

F.5.4 SOFTWARE PROCUREMENT AND SUPPLIER MANAGEMENT

Objective:

Acquired safety software, either COTS software or custom-developed for DOE, meets the appropriate level of QA based on risk, safety, facility life-cycle, complexity, and project quality requirements.

Criteria:

1. Procurement documents identify the technical and quality requirements.
2. Acquired software meets the technical and quality requirements.
3. Suppliers' QA programs meet or exceed the QA requirements specified in the procurement documents.
4. Procurement documents specify supplier reporting of software defects to the purchaser and the purchaser's reporting of defects to the supplier.

Approach:

Suppliers of acquired software are evaluated to ensure that the safety software is developed under an appropriate QA program and satisfies the specific requirements. The assessment of software procurement process should include the following.

- Determine the existence of safety software technical and QA requirements. These requirements may be embedded in the DOE contractors' or subcontractors' procurement document, software or system design description, or SQA plan. If not documented in the procurement contract, ensure that the supplier has received such technical and QA requirements. This verification may overlap with the Software Requirements Management work activity.
- Verify that the suppliers' QA program has been reviewed and meets or exceeds the procurement specification requirements. The supplier may review the supplier's QA program through supplier assessment, supplier self-declaration, third-party certification, or other similar methods.
- Review evidence that the acquired software was evaluated for the appropriate level of quality. This evidence may be included in the test results, a test summary, supplier site visit reports or supplier QA program assessment reports. This review may overlap with the V&V work activity.
- Review procurement or other documents between the supplier and purchaser for a documented process to report software defects from the supplier to the purchaser and the purchaser to the supplier. This review may overlap with the Problem Reporting and Corrective Action work activity.