



# Supplier Quality Requirements

**P015**

**February 2024**

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## 1 Purpose and Scope

This document defines the Supplier Quality Requirements to be met by suppliers in the performance of the purchase order issued by Sagatech to ensure that externally provided processes, products, and services conform to quality and technical requirements. Sagatech might use other parties to perform supplier surveillance or assessments on its behalf for qualification and auditing of a supplier's quality system.

Section 2 of this document provides the requirements that apply to all purchase orders, unless otherwise specified.

Section 3 of this document provides the specific requirements based on the complexity of the item(s) being procured or otherwise invoked on the purchase order.

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## 2 General Requirements

The requirements listed in this section are required by all suppliers and are invoked for all purchase orders issued by Sagotech, unless otherwise specified.

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SQR	Title	Description
SQR-01	Supplier Quality System & Surveillance	<p>Sagetech might use other parties to perform supplier surveillance or assessments on its behalf. Supplier certification to AS9100, ISO9000 or equivalent are preferred for items or services intended to be incorporated into products provided by Sagetech Avionics Inc. (Hereafter referred to as Sagetech). At a minimum, the supplier shall establish and maintain a Quality System that complies with one or more of the following:</p> <ul style="list-style-type: none"> <li>a) A system that is compliant with general industry requirements for acceptable manufacturing practices. At a minimum, practices should include incoming inspection, process controls, product acceptance, calibration, and control of nonconforming product.</li> <li>b) ISO9001 at the latest revision</li> <li>c) AS9100 at the latest revision</li> </ul> <p>A supplier’s Quality Manual shall be provided to Sagetech upon request. Suppliers are required to notify Sagetech, as soon as practical, of any changes to the supplier system (evaluated by Sagetech) that may affect the quality of the supply, and any changes to a supplier’s quality system must be submitted to Sagetech if they may affect inspection, conformity, or the airworthiness of the article.</p>
SQR-02	Right of Access	<p>The supplier shall provide right of access and cooperation to conduct surveillance at the applicable areas of their facilities and documented information (including any level of the supply chain). This access shall be granted to Sagetech, its Customers or Regulatory Authorities as appropriate for the specific contract. Supplier personnel shall be made available as required.</p> <p>For Suppliers located outside the United States: Assurance of access shall be provided by the supplier, or when no regulatory agreements are in place, the government of the country or jurisdiction in which the supplier is located. This assurance of access will be made available to the FAA. If access is at any time obstructed or denied, the FAA may instruct Sagetech to cease using the supplier.</p>

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<p><b>SQR-03</b></p>	<p>Sub-tier Suppliers</p>	<p>When the Supplier sub-contracts any part of the purchase order requirements to a sub-tier supplier, the applicable requirements of the Sagetech Purchase Order must be flowed down to the 2<sup>nd</sup> tier suppliers.</p> <p>Approval of sub-tier suppliers by Sagetech does not relieve the Supplier of the responsibility of assuring that work performed, or products supplied by the sub-tier supplier are in accordance with specified quality and technical requirements. The Supplier is to ensure approved sub-tier suppliers have a supplier control program in place to meet Sagetech’s requirements.</p> <p>Sagetech, its customers (if requested) or Regulatory Authorities reserves the right to participate in the evaluation and qualification of critical process lower-tier suppliers and to inspect at the source, any product or service not manufactured or performed within the primary supplier’s facility. The election to participate in these activities will be made by Sagetech Quality Manager</p> <p>Overseas Suppliers: Overseas suppliers will be authorized only if there is no undue burden to the FAA for evaluation and qualification.</p>
<p><b>SQR-04</b></p>	<p>Records Retention</p>	<p>Records related to the manufacturing and/or process operations, including inspections, tests and traceability are to be retained by the Supplier and made available upon request for verification by Sagetech, customers or Regulatory Authorities. Records shall be retrievable, legible, accurate and complete. The Supplier must retain quality records of products and services provided to Sagetech for a minimum of 10 years or the life of the contract, whichever is greater. At the end of the retention period, the Supplier should provide the option for Sagetech to take possession of the records if requested.</p>

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<p><b>SQR-05</b></p>	<p>Nonconformance / Quality Escapes/CAPA</p>	<p>The Supplier shall notify Sagetech of any nonconformances or quality escapes found and obtain written approval from Sagetech prior to the supply of any nonconforming product.</p> <p>A documented statement of nonconformance should be submitted to Sagetech for disposition.</p> <p>Quality Escapes:</p> <p>If the Supplier or Sub-tier supplier finds nonconforming material or product prior to shipment, the Supplier must evaluate, as part of their MRB, whether items already shipped to Sagetech may have the same nonconformance.</p> <p>If the potential exists, the Supplier must immediately notify Sagetech of the potential or actual nonconformance of already delivered products that may have escaped the supplier’s or their first-level supplier’s quality system. Findings of criticality of nonconforming material should be denoted as one of the following levels:</p> <p>Major – A systemic and/or Safety issue; needs immediate response.</p> <p>Minor – A nonconformance which is self-identified.</p> <p>In addition, suppliers are responsible for notifying their next level or first level of suppliers and follow a robust CAPA process.</p> <p>Request for Supplier Corrective Action will be required for Quality Escapes.</p> <p>When Sagetech identifies non-conformance caused by the Supplier, a Supplier Corrective &amp; Preventive 8D Action Report may be submitted to the Supplier and immediate containment and segregation conducted. The Supplier is required to take action and provide response to Sagetech within 15 business days of the date of receipt. Copies of all records related to the non-conformance shall be sent to Sagetech upon request.</p>
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<p><b>SQR-06</b></p>	<p>Certificate of Compliance</p>	<p>All Items or services where special processes such as heat treating, welding, soldering, magnetic particle inspection, penetrant inspection, ultrasonic inspection, surface preparation, treatment and chemical processing or testing and inspections are performed or manufactured to a specified regulation or standard require a Certificate of Compliance with each shipment or service.</p> <p>The Certificate of Compliance shall at a minimum contain the following:</p> <ul style="list-style-type: none"> <li>• Identification of the process, item, or service</li> <li>• Sagetech Purchase Order number</li> <li>• Quantity</li> <li>• The specification and revision to the item or service complies with</li> <li>• Name of the agency that performed process (if other than the seller).</li> <li>• Statement certifying item or service compliance and traceability as applicable</li> <li>• Authorized/qualified representatives' signature and Date</li> </ul>
<p><b>SQR-07</b></p>	<p>Certificate of Conformance</p>	<p>Items purchased by part number, drawing or approved instruction requires a signed Certificate of Conformance with each shipment.</p> <p>The Certificate of Conformance shall at a minimum contain the following information:</p> <ul style="list-style-type: none"> <li>• Name and Address of manufacturer</li> <li>• Sagetech Purchase Order number</li> <li>• Part Number and Revision (if applicable)</li> <li>• Quantity</li> <li>• Document and revision level to which product was manufactured</li> <li>• Statement certifying product conformance and traceability as applicable</li> <li>• Authorized representatives' signature and Date</li> </ul>

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<p><b>SQR-08</b></p>	<p>Counterfeit, Fraudulent, and Suspect Item Prevention</p>	<p>Suppliers shall ensure, through their processes and/or a formal program, against the receipt of counterfeit parts/materials into their inventory, against their use in manufacturing, and against their being sold to other suppliers.</p> <p>Suppliers' processes and/or formal program shall be similar to, and meet the intent of SAE AS6174, Counterfeit Material; Assuring Acquisition of Authentic and Conforming Material and/or AS5553, Counterfeit Electronic Parts; Avoidance, Detection, Mitigation, and Disposition. Counterfeit work –</p> <p>(a) For the purposes of this clause, "Work" consists of those parts delivered under this purchase order that are the lowest level of separately identifiable items (e.g., articles, components, goods, and assemblies). "Counterfeit Work" means work that is or contains items misrepresented as having been designed and/or produced under an approved system or other acceptable method. The term also includes approved Work that has reached a design life limit or has been damaged beyond possible rework but is altered and misrepresented as acceptable.</p> <p>(b) Supplier shall not deliver Counterfeit Work under this purchase order.</p> <p>(c) Supplier shall only purchase products to be delivered or incorporated as Work directly from the Original Component Manufacturer (OCM)/Original Equipment Manufacturer (OEM), or through an OCM/OEM authorized distributor chain. Work shall not be acquired from independent distributors or brokers unless approved in advance in writing.</p> <p>(d) Supplier shall immediately notify Sagetech with the pertinent facts if supplier becomes aware of suspects that it has furnished Counterfeit Work. When requested, supplier shall provide OCM/OEM documentation that authenticates traceability of the affected items to the applicable OCM/OEM.</p> <p>(e) This clause applies in addition to any quality provision, specification, statement of work or other provision included in this purchase order addressing the authenticity of Work. To the extent such provisions conflict with this clause, this clause prevails.</p> <p>(f) Supplier shall include paragraphs (a) through (e) and this paragraph (f) of this clause or equivalent provisions in lower tier subcontracts for the delivery of items that will be included in or furnished as work to Sagetech.</p>
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		These Supplier Quality Requirements are to be flowed down to the 2 <sup>nd</sup> tier suppliers.
<b>SQR-09</b>	Delivery	In the event of any anticipated or actual delay the Supplier must promptly notify Sagetech, in writing, of the reasons for the delay and the actions being taken to overcome or minimize the delay.
<b>SQR-10</b>	Changes of Circumstances, Product, or Process	<p>The Supplier must notify Sagetech in writing of changes to its Certification/Registration status, or any significant facility and organizational changes or other changes that may affect product quality, such as:</p> <ul style="list-style-type: none"> <li>• Company name</li> <li>• Company location</li> <li>• Senior quality management</li> <li>• Changes in ownership</li> <li>• Change of manufacturing location</li> </ul> <p>The Supplier is responsible for controlling changes and notifying Sagetech of all changes to the approved part design, manufacturing process, or testing procedures before incorporation, when required. Such changes may require re-qualification or re-submission of FAI (First Article Inspection). A full or partial FAI must be performed for affected characteristics when requested by Sagetech. All communications between the Supplier and Sagetech must be in writing.</p>
<b>SQR-11</b>	Packaging and Shipping	<p>All parts and materials intended for Sagetech must be protected against the potential damage from shipping, ESD (Electrostatic Discharge), FOD (Foreign Object Debris), corrosion, moisture, contamination, deterioration or damage by processing, handling, or storage at the Supplier, or in transit to Sagetech or from any sub-tier supplier.</p> <p>All electrostatic discharge sensitive materials or assemblies must be wrapped in ESD protective bubble wrap or placed in anti-static bags prior to boxing.</p> <p>All packages must be accompanied by a packing list detailing the contents.</p>

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<b>SQR-12</b>	Right of Inspection and Rejection	No parts received from a supplier by Sagatech shall be deemed accepted until Sagatech has had a reasonable time to inspect such items to verify conformity to Sagatech’s requirements and determine the actual quantity received for any packaged parts. Such inspection and physical count shall be performed at Sagatech’s facility. Any items discovered to be defective, or which fail to conform to the specifications may be rejected upon initial inspection or a later time if the defects contained in the items are not reasonably ascertainable upon initial inspection. Processor shall be liable for any parts lost or damaged by processor and shall reimburse Sagatech for the actual cost of damaged, defective or lost parts including shipping and handling costs.
<b>SQR-13</b>	Product and Material Specifications	It is the supplier's responsibility to verify all product and material specifications utilized at supplier's facility are at the current revision levels, including but not limited to, Industry Standards, Government Specifications, and the Sagatech provided drawings and/or data. Suppliers, Sub tier suppliers and Subcontractors shall have methods in place for managing obsolescence.
<b>SQR-14</b>	Awareness	Supplier shall ensure that all personnel follow these quality requirements, are aware of their contribution to product or service conformity, their contribution to product safety and the importance of ethical behavior.

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<p><b>SQR-15</b></p>	<p>Limited Shelf Life/Age Control</p>	<p>For purchase orders items subject to shelf life/age control the supplier shall provide the following information upon request, as applicable:</p> <ul style="list-style-type: none"> <li>• Part Number and Revision Letter</li> <li>• Manufacturers’ Part Number</li> <li>• Manufacturers’ Name and/or Identity Number</li> <li>• Rubber Class Designation</li> <li>• Date of Manufacture</li> <li>• Cure Date</li> <li>• Expiration Date - (Provide information if the shelf life/age control item is not controlled also.)</li> <li>• Batch or Lot Number</li> <li>• Storage Temperature Information</li> <li>• Special Handling Instructions</li> </ul> <p>Items supplied shall not have an expiration date less than 6 months from date of purchase. Items received with less than 6 months shelf life may be subject to rejection and return for replacement/credit.</p>
<p><b>SQR-16</b></p>	<p>Traceability</p>	<p>Items under the purchase order, including detail parts and sub-assemblies, must be traceable to heat lot/lot numbers/date codes of the original manufacturer, if applicable. Copies of all traceability, control and inspection records to be retained and provided upon request. Raw materials used are identified by lot number as well as material type, specification and heat number and must be traceable to records of acceptance (e.g., packing slip, bill of lading, etc.). Parts fabricated are identified with the lot or raw material used. These requirements are to be flowed down to the 2<sup>nd</sup> tier suppliers, accordingly.</p>

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<p><b>SQR-17</b></p>	<p>Calibration</p>	<p>Each calibration standard should be traceable to the National Institute of Standards and Technology (NIST) as a minimum. Providers of calibration services must meet the following requirements:</p> <ul style="list-style-type: none"> <li>• ANSI/NCCL Z540 or ISO 17025 compliant and certified by a recognized laboratory accreditation program such as NVLAP, A2LA or ILAC.</li> <li>• Calibration must be performed in accordance with the scope of accreditation.</li> </ul> <p>Calibration certificates shall include the following:</p> <ul style="list-style-type: none"> <li>• List of standards/equipment used. Standards must be NIST traceable and have a minimum Test Accuracy Ratio (TAR) of 4:1.</li> <li>• Provide “As-Found” and “As-Left” condition</li> </ul> <p>Unless stated otherwise, calibration will be per manufacturer's instructions</p>
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### **3 Specific Requirements**

The requirements listed in Section 3.0 are required when specified by purchase order. Specific requirements may be invoked on individual line items and differ between line items on a given PO.

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QR	Title	Description
SQR-18	Certified Material Test Report (CMTR)	Each shipment is accompanied by one legible and reproducible copy of the manufacturer's CMTR which includes all actual chemical and physical test results. The CMTR shall contain the signature, title, and date of the authorized representative of the agency performing the test and must conform to specification requirements. The report must note the purchase order number.
SQR-19	Federal/Governmental Specifications (FAR/DPAS Orders)	Products supplied shall be in strict conformance to the current revision of the specified Federal/Governmental Specifications (FAR/DPAS Orders). Specifically applicable clauses including DPAS ratings shall be incorporated on purchase documents or by reference. Part substitutions are not authorized unless Sagotech and /or Sagotech 's customers have approved them in writing as evidenced by a formally released Sagotech alternate parts document, other document or instruction.
SQR-20	Aerospace Specifications	Products supplied shall be in strict conformance to Purchase Order specifications, including but not limited to the most current revision of Aerospace Specification, if specified or other specifications, processes/procedures, reference documents or requirements that may be required by the Purchase Order. Part substitutions are not authorized unless Sagotech and /or Sagotech's customers have approved them in writing as evidenced by a formally released Sagotech alternate parts document, other document or instruction.
SQR-21	Military Specifications	Products supplied shall be in strict conformance to Purchase Order specifications, including but not limited to the most current revision of Military Specification, if specified or other specifications, processes/procedures, reference documents or requirements that may be required by the Purchase Order. Part substitutions are not authorized unless Sagotech and /or Sagotech's customers have approved them in writing as evidenced by a formally released Sagotech alternate parts document, other document, or instruction
SQR-22	Key Characteristics	When specified on the drawing or by purchase order, key characteristics may be subject to enhanced inspections or controls such as Statistical Process Control (SPC), 100% inspection or test, or other defined criteria. Requirements for control of key characteristics shall be specified on the purchase order when applicable.

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<b>SQR-23</b>	Process Documentation	Work to be accomplished in performance of this purchase order must be accomplished in accordance with the current and latest revision of the process specification(s) stated/requested on purchase order
<b>SQR-24</b>	First Article Inspection Report (FAIR)	The purpose of Supplier's FAIR is to ensure that all design features of a deliverable product and its sub-components meet all applicable levels of design drawing, material, and process specification requirements. In order to ensure clear definition, Sagetech FAI requirements are delineated per AS9102 Quality Standard Requirements for First Article Inspection. All Sagetech suppliers will be assessed to the latest AS9100 or 14CFE 21.137 quality system standard requirements. The Supplier must perform a First Article Inspection (FAI) for a new part representative of the first production run to verify that all dimensions, features and product attributes meet specified requirements. Documentation of the FAI must be submitted for review and approval to Sagetech prior to the first production shipment. The Supplier is responsible for flowing down FAI requirements to sub-tier suppliers. Supplier (including sub-tier) must notify Sagetech of any change to the product, process, sub-tier suppliers performing work, or manufacturing location. These types of changes shall require a new FAIR to be submitted to Sagetech.
<b>SQR-25</b>	RTV Disposition	Materials returned to supplier for rework or repair shall be returned to Buyer with a repair report detailing, at a minimum, all work performed, parts replaced and evidence of conformity to all applicable requirements. For warranty issues, materials are to be returned to Buyer free of any shipping, handling, or insurance charges.
<b>SQR-26</b>	Failure Analysis	Materials returned to supplier due to failure, shall have a failure analysis (FA) performed and summary report provided to buyer. For warrantable failures the FA Report should be provided free of charge. For non-warrantable failures a reasonable and customary fee may be assessed.

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## Version History

Ver.	Summary of Changes	Effective <sup>1</sup>	Approved by
1.0	Initial release	March 2022	DCR00015
2.0	Moved Calibration, Traceability and Shelf-life to General Requirements, added SQR-25 & 26	February 2024	DCR00055

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<sup>1</sup> Indicates month and year that the version become effective. The DCR captures the effectivity date.

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