## Attachment L: Consulting Services Labor Categories and Experience Requirements

The State will make a determination of the one appropriate labor category prior to release of the TO. A TO will address the specific process/scope requirements of the project tasks. The following section describes the labor categories to be provided (at the State's option) under this RFP:

## 1. Program Manager

**Duties:** The Program Manager serves as the single point of contact for the Contractor with the State regarding the Contract. Performs overall management for Contract support operations. Organizes, directs, and coordinates the planning and production of all Contract activities, projects and support activities, including those of subcontractors. Oversees the development of or develops work breakdown structures, charts, tables, graphs, major milestone calendars and diagrams to assist in analyzing problems and making recommendations. Demonstrates excellent written and verbal communications skills. Establishes and alters program management structure to direct effective and efficient Contract support activities.

**Education:** Bachelor's Degree from an accredited college or university in Engineering, Computer Science, Information Systems, Business or other related discipline. Master's degree and/or project management certification is preferred.

General Experience: At least twelve (12) years of experience in program or project management.

**Specialized Experience:** At least eight (8) years of experience in supervision or oversight of IT related programs or projects.

# 2. Project Manager

**Duties:** The Project Manager is assigned the management of a specific project and the work performed under assigned Task Orders (TO). Performs day-to-day management of the project, identifies issues and risks and recommends possible issue and risk mitigation strategies associated with the project. Acts as a facilitator between the State and Contractor. Is responsible for ensuring that work performed under TOs is within scope, consistent with requirements, and delivered on time and on budget. Identifies critical paths, tasks, dates, testing, and acceptance criteria. Provides solutions to improve efficiency (e.g., reduce costs while maintaining or improving performance levels). Monitors issues and provides resolutions for up-to-date status reports. Demonstrates excellent writing and oral communications skills.

**Education:** Bachelor's Degree from an accredited college or university in Engineering, Computer Science, Information Systems, Business or other related discipline. Master's degree or project management certification is preferred.

General Experience: At least five (5) years of experience in project management.

**Specialized Experience:** At least five (5) years of experience in managing IT related projects and must demonstrate a leadership role in at least three successful projects that were delivered on time and on budget.

### 3. Senior Subject Matter Expert

**Duties:** The area of expertise may be related to a specific discipline required by the State including information technology and human capital management. Requires expertise in the formulation of specifications and in the execution of technical initiatives in vertical areas. Defines requirements, performs analysis, and develops plans and requirements for systems.

**Education:** Bachelor's Degree from an accredited college or university in the specific discipline required by the State. A Master's Degree or Ph.D. Degree is preferred.

**General Experience:** At least twelve (12) years of relevant industry experience in the discipline is required.

**Specialized Experience:** At least ten (10) years of experience in the IT field directly related to the required area of expertise.

#### 4. Subject Matter Expert

**Duties:** Defines the problems and analyzes and develops plans and requirements in the subject matter area for moderately-complex to complex systems. Coordinates and manages the preparation of analysis, evaluations, and recommendations for proper implementation of programs and systems specifications including information technology and human capital management.

**Education:** A Bachelor's Degree from an accredited college or university with a major in Computer Science, Information Systems, Engineering, Business, or other related scientific or technical discipline. A Master's Degree is preferred. A Master's Degree in one of the above disciplines equals one year specialized and two years general experience.

General Experience: Must have seven (7) years of experience.

**Specialized Experience:** At least five (5) years of experience in the IT field directly related to the required area of expertise.

### 5. Applications Integration Expert

**Duties:** Provides design recommendations based on long-term IT organization strategy. Develops enterprise level application and custom integration solutions including major enhancements and interfaces, functions and features. Uses a variety of platforms to provide automated systems applications to customers. Provides expertise regarding the integration of applications across the business. Determines specifications, then plans, designs, and develops the most complex and business critical software solutions, utilizing appropriate software engineering processes – either individually or in concert with a project team. Will assist in the most difficult support problems.

Develops programming and development standards and procedures as well as programming architectures for code reuse. Has in-depth knowledge of state-of-the art programming languages and object-oriented approach in designing, coding, testing and debugging programs. Understands and consistently applies the attributes and processes of current application development methodologies. Researches and maintains knowledge in emerging technologies and possible application to the business. Viewed both internally and externally as a technical expert and critical technical resource across multiple disciplines. Acts as an internal consultant, advocate, mentor and change agent.

**Education:** Preference for a Bachelor's or Master's Degree in Computer Science, Information Systems, or other related field or equivalent work experience.

General Experience: At least seven (7) years of IT and business/industry work experience.

**Specialized Experience:** At least three (3) years as Technical expert in IT organization. Coaches and mentors more junior technical staff. Provides technical input into the most complex and high impact IT decisions. Accountable for the most complex enterprise-wide applications and issues, translating highly complex concepts for peers and customers.

## 6. Senior Integration Analyst

**Duties:** Must be knowledgeable in performing requirements analysis for a wide range of users in areas such as office automation, and finance and accounting. Must be able to present system designs for user approval at formal reviews. Must be capable of performing configuration management, software integration, interpreting software test results, and recommending solutions for unsatisfactory test results. Must be knowledgeable in project life-cycle support, including maintenance, administration, and management. Must be able to provide solutions to identified software problem reports.

**Education:** A Bachelor's Degree from an accredited college or university with a major in Computer Science, Information Systems, Engineering, Business, or other related scientific or technical discipline. A Master's Degree is preferred. A Master's Degree in one of the above disciplines equals one year specialized and two years general experience.

**General Experience:** Must have eight (8) years of progressive working experience as a computer specialist or a computer systems analyst.

Specialized Experience: At least five (5) years of experience as a Computer Systems Analysts.

# 7. Senior IT Professional

**Duties:** Identifies strategic issues for the Information Management Department and advises IT Senior Management of the risks and/or opportunities created by these issues. Issues will be centered on IT measurements and IT project management. IT measurements will encompass the refining or creating of measures related to value creation of IT products and services. Project Management will include presenting recommendations on ways of managing projects more effectively (including, but not limited to: appropriate methodology and quality reviews) Accountabilities include coordinating input from

various IT departments to develop recommendations, conducting analyses of issues and ensuring adequate communication of the endorsed positions and recommendations to stakeholders.

**Education:** Bachelor's Degree from an accredited college or university in Engineering, Computer Science, Information Systems, Business, Mathematics or a related technical or business field. A Master's degree is preferred.

General Experience: At least eight (8) years of relevant industry experience in the discipline required.

#### 8. Senior Database Management Specialist

**Duties:** Must be capable of providing highly technical expertise and support in the use of DOITS. Must be able to evaluate and recommend available DOITS products to support validated user requirements. Defines file organization, indexing methods, and security procedures for specific user applications. Develops, implements, and maintains database back-up and recovery procedures for the processing environments, and ensures that data integrity, security, and recoverability are built into the DOITS applications.

**Education:** A Bachelor's Degree from an accredited college or university with a major in Computer Science, Information Systems, Engineering, Business, or other related scientific or technical discipline or three (3) years of equivalent experience in a related field. A Master's Degree in one of the above disciplines equals one year specialized and two years general experience.

**General Experience:** Must have six (6) years experience in DOITS systems analysis and programming.

**Specialized Experience:** At least three (3) years of experience in using current DOITS technologies, application design utilizing various database management systems and experience with DOITS internals.

#### 9. Junior Database Management Specialist

**Duties:** Must be capable of providing highly technical expertise and support in the use of DOITS. Must be able to evaluate and recommend available DOITS products to support validated user requirements. Defines file organization, indexing methods, and security procedures for specific user applications. Develops, implements, and maintains database back-up and recovery procedures for the processing environments, and ensures that data integrity, security, and recoverability are built into the DOITS applications.

**Education:** A Bachelor's Degree from an accredited college or university with a major in Computer Science, Information Systems, Engineering, Business, or other related scientific or technical discipline or three (3) years of equivalent experience in a related field. A Master's Degree in one of the above disciplines equals one year specialized and two years general experience.

**General Experience:** Must have three (3) years experience in DOITS systems analysis and programming.

**Specialized Experience:** At least one (1) years of experience in using current DOITS technologies, application design utilizing various database management systems and experience with DOITS internals.

### 10. Quality Assurance Manager

**Duties:** Must be capable of maintaining and establishing a process for evaluating software and associated documentation. Must be able to determine the resources required for quality control. Must be able to maintain the level of quality throughout the software life cycle. Develops software quality assurance plans. Conducts formal and informal reviews at predetermined points throughout the development life cycle.

**Education:** A Bachelor's Degree from an accredited college or university with a major in Computer Science, Information Systems, Engineering, Business, or other related scientific or technical discipline. A Master's Degree is preferred. A Master's Degree in one of the above disciplines equals one year specialized and two years general experience.

General Experience: Must have six (6) years of experience in quality assurance and quality control.

**Specialized Experience:** At least three (3) years of experience in verification and validation, software testing and integration, software metrics, and their application to software quality assessment.

## **11. Senior Quality Assurance Consultant**

**Duties:** Provides quality management for information systems using the standard methodologies, techniques, and metrics for assuring product quality and key activities in quality management. Establish capable processes, monitoring and control of critical processes and product mechanisms for feedback of performance, implementation of an effective root cause analysis and corrective action system, and continuous process improvement. Provides strategic quality plans in targeted areas of the organization. Provides QA strategies to ensure continuous production of products consistent with established industry standards, government regulations and customer requirements. Develops and implements life cycle and QA methodologies and educates, and implements QA metrics.

**Education:** Bachelor's Degree from an accredited college or university in Engineering, Computer Science, Information Systems or other related discipline. A Master's degree preferred.

General Experience: At least eight (8) years information systems quality assurance experience.

**Specialized Experience:** At least five (5) years experience working with statistical methods and quality standards. Must have good QA/process knowledge and possess superior written and verbal communication skills.

# **12. Quality Assurance Specialist**

**Duties:** Must be able to determine the resources required for quality control. Must be able to maintain the level of quality throughout the software life cycle. Develops software quality assurance plans. Must be capable of maintaining and establishing a process for evaluating software and associated documentation. Participates in formal and informal reviews at predetermined points throughout the

development life cycle to determine quality. Examines and evaluates the software quality assurance (SQA) process and recommends enhancements and modifications. Develops quality standards.

**Education:** A Bachelor's Degree from an accredited college or university with a major in Computer Science, Information Systems, Engineering, Business, or other related scientific or technical discipline. A Master's Degree in one of the above disciplines equals one year specialized and two years general experience.

**General Experience:** Must have five (5) years of experience working with quality control methods and tools.

**Specialized Experience:** At least three (3) years of experience in verification and validation, software testing and integration, software metrics, and their application to software quality assessment, and a demonstrated knowledge of system and project life cycles.

## **13. Testing Specialist**

**Duties:** Must be capable of designing and executing IT software tests and evaluating results to ensure compliance with applicable regulations. Must be able to prepare test scripts and all required test documentation. Must be able to design and prepare all needed test data. Analyzes internal security within systems. Reviews test results and evaluates for conformance to design.

**Education:** A Bachelor's Degree from an accredited college or university with a major in Computer Science, Information Systems, Engineering, Business, or other related scientific or technical discipline or three (3) years of equivalent experience in a related field. A Master's Degree is preferred. A Master's Degree in one of the above disciplines equals one year specialized and two years general experience.

General Experience: Must have 4 years of experience in computer software development.

Specialized Experience: At least 2 years of software testing experience (integration and acceptance).

### 14. Training Specialist/Instructor

**Duties:** Conducts the research necessary to develop and revise training courses and prepares appropriate training catalogs. Prepares all instructor materials (course outline, background material, and training aids). Prepares all student materials (course manuals, workbooks, handouts, completion certificates, and course critique forms). Trains personnel by conducting formal classroom courses, workshops, and seminars.

**Education:** A Bachelor's Degree from an accredited college or university with a major in Education/Training in the areas of Computer Science, Information Systems, Engineering, Business, or other related scientific or technical discipline. A Master's Degree is preferred. A Master's Degree in one of the above disciplines equals one year specialized and two years general experience.

**General Experience:** Must have 4 years of experience in information systems development, training, or related fields.

**Specialized Experience:** At least 2 years of experience in developing and providing IT and end user training on computer hardware and application software.

# **15. Solution Architect**

**Duties:** Manages major projects that involve providing professional support services and/or the integration, implementation and transition of large, complex systems. Provides design and development of e-government solutions, and is responsible for technical design and implementation of the architecture. Provides expertise in modeling and organizing information to facilitate support of projects or information architectures. Provides guidance on how and what to data and process model. Provides experience in web application technologies and middleware solutions. Researches new technologies and products for their applicability to business processes. Must be able to compare various solutions and determine the most suitable. Ensures that development efforts are well planned and in agreement with standards. Also deals with transition planning from legacy to modern systems by concentrating on information flows, data exchange, and data translation standardization services.

**Education:** Bachelor's Degree from an accredited college or university in Engineering, Computer Science, Mathematics or other related scientific or technical discipline. Master's degree preferred.

**General Experience:** At least ten (10) years of experience planning, designing, building, and implementing IT application systems. Must have led or been chief architect in a major IT applications implementation effort.

**Specialized Experience:** At least six (6) years of experience in designing medium to large-scale and management of at least two projects.

# **16. Senior Application Security Specialist**

**Duties:** Analyzes and defines security requirements for Multilevel Security (MLS) issues. Designs, develops, engineers, and implements solutions to MLS requirements. Responsible for the implementation and development of the MLS. Gathers and organizes technical information about an organization's mission goals and needs, existing security products, and ongoing programs in the MLS arena. Performs risk analyses, which also include risk assessment. Provides daily supervision and direction to staff.

**Education:** A Bachelor's Degree from an accredited college or university with a major in Computer Science, Information Systems, Engineering, Business, or other related scientific or technical discipline. A Master's Degree is preferred. A Master's Degree in one of the above disciplines equals one year specialized and two years general experience.

**General Experience:** This position requires a minimum of eight (8) years of experience in analysis and definition of security requirements.

**Specialized Experience:** At least five (5) years of specialized experience in defining computer security requirements for high-level applications, evaluation of approved security product capabilities, and developing solutions to MLS problems.

### **17. Application Security Specialist**

**Duties:** Analyzes and defines security requirements for MLS issues. Designs, develops, engineers, and implements solutions to MLS requirements. Gathers and organizes technical information about an agency's mission goals and needs, existing security products, and ongoing programs in the MLS arena. Performs risk analyses, which also include risk assessment. Provides daily direction to staff.

**Education:** A Bachelor's Degree from an accredited college or university with a major in Computer Science, Information Systems, Engineering, Business, or other related scientific or technical discipline or four (4) years of equivalent experience in a related field. A Master's Degree in one of the above disciplines equals one year specialized and two years general experience.

**General Experience:** This position requires a minimum of six (6) years of experience in analysis and definition of security requirements.

**Specialized Experience:** At least four (4) years of specialized experience in defining computer security requirements for high-level applications, evaluation of approved security product capabilities, and developing solutions to MLS problems.

#### **18. Business Process Consultant**

**Duties:** Develops business requirements and business processes re-engineering methodologies. Solves application and process related problems by creating detail process and system design specifications; and works with other areas across the business units to support a total solution approach. Communicates business requirements for reports and applications development. Facilitates collaboration within and across business units and across IT functions. Resolves problems and improves business units' technical environments.

**Education:** Bachelor's Degree from an accredited college or university in Business, Human Resources Management or a related field. An MBA or MPA is preferred.

General Experience: At least eight (8) years experience in business process re-engineering.

**Specialized Experience:** At least five (5) years of experience in reengineering large scale business processes.