



**Management - Execute & Maintain Throughout IV&V Effort**

- 1- Generate Independent Verification & Validating Plan (IVVP)
- 2- Assess Proposed Changes to Existing Systems (if applicable)
- 3- Review IV&V Effort on Regular Basis
- 4- Support Technical & Management Activities Dictated by Each Project
- 5- Coordinate IV&V Effort with Program Management
- 6- Identify Process Improvement Opportunities

**Acquisition**

- 1- Define Scope of IV&V Effort
- 2- Plan Interface Actions with Program Management
- 3- Review System/Program Requirements
- 4- Plan Testing Activities

**Planning**

- 1- Plan the Interfaces Between the IV&V Effort and Program Manager

**Concept**

- 1- Analyze Concept Documentation
- 2- Analyze Criticality
- 3- Analyze Hardware / Software / User Requirement Allocation
- 4- Analyze Traceability
- 5- Analyze Hazard
- 6- Analyze Security
- 7- Analyze Risk

**Requirements**

- 1- Analyze Traceability
- 2- Evaluate Software Requirements
- 3- Analyze System Interfaces
- 4- Analyze Criticality
- 5- Generate System IV&V Test Plan
- 6- Generate IV&V Acceptance Test Plan
- 7- Assess Configuration Management
- 8- Analyze Hazard
- 9- Analyze Security
- 10- Analyze Risk

**Design**

- 1- Analyze Traceability
- 2- Evaluate Software Design
- 3- Analyze Interfaces
- 4- Analyze Criticality
- 5- Generate IV&V Component Test Plan
- 6- Generate IV&V Integration Test Plan
- 7- Generate IV&V Component Test Design
- 8- Generate IV&V Integration Test Design
- 9- Generate IV&V System Test Design
- 10- Generate IV&V Acceptance Test Design
- 11- Analyze Hazard
- 12- Analyze Security
- 13- Analyze Risk

**Implementation**

- 1- Analyze Traceability
- 2- Evaluate Source Code and Associated Documentation
- 3- Analyze Interface
- 4- Analyze Criticality
- 5- Generate IV&V Component Test Case
- 6- Generate IV&V Integration Test Cases
- 7- Generate IV&V System Test Cases
- 8- Generate IV&V Acceptance Test Cases
- 9- Generate IV&V Component Test Procedures
- 10- Generate IV&V Integration Test Procedures
- 11- Generate IV&V System Test Procedures
- 12- Execute IV&V Component Tests
- 13- Analyze Hazard
- 14- Analyze Security
- 15- Analyze Risk

**Test**

- 1- Analyze Traceability
- 2- Generate IV&V Acceptance Test Procedures
- 3- Execute IV&V Integration Tests
- 4- Execute IV&V System Tests
- 5- Execute IV&V Acceptance Test
- 6- Analyze Hazard
- 7- Analyze Security
- 8- Analyze Risk
- Installation & Checkout**
- 1- Audit Installation Configuration
- 2- Checkout Installation
- 3- Analyze Hazard
- 4- Analyze Security
- 5- Analyze Risk
- 6- Generate IV&V Final Report

**Operation**

- 1- Evaluate New Constraints (as applicable)
- 2- Evaluate Operating Procedures
- 3- Analyze Hazard
- 4- Analyze Security
- 5- Analyze Risk
- Maintenance**
- 1- Revise IV&V Plan
- 2- Evaluate Anomalies
- 3- Analyze Criticality
- 4- Assess Migration
- 5- Assess Retirement
- 6- Analyze Hazard
- 7- Analyze Security
- 8- Analyze Risk
- (Iterate Though Above Tasks Based on Modification)