



## Notice of Supplier Quality Assurance Requirements Policy (SQAR)

Dear Valued Supplier:

Supplier Quality Management has emerged as a leading business practice, driven by requirements established in ISO and AS9100 Quality Management Systems (QMS) standards. XACT EMS, is pursuing as a registered AS9100 company to join the ranks of world-class manufacturers making significant investments in their QMS and business processes to improve Supplier Quality, thereby effecting XACT EMS's Finished Goods Quality.

### **Supplier Quality is Critical**

Our business relationship is cooperative – improved Quality on products shipped positively affects our end product. Quality measurements important to us are: Supplier's Quality, meeting Purchase Order requirements, correct pull of parts, proper ESD handling and secure packaging, on-time delivery and responsiveness to our inquiries and RMA requests. In return, we pledge to continue to conduct business fairly, clearly communicate our Quality Requirements and pay within terms. We believe that when working together, both companies will benefit.

### **Supplier Quality Assurance Requirements (SQAR) Policy**

We believe that Suppliers providing product to XACT EMS are driven to maintain a 'Approved Supplier' status in order to continue our business partnership. Purchased goods should continue to meet or exceed acceptable Quality thresholds as indicated in XACT EMS's document, Supplier Quality Assurance Requirements (SQAR). Our Purchase Orders call out specific required sections of the SQAR. In addition, passing down to Suppliers our Quality Requirements is one of the AS9100 directives. The Supplier is responsible for understanding the SQARs indicated. We are confident that you realize the importance of your contributions to Product Conformity, Product Safety, and recognizing the importance of Ethical Behavior, are all important elements that contribute to XACT EMS's success. We look forward to a productive, evolving quality future. If there are comments or questions, please call or e-mail [Purchasing@xactems.com](mailto:Purchasing@xactems.com).

XACT EMS hereinafter is referred to as 'Buyer' and the Supplier referenced to as 'Seller'.

#### Definitions:

- ‘Shall’ and ‘Must’ express mandatory requirements
- ‘Should’ expresses a recommendation or advice on implementing said requirement. Buyer encourages these recommendations or best practices be followed.
- ‘May’ expresses a permissible practice or action, and
- ‘Will’ expresses a provision or intention in connection to the requirement.

### **General Supplier Requirements**

Requirements for documenting (forms, reports, tests) are cited within that relative section. All certificates, documents, forms, and reports are to be legible, electronic or in permanent ink, and submitted in English to Buyer’s Purchaser identified on the Purchase Order. Records associated with PO deliverables shall be maintained for a minimum of seven (7) years.

The Supplier shall be responsible for complying with Quality System requirements and for meeting Quality performance expectations. Failure to comply with Quality System requirements or to achieve an acceptable Quality performance level may result in an on-site audit or additional source inspection.

#### **1) Supplier Quality System Review**

Buyer shall be responsible for monitoring Supplier performance to ensure compliance to Quality Requirements. Initial and subsequent periodic review of the Supplier’s Quality System may be performed at the option of Buyer.

Objective evidence of Supplier’s compliance either by submittal of objective evidence, or evidence of a third-party accreditation, may be acceptable, but will not preclude the use of an on-site evaluation or other review methods determined by Buyer. Seller’s system shall be subject to audit by Buyer. At its discretion, Buyer may honor qualified second or third-party audits, provided the scope of the performed audit correlates with the type of product service being provided to Buyer.

#### **2) Quality System Program Requirements**

Seller’s Quality Systems Program for Quality Assurance in Design/Development, Production, Installation, and Services contracted by this PO shall be controlled by a documented ‘Quality Systems Program’ that complies with AS9100, ISO 9001 or an equivalent program accepted by Buyer. Contact Buyer’s Quality Manager with questions.

Quality Program Requirement compliance with the provisions of this clause in no way relieves the Seller of the final responsibility to furnish acceptable supplies or services. Seller’s system shall be subject to audit by Buyer and/or Buyer’s Customer. Supplier



shall also convey the importance of their personnel's contributions to product conformity, product safety, and recognizing the importance of ethical behavior; these are flow-down requirements of the AS9100 International Quality System Standard.

### **3) Supplier Quality Program Requirement:**

Department of Defense Contract Seller agrees to provide and maintain a quality assurance program which is in conformance with Military Specifications: MIL-Q-9858 entitled "Quality Program Requirements" and MIL-STD-45662 entitled "Calibration System Requirements". Any revisions or amendments to these specifications in place at the time of PO contract shall be controlling, notwithstanding the release of any revisions or amendments after the time of contract. 1

### **4) Inspection and Test Quality System**

Seller shall provide and maintain a system that complies with AS9003 Inspection and Test Quality System to ensure the inspection, conformity and airworthiness of products are maintained. The provisions of this clause in no way relieve the Seller of the final responsibility to furnish acceptable supplies or services. The system shall be subject to audit by Buyer. Records associated with PO deliverables shall be maintained for a minimum of seven (7) years.

### **5) Right of Access**

Buyer shall reserve Right of Access by Buyer, their customer, and regulatory authorities to the applicable areas of all facilities, at any level of the supply chain involved in the Purchase Order and all applicable records involved in the Purchase Order. Records associated with PO deliverables shall be maintained for a minimum of seven (7) years.

### **6) Buyer Source Inspection**

All items covered by this PO may require inspection, by Buyer, at Supplier's facilities prior to shipment. Supplier agrees to furnish, at no cost to Buyer, acceptable facilities and equipment necessary to perform the required inspections. Evidence of Source Inspection shall accompany each shipment of goods or material.

Note: When requesting Source Inspection, notify Buyer's Purchaser referenced on this PO at least seven (7) business days in advance. Supplier must obtain sign-off by Buyer Quality Representative on the shipping document prior to shipment of material. Failure to do this may result in rejection of the material by Buyer's Receiving Inspectors.

### **7) Buyer In-Process Inspection**

All items covered by this PO are subject to surveillance by Buyer, to include but not limited to, the Supplier's procedures and facilities. Supplier also agrees: to provide



acceptable facilities and equipment to allow Buyer to conduct surveillance; supply data as needed to fulfill the surveillance function and to perform testing as required by applicable documentation.

### **8) Supplier Deviation or Waiver**

All departures from drawings, specifications or other PO requirements must be recorded and reported on either the Supplier's or Buyer's deviation or waiver form or as stated on the PO.

Disposition of these departures must be approved by the Buyer's Quality Manager prior to shipment. Records associated with PO deliverables shall be maintained for a minimum of seven (7) years.

### **9) Design/Engineering**

Buyer may request seller to Design/Engineer a product to accommodate end user's requirements. During Design process seller shall require approval from the buyer to communicate directly. Buyer may request to sign confidentiality agreement and/or other possible documentation.

At the end of the project seller shall submit Design requirements, Spec sheet, Drawings, 3D models to the buyer. All design documents will be proprietary to XACT unless otherwise specified in contract agreement.

Seller shall maintain all documents for a minimum of seven (7) years.

### **10) Supplier's Controlled Products**

The initial shipment on this PO shall be accompanied by one (1) legible and reproducible copy of applicable specifications and/or drawings. Records associated with PO deliverables shall be maintained for a minimum of seven (7) years.

### **11) Protection of ESD-Sensitive Part Numbers**

Seller shall implement an electrostatic discharge control (ESD) program in accordance with ANSI/ESD-S20.20 or equivalent. Product shall be processed in a manner to protect from ESD damage. Product packaged for shipping shall be labeled to alert all handlers that the devices require special handling.

### **12) Identification of Limited-Shelf-Life Material**

Seller shall identify each item, package, or container of limited-shelf-life material with the cure or manufacturer date, storage temperature and special handling conditions. In addition to the normal identification requirement of name, part or code number,

specification number, type, size, quality and manufacturing recommended shelf life. This identification, including special handling conditions, shall be recorded on the Certifications and Shipping documents for the PO material.

### **13) Supplier Re-Approval Process**

Supplier approval shall be re-evaluated at Buyer's discretion. Approval shall be subject to Buyer's Supplier Quality Analysis regarding the Supplier's quality performance history and/or any significant changes in the Supplier's Quality System. It is the responsibility of the Supplier to provide Buyer a written statement of any changes in the Supplier's management, ownership, location/address and/or Quality System. Any of these changes may require Buyer Quality re-approval. This notice shall be sent to the Buyer Purchasing Department (Purchasing@xactems.com). Upon receipt of written notification, Buyer shall determine what types of approval activities are required.

### **14) Supplier Performance Requirements**

1) On-Time Delivery It is expected Products shall be provided no later than dock date established on the Purchase Order. The Supplier's Performance for On-Time Delivery shall be evaluated and deliveries earlier than seven (7) business days and later than one (1) business day of the established Purchase Order date may adversely affect Supplier Rating and status as an "Approved Supplier".

2) Product Quality It is expected Product and/or Services provided shall be 100% free of defects and be compliant with all applicable Material and Performance Requirements. Supplier's Quality Acceptance Performance shall be evaluated (number of lots of rejected / total number of lots received) and acceptance rates of less than 98.5% could adversely affect the Supplier's rating and status as an 'Approved Supplier'.

### **15) Certificate of Compliance: Material Conformance**

Each shipment shall be accompanied by a legible and reproducible Certificate of Compliance to Material Conformance, commonly known as a Certificate of Compliance or CoC. Records associated with PO deliverables shall be maintained for a minimum of seven (7) years. At a minimum, a CoC shall include a Statement:

1. The items being procured were produced from material which the Seller has available for examination,

2. Seller has available specific data or other objective evidence that the Part Number conforms to the applicable specifications called out in the PO and that this information shall be made available for review by Buyer; examples: revision, drawings, Supplier Quality Assurance Requirements

3. If Buyer-supplied material shall be used in the manufacture of the items, the CoC shall include a statement that the material supplied was used in the manufacturer of the items in the manner required by the applicable drawings and/or specification(s)
4. For Part Number(s) per shipment not per piece
5. For partial or complete shipments
6. Between the CoC and the Packing Slip, which may be the same form or two separate forms, the following shall be included:
  - a. Supplier Name and Address
  - b. Supplier Contact Information
  - c. Supplier Reference Number
  - d. Date of Shipment
  - e. Compliance Statement
  - f. Authenticator's Title and Signature
  - g. Purchase Order
  - h. Part Number
  - i. PN Revision as applicable
  - j. Part Quantity Shipped
  - k. Part Quantity Backordered
  - l. Serial Number label data as applicable
  - m. Date/Lot Code as applicable,
  - n. Dates of Expiration of Rubber, Consumables if not indicated on packaging It is acceptable to reference and/or include the Packing Slip within the CoC.

#### **16) Certificate of Compliance: Special Process**

Each shipment shall be accompanied by a legible and reproducible Certificate of Compliance: Special Process which defines the process(es) including but not limited to: soldering, surface preparation and treatment, heat treatment, welding, non-destructive testing processes (etc); the applicable specification(s) to which the item(s) are procured or processed, and the identity of the processor(s) used.

Each process used shall be listed on the Certificate in sufficient detail to permit Buyer verification. Processed items that are serialized shall have the serial numbers listed in the Certificate. Records associated with PO deliverables shall be maintained for a minimum of seven (7) years.

#### **17) Traceability of Materials: General**

General Seller shall maintain traceability information on file of all materials, parts and assemblies used in fabricating the product. Traceability records shall be maintained by the Seller for a period of seven (7) years.

### **Traceability to Raw Material:**

All items fabricated under this PO shall be traceable to Raw Materials used. All traceability and inspection records must be identifiable upon request or audit by Buyer or their Customer Representatives. Records associated with PO deliverables shall be maintained for a minimum of seven (7) years.

- 1) Raw Materials used shall be identified by lot number as well as material type, specification, heat number, etc., and shall be identifiable with lot of Raw Material used.
- 2) All material fabricated by the Seller in one lot shall be identifiable to that lot when supplied to Buyer. When the Seller is combining material fabricated in two or more lots to fulfill PO Requirements, these materials shall be segregated and identifiable to the lot in which it was fabricated.

### **Lot Control**

Lot Control shall be required. Lot number/date code shall be identified on the outside of intermediate and/or unit packages. When more than one lot/date codes are shipped together, individual lot/date codes shall be segregated and identified on the outside of the intermediate packages. Records associated with PO deliverables shall be maintained for a minimum of seven (7) years.

### **Counterfeit Material or Parts**

The term Material, as used in this clause, includes, but is not limited to raw material, parts, components, sub-assemblies, assemblies, and end product. The term New, as used in this clause, refers to Original Equipment Manufacturers (OEMs), Original Component Manufacturers (OCMs), Material previously unused or composed exclusively of previously unused Material, allowing for conventional use including, but not limited to integration, installation, assembly, test, burin, training, troubleshooting, and rework as required.

The term Counterfeit Materials means Material salvaged, produced or altered to resemble 'goods' without authority or right to do so, with the intent to mislead or defraud by presenting the goods as 'New Material'. Unless otherwise stated, Supplier shall deliver fully warranted New Material under this clause; Supplier shall not deliver Counterfeit Material to XACT EMS. Supplier represents and warrants that all electrical parts delivered under any XACT EMS Purchase Order (PO) are obtained from OEMs, OCMs, or their authorized dealers. If electronic parts cannot be obtained from OEMs, OCMs, or their authorized dealers and must be procured from alternative source(s), Supplier shall obtain XACT EMS's written approval before making such procurements. In these instances, Supplier shall employ, or cause to be employed, inspection, testing and authentication processes reasonably designed to detect and avoid Counterfeit Material and shall provide written description of Seller's detection and avoidance processed to XACT EMS on or before delivery. Supplier shall immediately



notify XACT EMS's Buyer when Material is found or suspected to be Counterfeit Material. Notice must be in writing and must be provided to Buyer within 10 days of discovery. Upon request, Supplier shall provide OEM/OCM documentation that enables traceability of Affected Material to the applicable OEM/OCM. Should any Material delivered against a XACT EMS PO be found to include Counterfeit Material, Supplier shall, at their expense, promptly replace such Counterfeit Material with genuine parts conforming to the PO. Notwithstanding any other provision in the PO, Supplier shall be liable for all costs relating to the removal and replacement of Counterfeit Material, including, without limitation, XACT EMS's cost of removing Counterfeit Material, of installing replacement New Material and of any testing/corrective action necessitated by said replacement. The remedies contained in this paragraph are in addition to any remedies XACT EMS may have by law, equity or under other provisions of the PO.

### **18) First Article**

First Articles shall be accepted by Buyer prior to production via Buyer's established Quality Assurance procedures unless written authorization to proceed is given by Buyer. Seller agrees to provide objective evidence of conformance with all applicable requirements prior to acceptance of First Article(s) by Buyer. Refer to AS9102 Aerospace First Article Inspection.

### **19) Sampling**

A Supplier shall use Sampling plans when historical records indicate that a reduction in inspection can be achieved without jeopardizing the level of quality. The Supplier may employ sampling inspection in accordance with nationally accepted or Customer-required standards. Records associated with PO deliverables shall be maintained for a minimum of seven (7) years.

### **20) Configuration Data List**

Seller shall furnish subassembly Configuration Data List (CDL) for each top end item assembly delivered. The CDL shall list the installed serialized assemblies by Part Number, Serial Number, and drawing Revision Level. The CDL may list multiple top end items (i.e. spreadsheet).

### **21) Test Reports**

Each shipment must be accompanied by one (1) legible and reproducible copy of actual Test Reports, as indicated below, identifiable with the material submitted. Reports shall contain the chemical and/or physical properties of the purchased material. Reports shall also contain the signature and title of an authorized representative of the agency



performing the tests and shall assure conformance to specification requirements. Records shall be maintained for a minimum of seven (7) years.

## **22) Functional Test Certification**

Each shipment shall be accompanied by one (1) reproducible copy of the Seller's Functional Test Certification. The Certification shall be identifiable to the delivered material (shipment) for which the test reports are on file and available for examination. These reports shall contain the signature and title of the authorized representative of the agency performing the test and must assure conformance to specification requirements. Records shall be maintained for a minimum of seven (7) years. Pressure or Leak Tests Each shipment must be accompanied by one (1) legible and reproducible copy of actual test results identifiable with test parameters and product submitted. Reports shall contain the signature and title of an authorized representative of the agency performing the tests and shall assure conformance to specification requirements.

## **23) Certificate of Calibration:**

When deliverable inspection and/or test equipment shall be part of this PO, the Seller shall furnish a Certificate of Calibration (traceable to NIST) for each piece of inspection and/or test equipment. When the inspection and/or test equipment shall be part of a system, then the Seller may furnish one Certificate of Calibration covering the total system, including indication of compliance to applicable requirements as defined in ISO 10012-1, Quality Assurance Requirements for Measuring Equipment. Records shall be maintained for a minimum of seven (7) years. The seller shall issue as found calibration and as left calibration (before after readings),

## **24) Standard Inspection System**

Seller agrees to maintain an inspection system adequate to ensure that goods shipped under this contract meet all of the applicable requirements. Seller agrees that this system will also provide for the maintenance of records and data of all inspections and tests performed and agrees to make such records available for examination and verification by Buyer upon request. Records associated with PO deliverables shall be maintained for a minimum of seven (7) years.

### **1. General**

Seller shall provide and maintain an inspection system acceptable to Buyer. Seller's system shall be subject to an audit by Buyer. The procedures shall be clear, concise and adequate to fulfill the requirements of this PO. The system shall provide sufficient controls, records and inspections to assure compliance to Contract or PO requirements. The System shall have a method to obtain and provide written (documented) Corrective Action. Records shall be maintained for a minimum of seven (7) years.

### **2. Non-Conforming Material**

Material Review Board authority shall not be granted for items designed by Buyer. The system shall provide for identification and control of Non-Conforming hardware or materials and for a method of obtaining Corrective Action. Seller shall provide immediate notification, in writing, of suspected problems with previously delivered product. This notification shall be sent to Buyer's Quality Manager and Purchaser. Records shall be maintained for a minimum of seven (7) years.

### 3. Notification of Changes

Seller shall notify Buyer whenever there has been a change in ownership, top management, head of quality department, facility location, major Supplier or process used on the item being delivered on the Purchase Order. Records shall be maintained for a minimum of seven (7) years.

### 4. Flow Down of Requirements

Seller shall flow down to sub-tier Suppliers the applicable requirements of the Purchasing Order documents, including any key characteristics (when identified) and required Quality Provisions. Advise that Records shall be maintained for a minimum of seven (7) years. Revision Control For all POs, unless otherwise specified, the Seller must use the latest Revision level of all applicable specifications to drawings that are in effect at the time the PO is issued.

## **25) Nonconforming Material**

Suppliers shall begin containment action immediately upon discovery/notification of nonconformance. If product may have escaped the facility and shipped to Buyer, the Supplier shall immediately notify their respective Buyer's Purchaser. For product that has been found or suspected discrepant prior to shipment, all requests for approval for repair or to be 'used-as-is' must be submitted to Buyer's Purchaser for approval and held at Supplier's location pending receipt of documented Buyer-approval prior to further processing of or shipping of the nonconforming product. Nonconforming products identified at a Supplier's facility or returned from Buyer's facility shall be analyzed to determine the cause(s) of the nonconformance. For all nonconformances returned from Buyer, the Supplier shall submit a formal Corrective Action Report within seven (7) business days from receipt of the Buyer Supplier Corrective Action Request (SCAR). Failure to respond to a SCAR may result in punitive action up to and including removal and/or suspension from Buyer's Approved Supplier List (ASL). Records associated with PO deliverables shall be maintained for a minimum of seven (7) years.

## **26) Resubmittal of Rejected Material**

All material rejected by Buyer's Purchasing Agent and subsequently resubmitted by the Seller shall bear adequate identification of such resubmission either with the material or the Seller's shipping document. Reference shall be made to Buyer's rejection document and evidence given at the time of shipment or at Final Source Inspection that the causes for rejection have been corrected.

## **27) Failure Review and Corrective Action**

When requested by Buyer by the issuance of a Seller Corrective Action Request (SCAR), the Seller shall conduct investigations to determine Root Cause associated with non-compliant conditions or Failure trends identified in the SCAR. Positive Corrective Actions shall be implemented to ensure the Root Cause conditions are eliminated. Seller shall provide written response to Buyer's SCARs within 30 days and, when requested, provide status reports every seven (7) days until the Root Cause has been identified and associated Corrective Actions have been implemented to Buyer's satisfaction. Records associated with PO deliverables shall be maintained for a minimum of seven (7) years.

## **28) Configuration Management – Design Change Authorization**

After Buyer has approved the Product Design, changes to the design shall be made in accordance with the following requirements:

### **1. Definitions:**

- a. Minor Change: no applicable change to fit, form or function.
- b. Major Change: affects fit, form or function.

### **2. Requirements:**

- a. Change Evaluation: Seller shall evaluate proposed design changes to determine if change requires approval by Buyer before implementation.
- b. Approval is not required for the situation determined below:
  - a. Drawing correction due to Typos
  - b. Non-Complex Component replacement with equal or better reliability
  - c. Nut, Bolt, Screw, washer changes that do not affect form, fit and function

## **29) Final Inspection (Manufacturer's Only)**

Seller shall not use a sample inspection plan when performing Final Inspection on items designed by Buyer. If a Seller plans to use sample inspection during the final inspection process, the Seller shall obtain written authorization from Buyer's Purchasing Agent prior to delivery of the product. Records associated with PO deliverables shall be maintained for a minimum of seven (7) years.

### **30) Standard Package Requirements: General**

Seller agrees to package all items to be supplied under this contract utilizing best commercial practice unless specifically requested otherwise per any other clause of this contract. Recommendation dependent on Product type: Product must be individually packaged in non-static plastic, bubble wrap, or similar protective material and arranged in orderly layer(s), a divided container or individual boxes in a larger container are preferred. Layers must be separated by cardboard or plastic dividers. Individual part foam immobilization is also acceptable. Each shipment shall have a Packing Slip on the outside of the box for each PO inside the box.

Test Reports shall be included as applicable. Inspection data and certifications as required by the indication on the PO order and any documents referenced therein, shall accompany each shipment.

Seller shall control all preservation, packing, storage, shipping and handling to assure all materials are adequately protected during all phases of procurement and assure compliance with any special handling and shipping requirements as may be specified.

#### **Standard Package Requirements: Specific**

All items listed on this PO shall be packaged in accordance with the following indicated specifications and/or procedures.

##### **ESD-Sensitive Components**

- No loose packaging materials, foam pellets, popcorn or shrink wrap allowed. A-A-59135 Packaging Material ESD protective foam between parts and in containers is acceptable.
- Electrostatic protective packaging, when specified, shall comply to MIL-STD-1686.
- Charge decay is < 2 seconds.
- Surface resistance 10<sup>6</sup> - 10<sup>12</sup> ohms/sq.
- Shielding packaging, when specified, shall conform to MIL-B-81705 types I of III.
- Alternative packaging and/or materials must be approved by Buyer prior to shipment.
- Materials shall be non-corrosive if used in direct contact with item (MIL-81705).
- Recommended tray material for items listed as ESDS is 'Static Intercept polyethylene, A-A59136 closed cell foam or protective bubble pack between parts is acceptable

#### **Material Safety Standard**

Seller shall include manufacturer's product safety information with each shipment. These are commonly known as Safety Data Sheets – SDS. This information shall contain at a minimum applicable product handling precautions and procedures, disposal information and emergency procedures for contact and contamination etc.

#### **Minimum Shelf Life at Time of Delivery**



The product procured under this PO shall have a minimum remaining shelf life of 80% of the initial shelf life at the time of manufacture or, if greater, a minimum of 6 months.

### **Prohibited Substances**

Use of materials containing magnesium or magnesium alloys with high content of magnesium, rilsan, mercury, cadmium, hexavalent chromium, polybrominated biphenyls (PBB) or polybrominated diphenyl ethers (PBDE) shall be prohibited. If item(s) delivered under this PO contain one or more of the prohibited materials, contact Buyer's Purchaser immediately for directions and disposition.

### **Conflict-Free Minerals versus 'Conflict Minerals'**

Widely used in today's electronic industry are the minerals tantalum, tin, tungsten and gold (hereafter referred to as the 3 Ts and G), which may have originated from 'Conflict Minerals' operations, inferring these are mined in the 'Conflict Region', the eastern portion of the Democratic Republic of the Congo (DRC) and surrounding countries. XACT EMS specifically requests 'Conflict-Free' metals be utilized in the manufacturing of XACT EMS product. 'Conflict-Free' refers to metals originating outside the conflict region or if from within, mines or smelters that are certified as 'conflict-free' by an independent third party. When not possible to source 'Conflict-Free' labeled minerals, XACT EMS requests all Suppliers to monitor current suppliers on the origin of 'Conflict Minerals' used in the manufacturing of XACT EMS product.

When requested by XACT EMS, Suppliers are to provide top-level source/smelter information using the standardized EICC/Ge SI Conflict Minerals Reporting Template.