

### **Category 1: IBM Host Systems Support**

Services shall include configuration design, installation, maintenance, modification, monitoring and/or evaluation of operating systems and secondary support software for the State's IBM host computers and associated utility software. Contractors will provide consulting in license evaluation, software selection, configuration, installation for, software interaction issues, and/or assessments of the State's IBM mainframe environment.

#### **Technologies and Services of Interest:**

- \*IBM Operating System and components
- \*CICS Systems Support
- Adabas, Natural, Broker and associated Software AG products
- \*CA Product Support
- \*ASG Product Support

Additional Offeror Qualifications: Not applicable.

Additional Staff Qualifications: \*All staff (except for the staff proposed for Adabas, Natural, Broker and associated Software AG products) must demonstrate proficiency in IBM Assembler language programming and use of SMP.

### **Category 2: Windows Servers Systems Support**

Services shall include configuration design, installation, maintenance, modification, and evaluation and administration of operating systems and application server software for the technologies listed below for the State's Mid-Range server computers, associated utility software and application server software. Primary responsibilities are to perform pre-installation planning activities, install, monitor, and perform problem determination and resolution, system level management and software maintenance. Experience with other LAN operating systems is desirable and experience with multiple protocols, topologies and architectures is preferred.

#### **Technologies and Services of Interest:**

- Microsoft Windows Server OS
- AD – Active Directory
- Exchange
- IIS – Internet Information Server
- ISA – Internet Security Appliance
- MIIS – Microsoft Identity Integration Server
- Database Administration
- ADFS – Active Directory Federation Services
- ADAM – Active Directory Application Mode
- WSUS – Windows Software Update Services
- BizTalk Server
- DNS
- Domain Migration and Configuration (MS Active Directory)
- File and print services
- Network Security design and implementation

- Mid-Tier Network Capacity Planning
- LANDesk
- Storage Management
- Microsoft SharePoint

Additional Offeror Qualifications: Not applicable.

Additional Staff Qualifications: Not applicable.

**Category 3: Non- Windows Servers Systems Support**

Services shall include configuration design, installation, maintenance, modification, and evaluation and administration of operating systems and application server software for the technologies listed below for the State's Mid-Range server computers, associated utility software and application server software. Primary responsibilities are to perform pre-installation planning activities, install, monitor, and perform problem determination and resolution, system level management and software maintenance. Experience with other LAN operating systems is desirable and experience with multiple protocols, topologies and architectures is preferred. These server OS's include, but are not limited to, Solaris, Unix, Linux, and Netware.

**Technologies and Services of Interest:**

- Solaris
- Linux
- Netware
- UNIX
- Apache Web Server
- UNIX Web Servers
- SUN Microsystems (iPlanet Messaging, Directory, Web Servers)
- IBM Websphere
- Database Administration
- Cold Fusion
- DNS
- Domain Migration and Configuration (MS Active Directory)
- File and print services
- Network Security design and implementation
- Mid-Tier Network Capacity Planning
- UNIX Shell Programming
- Storage Management
- Microsoft SharePoint

Additional Offeror Qualifications: Not applicable.

Additional Staff Qualifications: Not applicable.

#### **Category 4: Data Center Consulting**

Provide consulting services related to data center assessments, capacity and acquisition planning, performance tuning, data center production efficiency, disaster recovery planning, physical data center security, benchmarking, and software licensing/product review.

#### **Technologies and Services of Interest:**

- Capacity Planning
- Facilities Planning
- Site Assessment
- Disaster Recovery & Business Continuity Resumption

Additional Offeror Qualifications: Experience with enterprise facilities comparable to the State of Alaska's Juneau Data center (Tier 4 as defined by the Uptime Institute).

Additional Staff Qualifications: Not applicable.

#### **Category 5: Security Consulting**

Provide security services, solutions and processes as they relate to telecommunication and information technology security. Security related tasks such as documentation, assessment, design, probes, audits and provide hands-on technology assistance with network and system security, processes and the development of policy recommendations.

Provide "real life" solutions and services based on the Security Domain Principals taught within the Certified Information Systems Security Professional (CISSP) certification program.

#### ***Category 5 Security Consulting has 5 SubCategories***

#### **Subcategory 1 -Access Control and Application Security**

Provide Security solutions for Access Control

1. Access Control
  - a. Identify, Verify, Authorize
  - b. Accountability
  - c. Access Controls
    - i. Discretionary
    - ii. Mandatory
  - d. Lattices
  - e. Methods of Attack
2. Application Security
  - a. Application development issues
  - b. Agents and applets
  - c. Data warehousing concepts
  - d. Artificial Intelligence (AI) systems
  - e. System Development "life-cycle and security" models

Subcategory 2 -Business Continuity and Disaster Recovery Planning / Legal, Regulations, Compliance and Investigations

1. Business Continuity and Disaster Recovery Planning
  - a. Business Continuity Planning (BCP)
  - b. Business Impact Analysis
  - c. Business Resumption Planning
  - d. Contingency Planning
  - e. Continuity of Operations Planning (COOP)
  - f. Critical Systems Planning
  - g. Critical Business Function Planning
  - h. Incident Response Planning
  - i. Disaster Recovery Planning
  
2. Legal, Regulations, Compliance and Investigations
  - a. Regulation and Compliance
  - b. Ethics
  - c. Laws
  - d. Computer Fraud and Abuse Act
    - i. State Computer Related Statutes
  - e. Proprietary Rights and Obligations
  - f. Software Licensing Issues
  - g. Criminal, Civil and Administrative Law
  - h. Legal Liability
  - i. Investigative Steps

#### Subcategory 3 -Information Security and Risk Management; Cryptography

1. Information Security and Risk Management
  - a. Security management concepts
  - b. Non-repudiation techniques and solutions
  - c. Security policies and procedures
  - d. Data Classification
  - e. Security Awareness and Training
  
2. Cryptography
  - a. Basic Cryptographic Concepts
  - b. Application of Public and Private Key Algorithms
  - c. Key distribution and Management
  - d. Methods of Attack
  - e. Digital Signatures

#### Subcategory 4 -Operations Security and Physical (Environmental) Security

1. Operations Security
  - a. Legal
  - b. Administrative
  - c. Operational Controls
  - d. Monitoring
  - e. Auditing
  - f. Reporting

- g. Roles and Responsibilities
- 2. Physical (Environmental) Security
  - a. Significant of Physical Security
    - i. Personal Safety
    - ii. Authorized Access
    - iii. Equipment Protection
    - iv. Information Protection
    - v. Availability
  - b. Deterrent Controls
  - c. Detective Controls
  - d. Preventive Controls
  - e. Administrative Controls

Subcategory 5 - Security Architecture and Design; Telecommunications and Network Security

- 1. Security Architecture and Design
  - a. Hardware
  - b. Firmware
  - c. Trusted Computing Base
  - d. Assurance Models
- 2. Telecommunication and Network Security
  - a. OSI and TCP Protocol Stacks
  - b. Communication media
  - c. Network Security
  - d. Firewalls, routers, Network Intrusion Prevention and general network devices
  - e. Secure Networks

Additional Offeror Qualifications. Must clearly understanding of how the National Institute of Standards and Technology are applied to government and be versed in the practical application of ISO 17799 and ISO 27001 security standards.

Additional Staff Qualifications: Individual(s) providing security services must possess certification as a Certified Information Systems Security Professional (CISSP) or Certified Information Security Manager (CISM). They must be able to demonstrate the practical application, in the “real life” deployment, of security solutions within the security domain principals of the CISSP certification. Solutions recommended or deployed must meet or exceed Federal, State and Industry requirements and must fully comply with the State’s Governance structure, policies, procedures, and directives.

Individuals must demonstrate system security administration skills, such as Microsoft OS, Sun Solaris, and/or LINUX, Cisco IOS, multiple enterprise class firewall technologies, security event logging, security event correlation, system hardening, heuristic based security solutions, proxy and wireless security services, policy development, security auditing, risk management, or other specialized security solutions and principle. Demonstrating a strong understanding of Cisco Security Solutions is also required.

**Category 6: IT Management Consulting**

Offerer will provide guidance for senior managers in strategic analysis, process management, and financial planning.

**Technologies and Services of Interest:**

- ITIL framework and methodology
- IT Strategic Planning (review of the organizations environment, setting strategic goals and their related objectives and defining an operational, management or annual plan)
- IT Financial Management (based cost management, asset management, benchmarking, capital budgeting, chargeback, contract management, cost accounting, cost allocation, expense management and financial planning & reporting)

Additional Offeror Qualifications: Not applicable.

Additional Staff Qualifications: Not applicable.

**Category 7: IT Procurement and Grant Services**

Contractors will provide services to assist state agencies in defining, identifying, procuring, analyzing, selecting and negotiating, creating, and managing contracts for IT services, software and hardware. [Note: under this Category contractors will not be allowed to serve as the procurement authority and actually conduct procurements on behalf of the state.]

**Technologies and Services of Interest:**

- Grant writing
- Scope definition
- Technology RFP development
- Business application procurement
- Industry and products research
- Contract negotiation assistance
- Contract administration assistance
- Contract development

Additional Offeror Qualifications: Offerors must demonstrate experience providing this type of procurement assistance from the government side of the process in excess of the State's limit on small procurements (\$50,000). Familiarity with Alaska's Procurement Code, regulations, and policies is preferred.

Additional Staff Qualifications: Not applicable.

**Category 8: OS390 and Z/OS Mainframe Application Analysis, Design, and Programming**

Analysis and programming for mainframe applications programming covers the majority of language constructs currently in use at the State of Alaska. Services include requirements analysis, detailed specifications, programming, deployment, and maintenance of computer applications. Application development includes the complete life cycle involved in producing a computer application.

**Technologies and Services of Interest:**

- Software AG Products and associated tools and features
- ADABAS Performance Analysis System (APAS)
- IBM's CICS Transaction Server & associated tools and features
- IBM's C & C++
- IBM's COBOL for z/OS
- IBM's DB2 Universal Database for z/OS & associated tools and features
- IBM's Debug tool
- IBM's Fault Analyzer
- IBM's High Level Assembler & Toolkit feature
- IBM's ISPF Productivity Tool
- IBM's Migration Utility for z/OS
- IBM's Tivoli and associated tools and features
- IBM's Websphere Application Server & associated products
- IBM's z/OS & associated products
- IBM's z/OS communication server
- IBM's z/VM & associated products
- SAS

Additional Offeror Qualifications: Not applicable.

Additional Staff Qualifications: Not applicable.

**Category 9: Distributed Application Analysis, Design, and Programming**

Analysis and programming for distributed systems application development for the State of Alaska. Services include requirements analysis, detailed specifications, programming, deployment, and maintenance of computer applications. Application development includes the complete life cycle involved in producing a computer application.

**Technologies and Services of Interest:**

- Requirements analysis and detailed specifications
- Data modeling
- Logical and physical database design
- Data warehouse analysis
- Web application programming
- Web application user interface programming (thin or thick clients with dynamic HTML and interaction with server side code and data)
- Client-server application analysis and programming
- Object oriented language analysis and programming

- SQL programming (SQL Server or Oracle)
- LDAP interfaces
- XML(SOAP, XSLT, SAML, DOM) expertise
- Documentation

Additional Offeror Qualifications: Not applicable.

Additional Staff Qualifications: Not applicable.

**Category 10 Document Management, Image Management, & Content Management**

Provide consulting support for the full spectrum of services for document, records, imaging, and content management solutions. This may include, but is not limited to, requirements definition, architecture determination, product evaluation, systems and workflow analysis, detail design, installation, configuration, applications implementation, programming, training, and ongoing operational support for maintenance, capacity planning, administration, and troubleshooting.

**Technologies and Services of Interest:**

- Stellent products
- Document and Data capture services
- Imaging Management
- Content management
- Records Management
- Kofax Ascent Capture

Additional Offeror Qualifications: Offerors may add Kofax to their list of services provided they can demonstrate substantial prior experience in this area. Substantial experience means at least 1 mid-sized content management project of duration greater than three (3) months that for which the Firm had Kofax implementation responsibility within the last two (2) years.

Additional Staff Qualifications: Not applicable.



### **Category 11: Geographic and Spatial Information Systems**

Services in this category generally fall into two areas:

Services related to data genesis, manipulation, and hardcopy representation and services related to Systems, Database, Application design and development. These may include effectively handling a variety of data (topographic, hydrologic, geologic, environmental, population, land ownership, etc.) to meet needs specified by Task Order. Offerors must be able to interpret statistical geographical data on environmental resources in ways relevant to borough, municipal and regional planning.

#### **Technologies and Services of Interest:**

- Spatial data migration, transformation and integration
- Acquisition ( data collection, aerial photography, satellite imaging)
- Map production
- Analytical spatial services
- Commercial product training
- Problem analysis & solution recommendation
- Systems, database, and application design & development
- Commercial product mentoring
- GIS database and application design & development
- ESRI
- Oracle Spatial

Additional Offeror Qualifications: Not applicable.

Additional Staff Qualifications: Not applicable.

### **Category 12: Project Management**

Project Managers will provide management of integration, scope, time, cost, quality, human resources, communication and risks for IT related projects.

#### **Technologies and Services of Interest:**

- PMI

Additional Offeror Qualifications: Must show familiarity with IEEE 1058.1-1998.

Additional Staff Qualifications: Certified Project Managers with a level of certification comparable to the Project Management Institute PMP certification.

### **Category 13: Quality Assurance**

This category includes QA planning, the writing of test plans, personnel to manually test systems, software to remotely test networks or exposed web sites, design and programming resources to write automated test scripts, or training in testing modalities. Types of quality assurance testing include functional, security, and performance testing

#### **Technologies and Services of Interest:**

- Creation of test scenarios
- Creation of processes
- Organizational planning
- System testing