

## IV&V Provider Qualification Requirements

### *IV&V Service Provider Mandatory Qualifications*

Respondents to this Statement of Work (SOW) must provide evidence of successful completion of a minimum of three (3) IV&V reviews within the past five (5) years. Two of the three Reviews must be for duration of at least two months and have included a staff of at least 2 team members involved in performing IV&V tasks. Each IV&V Review reference must include the following information:

- A generic system, product or service description including the size and complexity of the effort.
- Type of IV&V reviews performed.
  - Audit-Level
  - Full-Phase
  - Full-Technical
  - Other (specify) \_\_\_\_\_
- Project areas reviewed.
  - Planning
  - Project Management
  - Requirements Analysis
  - Testing
  - Training
  - Implementation
  - Other (please specify) \_\_\_\_\_
- IV&V tasks performed.
  - Verify Project Plan Exist
  - Evaluate Estimating and Scheduling Processes
  - Verify Design Elements Track to Requirements
  - Evaluation Operational Documentation
  - Other (please specify) \_\_\_\_\_
- A generic summary of IV&V Review results.

The IV&V Service Provider must have successfully completed a minimum of one (1) IV&V review whose scope included meeting Federal or State administrative and technical regulations.

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At a more detailed level, the IV&V Service Provider must demonstrate the corporate knowledge and experience to:

- Develop an IV&V Review Plan.
- Review and make recommendations on the management of system, product or service development project, as well as, the financial and technical aspects of the project.
- Consult with all project stakeholders and assess user involvement and buy-in regarding system, product or service functionality and its ability to satisfy stakeholders' requirements.
- Conduct an analysis of project past performance (schedule, budget, technical) sufficient to identify trends and make recommendations for improvement.
- Develop performance metrics and indicators (schedule, budget, technical) that allow project completion against project milestones to be tracked and verified.

### ***IV&V Service Provider Desirable Qualifications***

- The IV&V Service Provider has a minimum of thirty-six (36) months experience performing audit level IV&V reviews.
- The IV&V Service Provider has a minimum of thirty-six (36) months experience performing full-phase IV&V reviews.

### ***IV&V Team Members Mandatory Qualifications***

- Each IV&V Team Member must have a minimum of thirty-six (36) months experience performing the duties necessary to complete one or more phases (e.g., project management, planning, development, testing, implementation) of a full system, product or service development lifecycle.
- At least 50% of the IV&V Team Members must have a minimum of twenty-four (24) months cumulative experience within the past seven (7) years performing audit level IV&V reviews.
- At least one IV&V Team Member must have a Project Management Professional (PMP) Certification.
- At least one IV&V Team Member must have a minimum of one (1) previous engagement managing an IV&V review whose scope included meeting Federal or State administrative and technical regulations.

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At a more detailed level, the IV&V Team Members must collectively demonstrate the individual knowledge and experience to:

- Analyze project management; work breakdown structure development and execution, schedule development and execution, resource planning and management, budget formulation and execution, workflow management and reporting, progress tracking.
- Review and analyze project management planning documents; e.g., Project Plan Executive Summary, Project Performance Plan, Work Breakdown Structure, Resource Plan, Project Schedule, Budget Plan, Procurement Plan, Risk Management Plan, Communications Plan, Change and Configuration Management Plan, Quality Management Plan.
- Review and analyze project product development documents; e.g., Project Status Reports; Change Control Requests; Issue Log; and Issue management documentation.
- Review and monitor development processes, procedures and practices to ensure they are being documented, implemented, and analyzed for improvement.
- Assess the project's Configuration Management function by reviewing CM reports and making recommendations regarding appropriate processes and tools to manage product changes.
- Assess the project's Quality Management function by reviewing QM reports and making recommendations regarding appropriate processes, procedures, practices and tools to assure product quality.
- Assess the project's Risk Management function by reviewing RM reports and making recommendations regarding appropriate processes, procedures, practices and tools to manage product planning, development, and implementation risks.
- Perform a detailed review of project deliverables and acceptance criteria for accuracy, completeness, and adherence to contractual and functional requirements.
- Perform a detailed review of the product documentation (Requirements, Design, Training, Test, and Management Plans, etc.) for accuracy, completeness, and currency.
- Perform a detailed review of the product architecture for feasibility, consistency, and adherence to industry, Federal or Commonwealth standards.
- Inventory and review application software for completeness and adherence to programming standards for the project.
- Analyze application, network, hardware and software operating platform performance characteristics relative to expected/anticipated/contractually guaranteed results and industry standards.

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- Review the processes, procedures and practices used within the project for tracking business and technical requirements to their source and review the processes, procedures and practices established during the planning phase for requirements traceability throughout the subsequent development and implementation phases.
- Review the traceability of product requirements through the design, development, testing, and training tasks of the project.
- Assess and recommend improvement, as needed, to assure the planned operations and maintenance performance of the product.
- Assess and recommend improvement, as needed, to assure product testing is being performed adequately through review of test plans or other documentation and through direct observation of testing where appropriate.
- Assess and recommend improvement, as needed, to assure appropriate user and developer training is planned for and carried out.
- Review product hardware and software configurations and report on any compatibility and obsolescence issues.
- Review and analyze product performance studies to determine if the product is performing as planned.
- Effectively document IV&V review findings and recommendations.

### ***IV &V Team Members Desirable Qualifications***

- Each IV&V Team Member has a minimum of one (1) full-technical (software and hardware) IV&V review.
- A minimum of 4,000 hours experience within the past ten (10) years in risk assessment and mitigation strategy/technique development. The hours of experience do not need to be continuous.
- A minimum of 14,000 hours development experience within the past fifteen (15) years in the full system, product or service development lifecycle. The hours of experience do not need to be continuous.
- Each IV&V Team Member has a minimum of eighty-four (84) months experience performing the duties of a system analyst.

Dependent upon the nature of the project being reviewed, it is desirable that at least one IV&V Team Member have:

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- A minimum of eighty-four (84) months development experience in the full software development lifecycle.
- A minimum of eighty-four (84) months experience performing the duties of a system analyst.
- A minimum of eighty-four (84) months Mainframe experience.
- A minimum of forty-eight (48) months experience in nTier development.
- A minimum of thirty-six (36) months database experience at both the conceptual and detail level. Including a minimum of one project of twelve months duration.
- A minimum of sixty (60) months client/server experience.