

Quality Requirements
Q6R – Software - Deliverable & Non-Deliverable

* Revised

** Added

Notice: A hard copy of this document may not be the document currently in effect. The current version is always the version on the Lockheed Martin network.

- A. Seller shall implement and maintain a Software Quality program or methodology acceptable to Buyer for engineering design, development, testing and delivery of standalone or embedded software products associated with this Purchase Order ("PO"). Buyer may accept Seller's adaptation of standards SAE AS9115 for contracted deliverable software and SAE ARP 9005 for management of non-deliverable software if artifacts of compliance are readily verifiable, and if the following elements, B, C, D, E, F, Note and Exclusion, are defined and visible.
- ** B. Seller shall define and maintain an infrastructure to support its software development and testing, that includes, as applicable:
1. Software development tools and utilities, including host computer and support software;
 2. Software verification tools and utilities, including test equipment, test software, vulnerability scanners, code scanners, and fuzzers;
 3. Equipment, tools and utilities for archiving and storage, disaster recovery protection, replication, software loading, transmittal, record retention, software quality, change management, and configuration management;
 4. Integrity verification tools and utilities (e.g., virus protection/checking, digital signatures, security hash algorithms, and CRC);
 5. Equipment and software needed to meet retention requirements; and
 6. Security for software environments against attacks (e.g., malicious code, enumeration, fingerprints, worms, viruses, backdoors, and spyware).
- C. Seller shall implement, and comply with, its Software Quality Program Plan ("SQPP") or Systems/Software Quality Program Plan ("SSQPP"), which shall be organized and documented in Seller's format and shall define Seller's software and software quality planning. Seller's SSQPP or SQPP is subject to Buyer's approval or disapproval. Buyer reserves the right to conduct periodic evaluations of Seller's compliance with the SQPP or SSQPP.
- D. Seller shall include in its Software Quality program or methodology the review and audit of software development processes, products and activities, as required by Seller, in order to ensure compliance with applicable planning, procedures and standards. Seller shall provide internal and Buyer visibility into Software Quality program trends in its program.
- E. Seller shall establish and maintain, as part of its Software Quality program as required by this PO, a system which provides for evaluation of each non-deliverable software Item used in the automated manufacturing of deliverable hardware or in the qualification or acceptance of deliverable software or hardware. Seller shall ensure this system provides for the following:

1. Required functions of the non-deliverable software are defined, in writing, and objective evidence exists prior to the intended use of such software, that such software performs the required functions.
 2. The non-deliverable software is placed under internal configuration control prior to its use, and such internal configuration control is maintained throughout its use.
- F. Buyer's software quality representatives shall have the right to conduct in-process inspection of Seller's software development process defined in the SQPP or SSQPP, and to evaluate Seller's compliance with Seller's internal procedures and other applicable documents at Seller's facilities.

Note: This Clause does apply to the development process for programmable devices used to store executable instructions or data operands which control the detailed operation of a microprocessor or integrated micro controller (commonly known as firmware).

Exclusion: This Clause does not apply to the development process for programmable logic elements of microcircuits that perform combinatorial or sequential logic (Boolean) functions which are developed using hardware development techniques. Such Items are subject to hardware development process requirements.