

F.5.9 SOFTWARE PROBLEM REPORTING AND CORRECTIVE ACTION

Objective:

Formal procedure for software problem reporting, and corrective action for safety software errors and failures are established, maintained, and controlled.

Criteria:

1. Documented practices and procedures for reporting, tracking, and resolving problems or issues are defined and implemented.
2. An evaluation process exists for determining if the reported problem is a safety software defect, error, or something else.
3. Organizational responsibilities for reporting issues, approving changes, and implementing corrective actions are identified and found to be effective.
4. For safety software defects and errors, the defect or error is correlated with the appropriate software engineering elements, identified for potential impact, and all users are notified.
5. For acquired safety software, procurement documents identify the requirements to both the supplier and purchaser to report problems to each other.

Approach:

Review documents and interview facility staff for the problem reporting and notification process to determine whether—

- a formal procedure exists for software problem reporting and corrective action development that addresses software errors, failures, and resolutions;
- problems that impact the operation of the software are promptly reported to affected organizations;
- corrections and changes are evaluated for impact and approved prior to being implemented;
- corrections and changes are verified for correct operation and to ensure that no side effects were introduced;
- preventive measures and corrective actions are provided to affected organizations in a timely manner; and
- the organizations responsible for problem reporting and resolution are clearly defined.