacturers part no, lot no, date code with Mill Test Certificate. If a conflict is uncovered with regards to mineral/material sourced from a banned country of origin, ESUK must be informed within a reasonable time period of identification.

Commercial off the Shelf

(COTS) Traceability through supply chain to Original Equipment Manufacturer (OEM)

Modified off the Shelf (MOTS)

Traceability shall be maintained for all product modifications throughout production from material to finished product (including product quantities, split orders, nonconforming product etc.) The originating COTS item(s) shall have traceability through supply chain to Original Equipment Manufacturer (OEM). Requirements specified for raw material & mechanical / electrical parts also apply where applicable for item modifications.

Electrical, Electronic & Electromechanical Parts

Lot traceable to Original Equipment Manufacturers part no, lot no or date code.

6.2. Configuration Management

The supplier shall plan, implement, and control a process for configuration management to ensure the identification and control of physical and functional attributes throughout the product lifecycle. This process shall:

- Control product identity and traceability to requirements, including the implementation of identified changes.
- Ensure that the documented information (e.g., requirements, design, verification, validation, and acceptance documentation) is consistent with the actual attributes of the products and services.

6.3. Certification Documentation

A Certificate of Conformity is required for all products and services to products (such as painting). The Certificate of Conformity shall be deemed as an authorised contractual guarantee that the goods and services referenced on the certificate meet drawing, specifications, technical data, and contract requirements in full.

6.3.1. Certificate of Conformity Requirements

Each CoFC should include the wording "Certificate of Conformity" in the title of the document to allow for easy identification. One CoFC is to be used per NSN/part number; a CoFC must not cover multiple line items.

The information provided on the CoFC shall include:

- a. Contractor name and address;
- b. Contractor unique CoFC reference number;
- c. Contract number and where applicable Contract Amendment number;
- d. Details of any approved concessions;
- e. Customer name and organisation (Typically this is ESUK)
- f. Delivery address;
- g. Contract Item Number from the Schedule of Requirements;
- h. Description of Article or Service including part number, Specification and configuration status;
- i. NATO Stock Number (NSN) (where allocated);
- j. Identification marks, batch and serial number(s) in accordance with the Specification;
- k. Quantities;
- l. A signed and dated statement by the Contractor that Articles or Services provided comply with the requirements of the Contract, and approved concessions.
- m. Exceptions or additions to the above are to be documented.

6.3.2. Calibration Certification

For calibration services a Certificate of Calibration shall be provided confirming that the equipment has been calibrated in accordance with, and meets the requirements of, the applicable national or international standard. The applicable standard shall be referenced on the certificate. Calibration shall be traceable back to the national or international standard or ISO10012 as applied.

6.4. Documented Information Retention

Suppliers shall retain records relating to processing, testing, calibration, manufacture, supply, configuration, traceability, and certification for a minimum of 10 years from end of contract date unless otherwise stated by contract or statutory requirements.

7. Counterfeit Avoidance, Detection, Mitigation & Disposition

7.1. Counterfeit Material

Counterfeit material poses a significant risk to the supply chain, potentially resulting in loss of material, mission, or life. Counterfeit material is: -

- An unauthorised copy, imitation, substitute, or modified item, which is knowingly, recklessly, or negligently misrepresented as a specified genuine item from an original manufacturer or source.
- A previously used genuine item that has been salvaged or repurposed without disclosure to the customer.
- The supplier shall have a defined and documented policy for the avoidance of counterfeit material, including an Anti-Counterfeiting Management Plan (ACMP) as guided by the requirements of DEF STAN 05-135.

7.2. Electrical, Electronic & Electromechanical (EEE) Parts

Suppliers that procure and integrate EEE parts into products supplied to ESUK shall implement the avoidance, detection, mitigation and disposition requirements of AS 5553. Distributors of EEE parts shall have an established QMS aligned to AS 6081

7.2.1. Obsolescence Management

Obsolescence can increase the risk of acquiring counterfeit EEE parts. To reduce the likelihood of purchasing counterfeit EEE parts, electronic equipment manufacturers should proactively manage the life cycle of their products through the use of an Obsolescence Management Plan.

Suppliers shall notify ESUK in a reasonable time if a part is reported to be going obsolete.

8. Production Process Verification & Special Process Validation

8.1. Planning

8.1.1. Define & Review Requirements – Contract Review

The supplier shall determine the requirements can be met at the contract quotation stage. Commonly known as contract review, the supplier shall conduct and document a review process before committing to supply products or services demonstrating consideration for the following:

- Applicable statutory and regulatory requirements
- Requirements specified by ESUK, including the requirements for delivery and post-delivery activities.
- Requirements not stated by ESUK, but necessary for the specified or intended use.
- Activities are covered in the supplier's QMS scope of certification.
- Material and component availability, minimum order quantities (MOQ) and lead times.
- Production, assembly, verification, and special process capabilities meet requirements.
- Drawing and design data characteristics, tolerances and any anomalies or queries.
- Any sub-tier or external subcontract approvals and capabilities including the flow down of Q7.
- First Article Inspection or other documented information requirement
- Any deviations via a production permit request where ESUK requirements cannot be met or only partially met.

It is encouraged that for significant, high value or high risk orders a ESUK Supplier Quality Engineer (SQE) may be called upon to assist with the supplier contract review activities.

The Supplier shall retain documented information of this review.

8.1.2. Competence, Training and Awareness

The supplier shall ensure personnel processing orders or performing work affecting conformity to product or service are trained and aware of the relevance and importance of their activities in relation to meeting the requirements of ESUK contracts and associated documentation.

8.1.3. Business Continuity and Disaster Management Planning

Where "Q7" is indicated on the contract, suppliers shall have in place a business continuity plan. This should be in accordance with ISO 22301. This includes requirements to plan, establish, implement, operate, monitor, review, maintain and continually improve a documented management system to protect against, reduce the likelihood of occurrence, prepare for, respond to, and recover from disruptive incidents when they arise.

8.2. Process & Design Failure Mode Effect Analysis

The supplier shall anticipate risks in its processes (including design where applicable) and implement actions to remove or reduce risks. This should be demonstrated through the use of Design Failure Mode Effect Analysis (DFMEA) and / or Process Failure Mode Effect Analysis (PFMEA). The output of the PFMEA should input into process control documentation. For further guidance see AS13004 Process Failure Mode and Effects Analysis and control plans.

8.3. Process Control & Documentation

The supplier shall control the production process to ensure configuration control and repeatability. Documented information for activities to be performed and results to be achieved can include process flow charts, control plans, production documents (e.g., manufacturing plans, travellers, routers, work orders, process cards) and verification documents.

Following approval of the sealed manufacturing baseline, no change shall be permitted without prior consultation and agreement from ESUK supply chain (who will co-ordinate ESUK internal change control)

- The Supplier shall notify ESUK and agree the class of change prior to submission.
- Class 1 changes are defined as any change that affects fit, form, function, safety, reliability, or Interchangeability. ESUK must approve these modifications in writing prior to embodiment.
- Class 2 changes are defined as any change that does not affect fit, form, function, safety, reliability, or interchangeability. ESUK must be notified of these changes, but approval is not mandatory.
- Requests for change shall be submitted to ESUK [department to be defined]
- Documentation may be submitted in the supplier's own format, and should state clearly what the intended change is, and this must include provision for acceptance signature by ESUK.
- No changes to 'Frozen Ops' manufacturing processes shall be made without the prior approval and permission of ESUK QA department. Frozen Ops will be highlighted by the ESUK SQE Engineer and may be due to airworthiness issues, customer requirements, health & safety requirements and or high numbers of issues around control of that operation not being followed.

8.4. First Article Inspection (FAI)

The primary purpose of FAI is to validate that production processes are capable of producing parts and assemblies that meet ESUK engineering and design requirements. A well-planned and executed FAI will provide objective evidence the supplier's processes can produce compliant product and that they have understood and incorporated associated requirements.

8.4.1. AS9102 First Article Inspection Report (FAIR)

When a FAIR is required by the contract, a FAIR in accordance with AS9102 shall be submitted electronically prior to first delivery of all products when required by the contract of PO.

- Additional full or partial FAIRs shall be provided when changes listed in AS9102 4.6 f. 1-6 occur.

8.4.2. Key Characteristics

Key Characteristics may be generated on ESUK design product and as such these characteristics will be controlled by means of statistical process control process. Only when having achieved process capability (as required by drawing limits), will a reduction on 100% inspection or testing be allowed (this must be agreed with the ESUK SQA Engineer).

8.5. Special Processes

A process where the conformity of the resulting output cannot be verified by subsequent monitoring or measurement is referred to as a special process.

Aerospace, Space & Defence Special Processes Incorporated in Manufacturing

8.5.1. Validation and Control of Special Processes

Suppliers that perform special processes shall establish documented information for special processes including: -

- • Definition of criteria (specifications) for the validation and periodic re-validation of the processes.
- • Determination of conditions to maintain the approval.
- • Approval of facilities and equipment and qualification of persons.
- • Use of specific methods and procedures for implementation and monitoring the processes.
- • Record retention of periodic testing (re-validation).

8.5.2. NADCAP

Suppliers are encouraged to obtain or use NADCAP accredited sub-tier suppliers for special processes. Being Nadcap accredited provides assurance that special processes performed are sufficiently validated and re-validated to industry standards and specifications.

8.5.3. Electronics - Printed Circuit Board (PCB) Manufacture & Assembly

All contract electronic manufacturing suppliers shall be approved by ESUK Supplier Quality via successful completion of a special processes IPC J-STD 001 audit. All electronic printed circuit board assemblies shall meet IPC-A-610 Class 3.

Unless otherwise agreed all PCB soldering shall be Lead solder.

8.5.4. Cable & Harness Manufacture

Cable and harness acceptance criteria shall meet IPC/WHMA-A-620 Class 3

8.6. Preservation of Product

The supplier shall preserve the product during internal processing, storage, and delivery to the intended destination.

8.6.1. Shelf Life

Supplied products containing items with finite shelf life shall have the expiry date clearly identified on the product and the delivery documentation. The remaining shelf life must be a minimum of 80% of the total shelf life for the material at time of delivery unless otherwise specified by ESUK.

8.6.2. Packaging, Storage & Handling

The supplier shall adequately plan and ensure that products are protected, packaged, and labelled as specified by contract. Where no packaging is specified, the supplier shall package to a standard that will provide adequate protection against damage, deterioration, corrosion, contamination, and loss. The supplier shall ensure that the product packaging is labelled to a standard that provides adequate identification and traceability of the product. Any special handling or storage conditions must be clearly documented in the delivery paperwork. For example, temperature and humidity. Hazardous materials shall include appropriate Material Safety Data Sheets (MSDS).

8.6.3. Electrostatic Discharge (ESD)

Product supplied that are ESD sensitive shall be handled, packaged, and labelled as such. This includes adequate ESD shielding and dissipative materials. Clear ESD labelling shall be used on external and internal packaging. Suppliers that handle ESD sensitive product must implement the requirements of ANSI/ESD S20.20.

8.6.4. Foreign Object Debris (FOD)

Inclusion of FOD is a nonconformity. The supplier shall establish a process to detect and prevent foreign object debris. This shall be in accordance with AS9146. As a minimum the process shall include: -

- FOD process review
- Training of FOD practices
- Material handling and product protection
- Tool / hardware accountability
- Lost items search and documentation process.
- Physical entry control into FOD critical areas
- Inspection for foreign objects prior to closing apertures and compartments during assembly.

9. Deviations – Production Permit & Concession

ESUK expects quality to be built into the design and production process of our product and this is also the expectation of the supply chain. Conformity first is key to the delivery of world class product to our customers and this culture and mindset needs to be throughout the supply chain.

ESUK relies on the supply chain to deliver conforming product free from defects. ESUK are a ZERO CONCESSION company. This means you enter into supplying goods to the ESUK having undertaken all the due diligence expected in the planning, process controls and records of supplied product.

9.1. Production Permit

An intentional deviation, Production Permits are considered permission to produce an item that deviates from design data. This may be because of design anomalies, material availability issues or other unforeseen reasons. A Production Permit can only be requested prior to production.

9.2. Concession

Concessions (an unplanned deviation to specification) are considered permission to deliver nonconforming product. As stated ESUK are a zero concession company. This therefore means any concession ie request from a supplier after work has been performed where the product does not meet specification will either not be accepted or may incur a penalty charge for process of that concession internally with ESUK. All requested deviations are reviewed and approved/rejected at a ESUK materials review board (MRB). Whether approved or rejected, concessions will impact the supplier performance rating. Concession requests must include root cause corrective action. The supplier shall continuously improve processes to achieve a zero concession ethos.

9.3. Request Process

Suppliers must liaise with and submit the request via the ESUK supply chain representative indicated on the contract / purchase order. Suppliers may use their own documentation to submit a request providing the required information is included. When submitting a request for concession or production permit, the following information shall be included: - Required Information for Production Permit and Concession Request

- Suppliers unique reference number
- Previous (or similar) deviation QNote reference
- Type of request (concession or production permit)
- Detail of the original requirement/specification
- Detail of requested deviation from the requirement including associated risks
- Date of request
- Supplier name and contact details.
- Any supporting information, photos, drawings, and technical data
- Part number and part description
- Root cause corrective action plan to prevent recurrence.
- Serial number(s) / batch number(s) and quantity
- Supplier stakeholder(s) (digital) sign off.
- Purchase order number and line-item number(s) Fields for ESUK sign off, additional comments and assigned QNote
- Number

9.4. Repair Schemes

Should there be a requirement for an approved repair scheme this will be authorised by the ESUK supplier quality engineer, supply chain and design engineering where the intent is to bring the part back to design standard. Once approved and signed off by the applied ESUK depts (due to the fact it is being brought back to design intent) a concession/production permit is not required.

10. Control of Nonconformities

10.1. Problem Solving

When supplier nonconformities exist, the supplier must perform Root Cause Corrective Action (RCCA) to investigate through the root cause and implement corrective actions to prevent recurrence of the problem. It is imperative when conducting RCCA the problem is understood in simple terms.

10.2. Supplier Corrective Action Report (SCAR)

A Supplier Corrective Action Report / Request (SCAR) is a document that is produced from ESUK quality notification (QN) system and emailed to the supplier for completion and return. The form is based on best practice problem solving. All sections of the ESUK SCAR are to be completed to be completed and returned to ESUK within 10 working days from receipt of SCAR.

The suppliers own corrective action report form will be accepted if it covers the following detail:

- Correct stakeholders and subject matter experts (SME) involved in problem solving activity.
- Define and understand the problem.
- Containment – Track and contain all product i.e., stores/WIP/in transit/at customer etc. Agree actions to repair, rework, replace affected product.
- Root cause analysis. Identify the root cause through the causal chain (direct, contributing and root cause)
- Establish corrective action plan to address the root cause to prevent recurrence.
- Implement and review corrective action plan.
- Identify similar potential root causes elsewhere (Risk and Opportunity) and establish and implement preventive action to prevent.
- Occurrence.
- Recognition activities through risk and opportunity, lesson learned and PFMEA database.
- Closure of SCAR.

SCARs shall be processed in a reasonable timescale. Typically, 5 working days to acknowledge receipt and provide a containment plan and a further 25 calendar days to return the completed SCAR or an equivalent 8D type form. Depending on the risk and impact of the nonconformity further investigation and verification activity may be required by the ESUK SQE. The ESUK SQE may be called upon to assist with the SCAR process at the supplier as a key stakeholder.

10.3. Notification of Escape

Immediately when an error in the deliverable is identified i.e., counterfeit, process malfunction, human error etc, it is a requirement of any ESUK Supplier to immediately notify your POC with ESUK as to the condition of escape. Due to the nature of the ESUK deliverable i.e., parts in flight, it is imperative that this fully understood within the supplier's organisation and adhered too.

10.4. Supplier Performance Rating

Nonconformances on delivered hardware to ESUK are viewed as escapes by the supplier, and as such will impact the supplier's performance rating. In addition, late, incomplete, or insufficient SCAR responses compound the supplier's performance rating which influences ESUK's future source selection decisions.

11. Applicable Standards

11.1. Availability of Defence Standards

Defence Standards (Def Stan) are freely available at no cost by signing up at <https://www.dstan.mod.uk/>