

Quality Requirements for Suppliers



Our Safety depends upon it

SQD- 108-4-3
Quality Requirements
For External Providers
(Suppliers)

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1. Foreword

SIRS Navigation Ltd (SIRS) manufactures and supplies Magnetic Standby Compasses for the global aircraft industry. It is essential for the safety of the aircraft that our products are Safe and reliable.


SIRS builds sustainable supplier capacity by partnering with our supply chain to reduce adverse environmental impacts, to promote human rights, health, safety and ethical behaviour, and to enable responsible supplier growth and raise standards.

We define Sustainable Supply Chain Management (SSCM) as “management of our supply base to drive affordability and innovation through social responsibility and environmental stewardship.” The objective of SSCM is to ensure alignment of our supply base’s social, ethical, environmental, safety and health responsibilities with SIRS Navigation’ sustainability commitments. The SIRS Navigation Ltd Quality Policy can be obtained upon request and is published within the ‘quality section’ of our website:

<https://www.sirs.co.uk/quality>.

Our business depends on a reliable network of skilled suppliers that provide the materials, parts and services to make our products conforming and deliver them to our customers on time. Goods and services provided by our suppliers have a key impact on the quality of the products, solutions and services we offer our customers. To maintain a high level of quality, we are determined to establish and maintain close and long-lasting relationships with our suppliers.

SIRS Navigations Terms and Conditions of trade **shall** apply to all contracts unless otherwise agreed.

Please note  Indicates an item of high importance that is sometimes overlooked by suppliers and causes potential high risk to product conformance.

2. Scope

The aim of this document is to formally communicate the quality requirements of SIRS Navigation Ltd (SIRS) to the supply chain. This document supersedes any previously issued SIRS Quality Requirements.

2.1 Definitions and Terms

In this, Quality Requirements for Suppliers SQD-108-4-3 document, 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.

The term “supplier” means vendor, supplier of goods and services, sub-contractor and distributor. Questions concerning this manual **should** be directed to your respective SIRS Buyer or Supplier Quality Representative.

2.2 Order of Precedence

Any inconsistencies in this document **shall** be resolved in accordance with the following descending order of precedence: (1) the drawing, design data and any approved concession deviation (2) the Purchase Order, release document, as applicable, including any special terms and conditions; (3) any Statement of Work; (4) SQD-108-4-3.

As the world’s leading provider of Aircraft magnetic compasses, SIRS maintains the highest standards for ethical business practices and performance in every aspect of its business conduct.

3. Supplier Approval

3.1 Supplier Approval Requirements

The minimum quality requirement for suppliers of goods and services to SIRS **shall** be Quality Management System (QMS) certification to ISO9001 by a UKAS (or equivalent) accredited certification body. This requirement guarantees the supplier has put in place a consistent QMS able to satisfy our basic needs. Suppliers that provide goods and services that are used in projects for aviation, defence and space applications **should** be certified to AS9100 or equivalent and listed on the IAQG Online Aerospace Supplier Information System (OASIS)

Where appropriate, suppliers **shall** be subject to on-site audit and / or site visit by a SIRS Quality engineer and / or supply chain representative. In some instances SIRS will be unable to raise a purchase order until supplier approval has been granted. Scheduled verification audits, site visits and business to business meetings **shall** be supported when required.

3.1.1 Exceptions

Requirement exceptions for suppliers that do not meet the minimum quality certification **shall** be authorised on the basis of:

- The supplier is mandated by our customer.
- The supplier is the manufacturer of a single sourced product mandated by our customer.
- The supplier is the only distributor of a product mandated by our customer.
- The supplier provides goods or services that have no direct or indirect effect on the goods and services we provide our customer.

3.1.2 Supporting Documentation

Documents required to complete the supplier approval process are:

- Form CF-136 Supplier Quality Assessment
- QMS certification
- Confidentiality or non-disclosure agreement (NDA) if applicable

3.1.3 Special Measures

Where the above criteria and exceptions cannot be met, depending on the product, its application, value and criticality, special authorisation may be granted where evidence of compliance can be provided.

This **may** include a SIRS audit to a set of alternative basic quality requirements. See form CF-137.

3.2 Special Processes

Suppliers and supplier sub-contractors providing special processes **shall** have a documented process control schedule (for example: Process Flow Chart, PFMEA, Job card traveller - or similar, Process Control Plan & Inspection Plan) suitable of meeting all requirements prior to the commencement of production. This will include identifying key characteristics in all preparatory treatments, post treatments, processing, significant surfaces, tests and all other processes and treatments. In some

instances depending on the criticality of product the process control plan/schedule **shall** be subject to SIRS approval.

Suppliers and supplier sub-contractors providing special processes **may** be Nadcap accredited for the special process they provide.

3.3 Site Visits and Supplier Audits

Where appropriate, suppliers **shall** be subject to on-site audit and / or site visit by the SIRS supplier quality engineer and / or supply chain representative. In some instances SIRS will be unable to raise a purchase order until supplier approval has been granted. Scheduled verification audits, site visits and business to business meetings **shall** be supported when required.

3.4 Scope of Approval

Suppliers approved for use will be allocated to the SIRS Supplier database stating the scope detail on their approval. Suppliers shall not conduct work for SIRS outside their scope of approval unless authorised by SIRS Quality department through audit i.e. special process audits or SIRS specific approvals. See form CF/137.

3.5 Approval updates – Supplier Responsibilities



It is a requirement of the conditions of supply into SIRS that the contractor / supplier fully understands and adheres to the following. It is the supplier's responsibility to ensure:

- SIRS **shall** be provided up-to-date copies of Quality Management System certification including scope of certification.
- SIRS **shall** be informed by the approved supplier when approval bodies are changed and certificates are re-issued or revoked.
- SIRS **shall** be informed by the approved supplier when certificates scopes are amended which would affect work currently undertaken or scheduled for future delivery. This would also include any change of address.
- SIRS **shall** be informed if due to any circumstance welder's skill base alters i.e. coded welders certification lapses – in this instance the Special Process Auditor must be informed.
- SIRS **shall** be informed of any work transfers (from one organisation facility to another, from the organisation to a supplier, from one supplier to another supplier) and it shall not proceed without SIRS prior written approval. This requirement shall be escalated to SIRS' customers for approval.
- SIRS **shall** be informed of any changes to "Controlled" or "Approved" processes prior to implementing proposed changes and commencing manufacture.

3.6 Right of Access

Suppliers and their sub-suppliers **shall** provide to SIRS, their customer and / or Regulatory Authorities (EASA / FAA):

- 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
- Unrestricted opportunity to 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-suppliers premises
- Working area and facilities
- The necessary equipment available for reasonable use for performing verification
- Supplier and/or sub-suppliers personnel for operation of verification equipment as required
- Access to information and communication facilities
- The necessary supplier documentation, to confirm product conformance to specification
- Copies of necessary documents, including those on electronic media
- Confirmation of capacity constraints

4. Quality Management Requirements

SIRS are required by AS9100 to apply appropriate controls to their direct and sub tier external providers to ensure that requirements are met (AS9100 para 8.4.1). The sections following detail the minimum controls that the supplier **shall** implement to meet those requirements.

Suppliers **shall** plan, implement, and control the processes needed to meet the requirements for the provision of products and services to SIRS. Specifically this will be focused on the following:

- Review of the Requirements for Products and Services
- Design and Development provision (inputs, controls and outputs)
- Configuration Management
- Process Control
- Control of Externally provided Processes, Products and Services (importantly):
- Control of Equipment's, Tools and Software
- Validation of Special Process
- Production Process Verification
- Release of Product and Services
- Control of Non Conformance
- Performance Evaluation
- Improvement Activities

4.1 Review of the Requirements for Products and Services

The supplier **shall** ensure that they have the ability to meet SIRS' requirements for products and services – formally known as contract review. This review will cover but not be limited to

- Scope of certified approval against what product or service is being requested
- Technical ability i.e. can equipment or employee skills meet the requirements of the drawings.
- Capacity constraints
- Statutory and regulatory requirements
- Contract or order requirements differing from those agreed at tender

- Drawing pack i.e. tolerancing, datum's and geometric tolerancing, material requirements (ensuring the material is available in size and condition stated), special processes, specific drawing notes including adherence to standards quoted within the context, destructive and non-destructive testing requirements i.e. mechanical, electrical, software etc.
- Design and verification – if undertaking this requirement for SIRS understand the conditions of the contract as highlighted in para 4.2
- Reference documentation - it is the responsibility of suppliers to obtain, review, work to, and maintain current issues of specifications and standards from appropriate sources.
- Additional Resources – when reviewing the process controls required to assure compliance to the documentation pack, should the requirement for fixturing, hard gauging, specialist test equipment, specialised training etc be identified this **must** be communicated to SIRS. It is not acceptable if risk is identified and no action is undertaken or communicated to SIRS due to timescales or financial constraints. This will also apply to sub-contractors undertaking work on the product.
- Supplier selection of sub-contractors. SIRS must be informed if sections of work are to be subcontracted. SIRS reserve the right to audit that supplier if it is deemed a perceived risk to contractual requirements (see 4.5). Special Processes are covered in section 3.2

4.2 Design and Development Provision

If undertaking design and development work for SIRS the subcontractor is bound by the requirements of ISO9001 as a minimum. If identified by SIRS the additional requirements of AS9100 for aerospace contracts will be required e.g. provision for obsolescence.

4.3 Configuration Management

The supplier **shall** plan, implement and control a process for configuration management to ensure the identification and implementation of changes when required by SIRS in the supply of products and services. If a change is requested by SIRS and can be accommodated this **must** be detailed in a change to SIRS' original purchase order and detailed on all supplier process documentation.

4.4 Process Control and Verification

SIRS require the supplier to demonstrate control through the production process. The supplier **shall** demonstrate confidence that the processes have been carried out as planned and therefore be able to demonstrate the conformity of those products and services. This can be undertaken by the flow of information associated in the following documentation.

The following is an example of how the supplier can incorporate these activities that will show the flow of information needed to control the process (similar processes and documentation that meet the requirement are acceptable):

- Value Stream Mapping
- Process Flow Diagrams (identifying key characteristics, inspection stages, processes, frozen operations if identified by SIRS (no changes allowed unless agreed by A SIRS delegate), associated documentation. Examples of layouts can be requested.

- PFMEA – Process Failure Mode Effect Analysis. Critical in analysis of the process flow showing anticipation of risks and actions to nullify those risks to the process
- Control plans – detailing the stages of the process where inspection and our documenting of special process monitors are required
- Inspections plans – identifying by whom (level of trained operators), with what (equipment’s to be used), how (standard operation) and the frequency of how those checks/inspection will be carried out.
- Statistical Product Acceptance – Supplier shall perform 100% inspection for in-process and final inspection, or supplier shall conform to requirements of document AS9138 “Aerospace series – Quality Management Systems Statistical Product Acceptance Requirements”. SIRS can offer further support with this clause if required by Supplier.
- Self-Verification – Should supplier utilise an Operator Self-Verification program, this programme shall comply with the requirements on AS9162, “Aerospace Operator Self Verification Programs”. SIRS shall remain able to conduct surveillance to determine compliance to this requirement.
- AAM – ‘Acceptance Authority Media’ Supplier shall maintain a QMS that identifies use of AAM and details that AAM must be considered as a personal warranty of compliance and conformity. An approved signatories document shall be maintained to ensure all documents and products are signed off by approved persons and to prevent document falsification.

Further to this the supplier **shall** demonstrate the eradication of variability in the process (**if required by SIRS on critical processes**) by the use of process capability measurement, statistical process control and MSA studies i.e. Gauge R&R. When specified by SIRS these activities should be covered in a Quality Plan agreed with both parties and the requirements flowed down the supply chain if needed. **A Quality Plan will be required when specific controls not covered by ISO9001, AS9100 certification or detailed in SIRS/9100/02 are required by SIRS.**

4.5 Control of Externally Provided Processes, Products and Services

The supplier, as the recipient of the contract, **shall** be responsible for meeting all requirements, including work performed by the supplier's sub-tier suppliers (also known as sub-suppliers or subcontract suppliers).



Where the supplier intends to sub-contract work or service normally undertaken by the supplier, **a written agreement shall be in place between SIRS and the supplier** indicating the reason for the sub-contract and the sub-tier sub-contractor to be used.

When the supplier uses sub-tier sources to perform work on products and/or services for SIRS, the supplier **shall** flow down to its sub-tier sources, all of the applicable technical and quality requirements contained in the SIRS contract. This will:

- ensure that externally provided processes remain within the control of their own quality management system
- define both the controls that it intends to apply to an external supplier and those it intends to apply to the delivered product.



SIRS representatives, customers and/or end users **shall** be allowed access to the sub-supplier’s plant and facilities for the purpose of surveillance and inspection.

4.6 Control of Equipment, Tools and Software

Equipment, tools and software programs used to automate, control, monitor or measure production processes shall be validated prior to release for production and shall be maintained. The supplier shall be responsible for maintaining traceability to national standards whether those items are calibrated internally or externally.

Storage requirements shall be defined for production equipment or tooling in storage including any necessary periodic preservation or condition checks. Items that have an extended replacement period (i.e. mould tools, die sets, software programs) are required be detailed in a risk avoidance document that will detail the suppliers disaster recovery plan in such an event – see section 12.

4.7 Validation of Special Processes

A special process is a process that generates outputs that cannot be measured, monitored, or verified non-destructively or cost effectively. Deficiencies cannot be detected until after products are in use.

In order to prevent output deficiencies, special processes must be periodically validated in order to prove that they can generate planned results. Periodic validation is usually performed which will define:

- the criteria for the review and approval of the process
- the maintenance of the approval
- approval of the facilities and equipment
- qualification of persons – see para 7
- specific methods and procedures for implementation and monitoring the processes
- detail the documentation to be retained

4.8 Production Process Verification

When indicated on the purchase order the supplier **shall** produce a First Article Inspection report (FAIR) to verify the manufacturing process using a representative item from the first manufacturing run of a new part or assembly. The purpose of the FAIR is to verify that the production processes, production documentation and tooling are capable of producing parts and assemblies that meet requirements. This process **shall** be repeated when changes occur that invalidate the original results (this will include transfer of work to another site, drawing changes, process changes etc.). The FAI requirement, once invoked, **shall** continue to apply even after initial acceptance.



The FAIR will be produced in accordance with AS9102 and shall be provided with the delivery of goods. Guidance on how to complete First Articles can be supplied by SIRS.



It is strongly advised the FAI requirements are reviewed and its requirements understood. Guidance material details when a Partial/delta FAI is required but as an aid:

A Partial/Delta FAI is required to the original when:

- A change in design potentially affects form, fit or function.
- A change in manufacturing source, process, inspection method, location of manufacturer, tooling, or material potentially affects form, fit or function.

The FAIRs **shall** include all certification indicating conformity of materials, special processes, calibration, testing and personnel training qualification where applicable.

The FAIRs shall include a Form 1, Form 2 and Form 3, completed in accordance with the requirements of AS9102. A copy of this standard can be provided by SIRS if required.

4.9 Release of Product and Services

Suppliers **shall** supply conforming goods and services on time in full (OTIF) including all required correct documentation and certification where applicable. Target = -2 days.

Certification refers to any document that states the goods or services meet or conform to specification or purchase order requirements. These include, but are not limited to; Certificate of Conformity, Certificate of Compliance, Certificate of Analysis, Certificate of Attestation and Certificate of Calibration.

The certifying document **shall** be deemed as an authorised contractual guarantee that the goods and services reference on the certificate meet drawing, specifications, technical data and purchase order requirements. **A signed copy or digital signature will be acceptable** but Certificates must be traceable to the certifying quality representative or company official as per ISO9001 requirements.

4.9.1 Supplier Documentation

The following data/information **shall** be included on each certification document (normally referred to as a CofC or Release Note)

- Certificate or delivery unique identifier / Certification / Delivery Note number
- Certificate Date
- Purchase order number
- Drawing number and / or part number and revision (as stated on Purchase Order)
- Batch unique identifier (Batch number / Lot number / Date code / Serial number)
- Quantity
- Supplier Name and Address
- Statement that goods and / or services conform to the specified requirements
- Original Manufacturer's name, part number and lot / date code (when applicable)
- Reference to **all concessions/Production permits** applicable
- Reference to current First Article Inspection Report where applicable
- Reference to the Quality Management System release.

Suppliers **shall** ensure the correct documentation is supplied with products and services.

4.9.2 Certificate of Conformance



For deliveries that apply quality condition listed within SIRS/9100/02, a certificate of conformity **shall** be supplied with delivered goods or services that meet the above traceability requirements.

4.9.3 Calibration and Test Certification

In addition, where calibration and test certification are issued to SIRS information **shall** include:

- The calibrated test apparatus / instrument / standard used. These will be traceable to **UKAS** or the national equivalent from sources other than the UK.
- Calibration / test specification used including tolerances and criteria.
- Items outside specified limits will be identified, especially if the item has undergone authorised repair to bring it into specification.

4.9.4 Late Deliveries / Short Deliveries

If non-delivery, short or late deliveries are anticipated, suppliers shall immediately notify the buyer indicated on the purchase order.

4.9.5 Completeness of Supplied Documentation



Certification documentation supplied to the requirements of any SIRS purchase order will be rejected and deemed not complete should it transgress any the following:

- Certification supplied with CofC is illegible i.e. faint, blurred or ambiguous
- Certification supplied with concession/production permit whose approval is outstanding
- Incorrect / different material or treatment certificates being referenced or certificates that do not tie up with FAI documentation
- No quality representative authorising release is identified on the CofC.
- Alternative material and or treatments – will be rejected if authorised certification is not attached to the CofC i.e. production permit or concession, Defence Standard reference, Mil Specs alternative and the prior agreement of SIRS UK.

4.10 Control of Non Conformance

SIRS will inform the supplier of nonconformities that are highlighted at any stage of SIRS process flow including, but not limited to, trials and subsequent service. The supplier **shall** respond to the Supplier Corrective Action Report when raised. The report shall be structured around the 8D process which details the requirement for the following:

- Problem statement
- Containment Action (in production, in stores, in transit, delivered product)
- Root Cause Analysis (see below)
- Corrective Action
- Implement Corrective Action
- Define and Plan Preventative action to **prevent reoccurrence**
- Review of Implementation or actions



Non-Conformances or Notice of Escape reports **shall** be processed to the following timescales by the supplier:

- Supplier shall notify SIRS of the non-conformity or notice of escape within 72 hours of becoming aware
- Supplier has **5 working days** to acknowledge provide and undertake containment action
- Supplier then has a further **25 calendar days** to respond with a detailed corrective action
- Supplier will submit on or before the agreed verification date, **evidence of the implemented corrective/preventative action**. This evidence will allow the SIRS Supplier Quality Engineer to close the non-conformance.
- In cases of a notice of escape, supplier shall submit the following information within 10 days unless otherwise agreed with SIRS;
 - Affected processes or products, part numbers and names;
 - Description of the non-conforming condition and the affected engineering requirement;
 - Quantities, shipping dates, purchase orders and destinations of delivered shipments;
 - Suspect / affected serial number(s) or date codes, lot numbers or other part identifiers.

4.10.1 Root Cause Analysis (RCA)

When nonconformities occur the supplier **must** perform Root Cause Analysis (RCA) and corrective action activities to prevent recurrence of the problem. SIRS recommend that the suppliers Improvement teams use industry standard root cause analysis tools to aid in identifying these issues i.e. 5 why methodology & Cause and Effect Diagram (Fishbone).

4.11 Application for Concession or Production / Deviation Permit

Suppliers **shall** generate the Concession or Deviation Permit in accordance with SIRS CF/403, or their own form provided it incorporates the applicable requirements. This must include the proposed corrective action to eliminate the cause and prevent reoccurrence.

4.11.1 Production Permit

Production Permits / Deviations 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 prior to manufacture. Requirement for a production / deviation permit **should** be identified by the supplier at contract review or production planning.

Completed production / deviation permits **shall** be submitted to the procurement representative indicated on the purchase order. **All Production permits must be referenced on the applicable certificate of conformity** (using the SIRS approved concession number).

Any production prior to production / deviation permit approval **shall** not occur unless entirely at the suppliers own risk. Products delivered against a SIRS approved production / deviation permit are not considered as nonconforming.

4.11.2 Concessions

It is the policy of SIRS not to accept a product that fails to meet the required standard. In certain circumstances however, concessions will be considered by SIRS. This will allow, when approved, the supplier to deliver product against agreed deviations for a set number of product or parts.



Completed concession forms **shall** be submitted to the procurement representative indicated on the purchase order.

Delivery of nonconforming product **shall** not occur unless an approved concession is in place. **All concessions must be referenced on the applicable certificate of conformity** (using the SIRS approved concession number).

5. Record Retention / Destruction Requirement

Suppliers **shall** retain records relating to processing, testing, calibration, manufacture, supply, traceability and certification for **calendar year + 10 years from the date of shipment** unless otherwise stated by contract.

Prior to any disposal of records, the supplier shall notify SIRS to obtain approval.

Any loss or potential compromise of any classified material must be reported to SIRS without delay.

All OFFICIAL-SENSITIVE documents must be returned to SIRS either:

- a. When they are no-longer required as part of the sub-contract; or
- b. At the end of the sub-contract.

Requests to destroy programme-related **OFFICIAL- SENSITIVE** information locally on the sub-contractor's site must be passed to the SIRS Programme/Project Manager.

At a minimum, all **OFFICIAL-SENSITIVE** hard copy information must be destroyed using a cross-cut shredder which makes the reconstitution of the material highly unlikely. Unwanted **UK OFFICIAL-SENSITIVE** information/material that cannot be destroyed in such a way shall be returned to the Authority.

6. Performance Evaluation

SIRS requirements for suppliers monitoring, measurement, analysis and evaluation of internal performance is detailed in ISO 9001 para 9. No additional SIRS requirement is required.

7. 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 SIRS purchase orders and associated documentation.

The supplier will as a minimum produce a skills matrix which details the training undertaken by the operative in relation to the processes specific to SIRS product. For example:

- IPC trained operatives in harnessing
- FOD awareness
- Internal procedures relevant to their scope of work on SIRS product



The skills matrix **shall** be maintained by supervisory/management level and demonstrate control of those activities. The skills matrix procedure **shall** also detail how risks associated with highly skilled operators are covered i.e. sickness, leave, succession planning etc. and the business decision on how that risk will be covered as well as capacity constraints.

It is highly recommended that the free resources provided by the Society of Automotive Engineers (SAE) [International Aerospace Quality Group](#) (IAQG) in the form of the Supply Chain Management Handbook (SCMH) is utilised to its full potential by all suppliers. This online document contains invaluable training

and guidance material on every element of Aviation, Space and Defence (AS&D) requirements including first article inspection, configuration management, quality plans, counterfeit management and contract review.

8. Identification and Traceability

Traceability is an important factor in high end and safety critical products and is a basic requirement unless agreed in writing. Suppliers **shall** provide documentation that includes revision / issue nos., batch numbers, lot codes or where relevant date codes and serial numbers of goods provided.

8.1 Serialisation and Part Marking

Serialisation and part marking identification **shall** be in accordance with the purchase order, design data, drawing or any contractually agreed specification or standard.

8.2 Traceability to Source/Origin of Raw Material

Where the delivery quality conditions are in line with SIRS/9100/02 any applicable Quality Plan requires demonstration of traceability and design provenance through the supply chain, the supplier **shall** include in any relevant sub-contract the requirement for certification from its sub-tier



suppliers. **The supplier shall ensure that full traceability is maintained throughout the sub-tier supply chain and can be provided on SIRS request.** Material **shall** be identified and traceable to manufacturer's part number, lot number, date code for all electronic and electrical parts, raw material, mechanical machined parts.

9. Preservation of Product

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

9.1 Workmanship Acceptance Criteria for Surface Engineering

Unless otherwise stated, the following workmanship acceptance criteria **shall** be used; Supplied product with surface finishes for functional or cosmetic applications **shall** meet the requirements of the drawing (or referenced specification) for surface conditions, uniform in appearance, free from blisters (adhesion), pits, nodules, scratches, stains. This includes but is not limited to electroplated, conversion coated, anodised, painted, mechanically finished and passivated surfaces.

9.2 Deviation from Design Data

Deviation from design data **shall** not occur unless an approved deviation permit from SIRS is obtained. See section 4.11.

9.3 Foreign Object Debris (FOD)

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

If the FOD process is not in accordance with AS9146, supplier shall submit their FOD process to SIRS for approval and to determine its suitability to the products and services supplied to SIRS and the potential impact on product conformity and safety. SIRS shall confirm that the minimum coverage levels for FOD control are met where a formal process does not exist.

9.4 Moisture Sensitive Level (MSL)

Moisture sensitive components **shall** be packaged in accordance with [IPC/JEDEC J-STD 033](#). The Moisture Sensitivity Level (MSL) **must** be clearly identified on the outer packaging.

9.5 Electrostatic Discharge (ESD)

Where appropriate, suppliers **shall** provide adequate protection measures against ESD damage to goods and SIRS property. This **should** be in accordance with [MIL-STD-1686](#) or [ANSI/ESD S20.20](#). Electronic Components **shall** be handled, packaged and supplied in accordance with [BS EN 61340-5-1](#) or as specified in the contract conditions with SIRS.

9.6 Shelf Life

Goods and products containing items with finite shelf life **shall** have the expiry date 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.

9.7 Packaging

The supplier **shall** adequately plan for packaging designed to prevent product contamination, deterioration, damage or loss. Suppliers **should** provide expendable packaging or returnable containers, where appropriate, of sufficient density and protection from likely damage that could occur. The use of approved industry standard labelling and bar-coding **shall** be in accordance with any contractually agreed packaging specification.

10. Counterfeit Product Prevention and Conflict Minerals

10.1 Counterfeit Product Prevention

Where appropriate, the supplier **shall** establish and maintain a counterfeit parts / material prevention and control plan using [AS6174](#) to ensure that counterfeit work is not delivered. The purpose of the supplier's plan **shall** be to develop a robust process to prevent the delivery of counterfeit commodities and to control commodities identified as counterfeit.

11. Obsolescence Management

Obsolescence Management is 'the co-ordinated activities to direct and control an organisation with regard to obsolescence'. The suppliers **shall** notify SIRS of any pending obsolescence, the relevant last time buy date and last time ship date at least 6 months prior to the last time buy date.

12. Business Continuity / Disaster Management

Suppliers **should** have in place a business continuity plan. The plan shall include 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.

Essentially this is a management plan that ensures no disruption to the supply of goods to SIRS should the business fall foul of environmental circumstances such as fire, flood, power failure etc. This will include

but not be limited to safety stocks of goods, fire protection of tooling/Jigs, safeguarding essential key machinery, off site holding of key software etc.

The extent of application of these requirements depends on the supplier's operating environment and complexity.

13. Chemicals and Hazardous Substances

Nothing in this section **shall** reduce or limit any statutory duty or legal obligation of SIRS or the supplier.

13.1 Safety Data Sheets

Safety data sheets (SDS) provide information on chemical products that help users of those chemicals to make a risk assessment. They describe the hazards the chemical presents, and give information on handling, storage and emergency measures in case of accident. By law suppliers of chemicals **must** provide an up to date safety data sheet if a substance is classified as dangerous in accordance with the [Classification, Labelling and Packaging \(CLP\) Regulation 1272/2008](#).

If the supplier is required, under, or in connection with the contract, to supply articles or components of articles that, in the course of their use, maintenance, disposal, or in the event of an accident, **may** release hazardous materials or substances, they **shall** provide to SIRS a list of those hazardous materials or substances, and for each hazardous material or substance listed, provide an SDS.

13.2 Registration, Evaluation, Authorisation and Restriction of Chemicals (Reach)

[REACH](#) applies to substances manufactured or imported into the EU in quantities of 1 tonne or more per year. Generally, it applies to all individual chemical substances on their own, in preparations or in articles. The supplier **shall** disclose such information to SIRS for the purpose of compliance with the REACH regulation.

13.3 Lead and Radioactive Substances

Special regulations apply to Lead and radioactive substances. Adequate packaging **must** be provided to prevent exposure of staff to these substances in accordance with the relevant [Health and Safety Executive \(HSE\) Approved code of practice \(ACOP\)](#)

14. Sensitive and SIRS Propriety Data

SIRS propriety and customer technical data **must** only be shared with 3rd party suppliers who have:

- Been approved by SIRS and the owner of the technical data.
- Confirmed in writing (e.g., hardcopy letter, email with return address header) that they are authorized to receive such data and they understand the implications of and requirements for handling sensitive and proprietary technical data.

Principally where data is identified as sensitive or SIRS Proprietary Data, restrictions apply to the control, handling and monitoring of such data. Only authorised personnel **shall** have access to restricted data and the data **shall** be controlled in such a way as to prevent unauthorized transmission or access.

14.1 Non-Disclosure Agreement



Suppliers that require Restricted and Official Sensitive Classification data **shall** have a procedure in place for the control, handling and monitoring of such data.

Where a supplier is identified on a Technical Assistance Agreement (TAA) or Manufacturing Licence Agreement (MLA), the organisation **must** complete a Non-Disclosure Agreement (NDA) when requested by SIRS and **shall** continue to maintain access controls in accordance with the NDA and any Technology Control Plan (TCP) that SIRS and the organisation enter into. SIRS reserve the right to issue an NDA where SIRS deem sensitive information will be shared with the supplier.

14.2 Sub-Tier Suppliers



Sub-tier suppliers and sub-contractors used by the supplier that have access to any sensitive or SIRS proprietary data **must** be authorized with an NDA in place.

14.3 Disposal of Sensitive and SIRS Propriety Data



Hard-copy documentation that is no longer needed **must** be disposed of in shredder bins or confidential material disposal bins. Scrap products and components **shall** be destroyed, rendered unusable and unrecoverable and **specific disposal sanctioned by SIRS Supply Chain**