

Glossary of Terms For Categories Of Expertise

Vendor must qualify to provide Consulting, and/or Systems Integration and/or Training and/or On-Going Services, Maintenance & Support services for at least one (1) platform-specific Category of Expertise (Applications Development and Systems Management) **OR** for one (1) non-platform specific Category of Expertise (Business Process Re-Engineering, Imaging, Year 2000, etc.) Vendor's qualifications must be set forth on the form provided in Appendix C, Part I, Mandatory Vendor Submissions, entitled: "Vendor Declaration of Expertise Matrix", along with supporting documentation for each Category of Expertise and Type of Service. Vendor may amend its contract at any time to expand or reduce the Categories of Expertise and/or Types of Services for which it is qualified. Refer to Section VI.7.

The State reserves the right at any time to revise or expand the Categories of Expertise set forth below in response to changes in technology needs. (Refer to Section III.27 Emerging Technologies of this RFP.)

II.5.1 Platform Specific Categories of Expertise

Vendors may qualify for as many of the Platform Specific and non-Platform Specific categories of expertise by providing substantiating documentation as required in Appendix C, Part I, Mandatory Vendor Submissions or as few as one (1) Category of Expertise.

II.5.1.1 Applications Development

Applications development is defined as development and modification of applications software programs within one or more of the various Platform Specific Mainframe (MF), Mid-Range (MR), or PC environments. Must include experience and knowledge within any one or all of the following various platforms to be considered as a Mainframe, Mid-Range, or PC qualified Contractor. These platforms include but are not limited to:

<u>MF</u>	<u>MR</u>	<u>PC</u>
IBM (MVS, VM) UNISYS (2200, A Series)	AS400 UNIX DEC SUN HP	WINDOWS/NT NETWARE OS/2

II.5.1.2 Systems Management

Systems management includes consulting services pertaining to the planning, programming, management and operation of systems, procedures and guidelines (technical manuals, user manuals, etc.) technical manuals, user manuals, etc.) that work to maintain the on-going operational performance of programs (software) and

the hardware on which the programs run within the Mainframe, Mid-Range, or PC environments with platforms that include but are not limited to:

<u>MF</u>	<u>MR</u>	<u>PC</u>
IBM (MVS, VM) UNISYS (2200, A Series)	AS400 UNIX DEC SUN HP	WINDOWS/NT NETWARE OS/2

An Issuing Entity may request from an external provider the on-going, maintenance, & support of systems either as a part of a newly developed system or application (analysis, design, implementation, support and maintenance) or as a standalone post-implementation request (e.g. Data Center support/operations). The industry has referred to such providers as Application Service Providers (ASPs) and Application Development & Maintenance Services. The specifics of such services will be defined in the Project Specifications/Definition released by the Issuing Entity.

II.5.2 Non-Platform Specific Categories of Expertise

Includes services pertaining to each of the following technical areas:

II.5.2.1 Business Process Analysis (BPA) and Business Process Re-Engineering (BPR) [14.2.1]

Increasing competition and demands for better service are causing enterprises and agencies to evolve and re-engineer the way they do business and operate. Business Process Analysis (BPA) and Business Process Re-engineering (BPR) services focus on identifying target processes, maximizing efficiencies, managing change and leveraging technology investments to re-engineer the enterprise business functions. These services include a complete rethinking and redesigning of the enterprise from the business management and decision-making processes, through the supporting IT systems, to the underlying business transformation processes themselves.

II.5.2.2 Computer-Aided Design & Drafting (CADD)

CADD, Computer-aided Design and Drafting, is a customizable software tool, sometimes combined with specialized hardware, used to facilitate tasks involved with the design and drafting of products. Products can range from buildings to automobiles to silverware. CADD utilizes 2-D and 3-D graphics to speed the usually labor-intensive design tasks and thus allows designers more time to spend on design changes and improvements. CADD, through viewing and rendering, provides the ability to analyze and design a system prior to its actual development and also facilitates the sharing of design details among the various design platforms.

An Issuing Entity may request from an external provider the on-going maintenance, & support of its CADD systems. The specifics of such services will be defined in the Project Specifications/Definition.

II.5.2.3 Data Conversion

Data Conversion includes the process of changing data from one form of representation to another within various mainframe, mid-range, and PC environments.

II.5.2.4 Desk Top Asset Management

Desktop Asset Management services encompass the creation of a managed life cycle for desktop computer products (including mobile computers), the ability to control cost of ownership and the ability to manage service levels. The functional services include consulting in regard to procurement, break and fix maintenance, inventory control, help desk services, management of moves and changes, network services (LAN/WAN), financial management of all desktop assets, disposal services, and problem and change management. Also included is software management, which involves the key elements of inventory, distribution, and license management. Applications development for desktop systems may also be included.

An Issuing Entity may request from an external provider the on-going maintenance, & support of its Desktop Assets. The specifics of such services will be defined in the Project Specifications/Definition.

II.5.2.5 Electronic Commerce (EC) and Electronic Data Interchange (EDI)

Electronic Commerce (EC) refers to business transactions done electronically over networks and through computers instead of through the mail, in person, etc. EC also includes all inter-company and intra-company functions (such as marketing, finance, manufacturing, selling, and negotiation) that enable commerce and use electronic data interchange (EDI), Internet applications, on-line services, electronic forms (E-forms), electronic mail, file transfer, fax, video conferencing, workflow, or interaction with a remote computer. Electronic data interchange (EDI) is the exchange of standardized document forms between computer systems for business use.

An Issuing Entity may request from an external provider the on-going, maintenance, & support of its electronic, inter-organizational business networks. The specifics of such services will be defined in the Project Specifications/Definition.

II.5.2.6 Electronic Output Management

Electronic Output Management encompasses the management of electronic transferred output. It focuses on computer output to laser disc (COLD); hard

copy output production, including distributed print and distributed output management; electronic forms; COM and/or COM-replacement and paper reduction strategies, including report distribution systems (RDSs), viewers and application development tools for production output. A common method of pricing such services is based on a "Fully Loaded Price Per Page". The Pricing Designation Page has been included in this RFP to accommodate this pricing scheme. . Refer to the category of Imaging Services, II.5.2.10, as another category that may address Imaging needs depending on the scope of services required.

An Issuing Entity may request from an external provider the gamut of Document Management Services that include but may not be limited to:

- a) Planning and Designing of a document systems solutions
- b) Identifying resources, processes and applications to enable a document management system
- c) Performing troubleshooting, third party equipment management, production support related to the operation and use of document management equipment in production of the document applications
- d) Providing Records Management Services that include indexing, filing, refilling and retrieval from on and of-site locations

The specifics of such services will be defined in the Project Specifications/Definition.

II.5.2.7 Equipment Maintenance (EM)

II.5.2.7.1 General

Equipment Maintenance (EM) refers to preventive and repair services covering at a minimum the following types of equipment:

- a) Mainframes & Servers (including monitors, internal components, storage disk, CD ROM libraries, tape, back up units, file server based technology, web server technology etc.)
- b) Mid-Range
- c) PC
- d) Laptops
- e) Printers, plotters, scanners (including all internal components and peripheral devices)

Dependable equipment is of paramount importance to the day-to-day operations of government entities. Monitoring software and preventive maintenance can minimize costly downtime while increasing uptime and equipment reliability. Timely repair services during and following a manufacturer's warranty period is equally critical. Establishing maintenance agreements with external providers

can provide these services. The equipment includes but is not limited to the following:

High End Servers/ Mainframes	Mid-Range Servers	PC/Laptop/ Servers	Printers
IBM (zSeries 900, S/390) Unisys (ES7000)	IBM AS400, RS 6000) Sun (Enterprise 6500) H-P (e3000) Compaq (AlphaServer)	All manufactured brands; Various operating systems,	All Brands, Laser, Dot Matrix, Impact

At time of a mini-bid, the Issuing Entity may require supporting documentation verifying a Contractor's Authorization or Certification where applicable to perform services or maintenance for particular brands of equipment specified in the Project Definition/Specifications. This documentation could be in the form of certificates from Equipment Manufacturers, verifying their certifications.

When awarding Equipment Maintenance services to a Contractor, the Issuing Entity may have additional requirements to which will be set forth in the Project Definition/Specifications and may include at a minimum:

- Permanent identification markers suitable for inventory/tracking purposes for all equipment.
- Maintenance Service Sheets to track the information about the requested service.

II.5.2.7.2 Classification of Services

II.5.2.7.2.1 Time and Materials (primarily applicable to microcomputers and servers)

The Issuing Entity may have additional requirements that will be set forth in the Project Definition/Specifications and may include at a minimum:

- **Repair Services** that may include but are not limited to activities such as initial diagnosis of problem, repair or replacement of faulty components, and testing to ensure equipment and software are functioning properly after repairs have been completed.
- **Maintenance Services** which may include but are not limited to activities such as cleaning equipment; installing additional components such as second floppy drive, additional memory, modems, CD-ROM drives, etc.; or upgrading existing components such as hard disk drives or general upgrades of personal computers.
- **Support Services** which may include but are not limited to activities such as software installation, upgrading and/or configuration; physically and logically connecting personal computers to printers, telephone lines, etc.; and installing new components such as personal computers, printers, modems, scanners, and other peripheral devices.

II.5.2.7.2.2 Fixed Rate Maintenance (FRM)

II.5.2.7.2.2.1 On-Site Remedial Maintenance

The Issuing Entity may require unscheduled on-site remedial maintenance

service to ensure that its equipment is performing according to published specifications. Remedial maintenance shall include the repair or replacement of any defective components that have been determined to be the cause of the equipment to be malfunctioning or to be inoperable or unserviceable. This repair will be inclusive of all labor, parts or travel associated with the service call. The Issuing Entity shall initiate remedial maintenance by notifying the Contractor's service center via phone call (or other agreed upon method of communication such as e-mail) that equipment is inoperable or unsuitable for operation. Contractor will be expected to perform any preventive maintenance deemed necessary at the time of the service call, at no additional charge. Only new parts or parts equivalent to new parts shall be used in providing maintenance. Delivery, cost, and response times of remedial maintenance will be defined in the Project Definition/Specifications.

II.5.2.7.2.2 On-Site Scheduled/Preventive Maintenance

Scheduled/Preventive maintenance will be one classification of services Contractor will perform at the request of the Issuing Entity and provided at no additional charge on any covered equipment for which a service call is received. Contractor may propose to provide additional preventive maintenance to ensure that equipment performs according to published specifications. The Contractor shall perform routine preventive maintenance (PM) according to the manufacturer's recommended schedule and it shall be performed during the working hours specified in the Project Definition/Specifications. Among the services included are any routine cleaning, servicing, or inspection requested by the Issuing Entity, or as recommended by the manufacturer of the equipment to insure the equipment is in proper operating condition. Scheduled/Preventive maintenance may also be made at the request of the Issuing Entity as a result of problems occurring on an intermittent basis with non-critical equipment.

II.5.2.7.3 Service Levels

Service Levels apply to both Remedial and Scheduled/Preventive Equipment Maintenance and will be defined by the Issuing Entity in the Project Specification/Definition as part of or in conjunction with service level agreements (SLA's – Section IV.14). There are generally two (2) types of service levels, but are not limited to the following:

II.5.2.7.3.1 On-Site Service - Critical Need

The Issuing Entity will provide the Contractor a complete inventory identifying the location and types of equipment that are classified as critical to the agency's ability to perform their function. The Issuing Entity will define in detail the specific equipment, location and response times required by the contractor to restore or replace the equipment to full operation to the Issuing Entity's satisfaction. Response times may be unique to each Issuing Entity dependent on its organization and function. An Issuing Entity may consider varying degrees of coverage, such as:

- a) Dedicated On-Site Service Engineer (if deemed necessary by Issuing Entity - Refer to Section II.5.2.7.5 below)
- b) Timeframe for on-site service (24 x7 including holidays and weekends or other mutually agreed upon schedule.
- c) Dedicated toll-free number for Service Calls
- d) Mutually agreeable timeframe for response time to initial call for service.
- e) Mutually agreeable timeframe by which Contractor restores or replaces equipment to be fully operational.
- f) Contractor maintenance of an inventory of components necessary to repair or replace equipment determined to be of critical need that has been mutually agreed upon.

II.5.2.7.3.2 On-Site Service -Non-Critical Need

The Issuing Entity will provide a complete inventory identifying the location and types of equipment that are classified as non-critical to the Issuing Entity's ability to perform its function. The Issuing Entity will define in detail the specific equipment, location and response time required by the contractor to restore or replace the specific equipment to full operation to the Issuing Entity's satisfaction. In defining response time for non-critical equipment the agency will provide the contractor with a list detailing their requirements for service in the same detail as described for On-Site Critical Need. For example:

- a) Dedicated toll-free number for Service Calls
- b) Response to initial call within a period of time to be mutually agreed upon by all parties.
- c) Equipment will be repaired or replaced with period of time to be mutually agreed upon by all parties.

II.5.2.7.4 Obsolete Equipment

The recommended life of equipment is five (5) years (re: Gartner Group) after which time it should be replaced rather than maintained. If equipment currently covered under a maintenance contract becomes obsolete, is inoperable, and cannot be repaired due to the unavailability of spare parts, the contractor is obliged to advise the Issuing Entity. The Issuing Entity will have the option of finding the required parts or will be obligated to remove the equipment from its list of covered maintenance items.

II.5.2.7.5 On-Site Technical Assistance

The Issuing Entity may request an on-site technician at any of the Issuing Entity's facility locations. If there is an additional cost for an on-site technician, the Contractor may:

- use the Specialist Mandatory Job Classification/Title if the Contractor has provided not-to-exceed rates under the Consulting/SI Services requirements or
- amend its contract add an Ancillary Job Classification/Title if the Contractor does not have hourly pricing on its contract to provide this level of expertise.

II.5.2.8 Geographic Information Systems (GIS)

Geographic Information Systems (GIS) are computer systems used for capturing, storing, checking, integrating, manipulating, analyzing and displaying data related to positions on the Earth's surface. Typically, a GIS is used for the storage and manipulation of electronic maps and related data. These might be represented as several different layers where each layer holds data about a particular kind of feature (e.g. roads). Each feature is linked to a position on the graphical image of a map.

An Issuing Entity may request from an external provider the on-going maintenance, & support of its Geographic Information Systems. The specifics of such services will be defined in the Project Specifications/Definition.

II.5.2.9 Help Desk Services

A professionally staffed Help Desk provides a single point of contact for Issuing Entities, responds to their requests for assistance, and change management, and works with them toward resolving their problems. The Help Desk also facilitates tracking and reporting requests for assistance. Managers are increasingly relying on automated help desk tools and help desk out-sources. The role of the Help Desk is to provide support for the use of technology and/or services.

Authorized Users in need of Level I Help Desk Services Support should consider the *Enterprise Help Desk Services* contract CM00664 with Unisys administered by the Office for Technology (contact OFT Customer Relations at 518-473-2658 for further information) to determine its applicability to the User's individual project needs. The Authorized User should investigate both the *Enterprise Help Desk Services* contract and the backdrop contracts based on its particular needs and scope of services required.

Where applicable, an Issuing Entity may request from an external provider the on-going maintenance, & support of its Help Desk on-site and off-site. The specifics of such services will be defined in the Project Specifications/Definition.

II.5.2.10 Imaging Services

Imaging services involve the recording, organization and retrieval of graphic images, either from a video camera or from digitally generated data. Recording of images may be on microfilm, videotape, magnetic disk or laser disk. Imaging services includes the scanning and indexing, the capture, storage and management of imaged data within the information technology environment, document management and document output, as well as, providing recommendations to the user community on the best methods for accessing and utilizing the imaging services. A common method of pricing such services is based on a "Fully Loaded Price Per Page". The Pricing Designation Page has been included in the RFP to accommodate this pricing scheme. Refer to the

category of Electronic Output Management, II.5.2.6, as another category that may address Imaging needs depending on the scope of services required.

An Issuing Entity may request from an external provider the on-going maintenance, & support of its Imaging Systems. The specifics of such services will be defined in the Project Specifications/Definition. (Note: Refer to Section II.3 **Preferred Sources** for **appropriate use of Preferred Sources for Imaging Services**)

II.5.2.11 Information Security

Information security services may include developing a risk assessment; providing a framework, technical guidance and services to develop security guidelines and policies; and providing an end-to-end information security solution for environments from desktop to mainframe, from point to network, and from physical site to interface between information systems. Other services include design, plan, implement, test, and certify security systems, as well as provide supporting tools for construction of such systems. A vendor may perform security incident follow-ups, including identifying the vulnerabilities and providing legal framework and resources to go after those gaining unauthorized access.

An Issuing Entity may request from an external provider the on-going maintenance, & support of its Information Security System (e.g. Managed Security Systems). This includes but may not be limited to:

- a) Hardware Security Support
- b) Software/application Security Support
- c) Disaster Recovery including at a minimum:
 - i. Business impact analysis
 - ii. Continuity of operations
 - iii. Contingency planning
 - iv. Risk assessment
 - v. Simulation and testing
 - vi. Intrusion detection
 - vii. Penetration testing
 - viii. Disaster recovery

The specifics of such services will be defined in the Project Specifications/Definition.

II.5.2.12 Interactive Voice Response (IVR) Application Development Services

Includes Touchtone® and Natural Language Speech Recognition Applications. Development of IVR applications for Authorized Users includes permitting constituents to initiate transactions, including payments to the Authorized Users. Attributes of IVR Applications (e.g. dialog, call rates, and lengths, validations, local database lookups, payment processing, security, disaster recovery) will be specified

at the project level in the Project Definition/Specifications. Payments will be based on an hourly rate.

II.5.2.13 Interactive Voice Response (IVR) Hosting Services

IVR hosting services include Touchtone[®] and Natural Language Speech Recognition Applications. Development, maintenance, and hosting of IVR applications for Authorized Users includes permitting constituents to initiate transactions and including payments to the Authorized Users. Attributes of IVR Processing Applications (e.g. dialog, call rates, and lengths, validations, local database lookups, payment processing, security, disaster recovery) will be specified at the project level in the Project Definition/Specifications. Payments will be based on a per transaction fee.

An Issuing Entity may request from an external provider the on-going maintenance, & support of its IVR System.

II.5.2.14 Internet/Intranet Application Services

This Category of Expertise includes consulting with clients to exploit the full potential of Internet technologies -- both on the global Internet and on internal Intranets. Areas include web site creation and operation, network service providers, Intranets, Internet infrastructure and its impact on software and hardware platforms and communications technologies, security and management issues surrounding electronic network usage, Web technologies, navigation tools, infrastructure management and application deployment.

An Issuing Entity may request from an external provider the on-going maintenance, & support of its Web site. Web Hosting Services will be addressed under the category of Web Hosting Services (Refer to II.5.2.20 Web Hosting Services).

II.5.2.15 IT Management & Planning

Information Technology Management Consulting and Planning encompass services that provide support to the management of the IT function. These IT areas include personal computing, networking, LAN Server based systems, midrange systems and large-scale systems. Services focus on satisfying the needs of IT managers and executives and on providing solutions allowing them to maximize the contribution their organizations can make to the enterprise.

Services may involve assistance in policy formulation, re-investment decisions, external/internal resource decisions, integration of sources of IT within the enterprise and developing architectures), economics (value analysis, contribution and productivity analysis, financial tools and alternative funding and charging mechanisms, plus research into budgets and spending patterns), organization (the development of business models and management processes), planning (structuring the IT organization of an enterprise to increase alignment and to

better identify business opportunities, also management implications of emerging IT technological issues, addressing of disaster recovery strategies), learning (processes for adoption of appropriate best practices, contracting and relationship management and the various means to add skills to an IT organization), and effective use of the IT function (business unit managers' responsibilities for IT, the management of external service providers and the marketing of IT services within the enterprise).

II.5.2.16 Local Area Network Services (LAN/WAN)

Local Area Networks (LANs) are predominantly data communications networks that are geographically limited (typically to a 1 km radius) allowing easy interconnection of PCs, minicomputers, mainframes, printers, file servers, and a host of other devices. Ethernet 10Base-T/100Base-T and token ring are examples of standard types of LANs. LAN services encompass planning, management, support, and operation of the LAN environment.

An Issuing Entity who requires on-going maintenance, & support of its networks, etc. from an external provider will procure those services from the OGS PSG Networking Hardware and Software Contracts. This will not be a service offered as part of this RFP#S960275-E.1.

II.5.2.17 Point-of-Sales (POS)

Point-of-Sale (POS) systems are a special type of computer system that is used to collect, store, and manage retail sales data. POS Systems include inventory control systems involving electronic data input with automatic, real-time updating of a database and include processing of cash sales, integrated order entry, stock identification, stock issue, and invoicing.

An Issuing Entity may request from an external provider the on-going maintenance, & support of its Point-of-Sales (POS) systems to assure optimal operation of the computing environment.

II.5.2.18 Technology Procurement (Marketwatching)

Marketwatching services provide knowledge and know-how relative to recommendations for the purchasing of hardware and software in light of current technology market trends and conditions. The service supports new organization-wide procurement strategies and systems to effectively cope with IT asset procurement. Enterprises must have timely information and analysis concerning the best-in-class deals and prices, knowledge of financial, secondary market and outsourcing alternatives, distribution channels and hardware and software asset management strategies (including both acquisition & retirement). Part of making procurement decisions also includes recommendations for action, advice on negotiating tactics, knowledge of contract terms & conditions as well as primary and secondary market pricing trends and financing alternatives.

II.5.2.19 Telecommunications Services

Telecommunications describes the transmission and reception of digital data as well as voice and video signals (analog data). Information stored in digital form can be delivered over various media including electrical wires, fiber-optic cables, microwave transmission and standard telephone lines. Telecommunications includes all aspects of providing these services to the enterprise including research, planning, installation, maintenance and trouble-shooting.

Telecommunications consultant services include services that enable multi-media delivery to the desktop, within a building, across the campus and over the wide area. Examples of relevant technologies used include: ATM (Asynchronous Transfer Mode), Frame Relay, SONET (Synchronous Optical Network) and AIN (Advanced Intelligent Networking) for wide area networking applications; FDDI (Fiber Distributed Data Interface), Ethernet, Token Ring and ATM for local area networking; ISDN (Integrated Services Digital Network), ADSL (Asynchronous Digital Subscriber Loop) and various wireless technologies for local access and CTI (Computer Telephone Integration) for the desktop. Premise-based equipment, such as switches, routers, hubs, multiplexors, PBXs (Private Branch Exchange), ACDs, (Automatic Call Distributor), and VRUs (Voice Response Units) are other examples of products that require telecommunications services.

An Issuing Entity who requires on going, maintenance & support of its key telephone systems, digital Centrex equipment or PBX equipment will procure those services from the appropriate OGS PSG contracts for key telephone systems, digital Centrex equipment and PBX back-drop contracts. Maintenance for these types of equipment will not be a service offered as part of this RFP#S960275-E.1.

II.5.2.20 Web Hosting Services

Includes provision of space on the Contractor's servers for the Authorized User's informational and transaction processing web pages or provision of space within the Contractor's facility for storage of Authorized User's servers including access to the Internet. Attributes of Web Hosting Services (e.g. space requirements, security, data transfers, disaster recovery, e-commerce solutions, proximity to the Internet, customer support, and account features including e-mail management) will be specified at the project level in the Project Definition/Specifications. Where there are payments (e.g. debit/credit card transactions), payments will be based on a monthly service fee or other applicable fee schedule.

Web Development and Hosting Services may require development, maintenance, and hosting of Internet applications for Authorized Users permitting constituents to initiate transactions, including payments to the Authorized Users. Attributes of Internet Processing Applications (e.g. number of web pages, number of entered fields, number of calculated fields, edits and validation performed, local database lookups, number of transactions, and security) will be specified at the project level in

the Project Definition/Specifications. Payments will be based on a per transaction fee or other applicable fee schedule.

An Issuing Entity may request from an external provider the on-going maintenance, & support of its external, public web site. Such *Web Hosting Services* include but may not be limited to:

- a. Handling of the day-to-day operations and maintenance of the web site
- b. Performing all upgrades with knowledge and approval of entity

Web Hosting can be shared, dedicated or collocated.

Shared - when multiple entities/accounts or Web sites are stored on one server and controlled/owned by the host (often referred to as "virtual hosting").

The server and everything related to the server is "shared", such as the hard disk drive, the central processor units, and the network bandwidth. This is one of the fastest-growing markets targeted to low-cost, entry-level consumers.

Dedicated Hosting - when a Web site is stored on a server owned by the Web host, rented by the entity and "dedicated" to that entity. In addition the hardware, software, and network connectivity and all other parts required to run the site are also dedicated. With this solution the entity is responsible for the software only while the host handles the staff to customize, upgrade, or maintain the server.

Collocation - when the entity owns the server but it is housed at the host's site. The entity maintains and updates its servers and has more control over the Web server administration. The host delivers all the related network services, including bandwidth. The entity must have the resources to maintain its own equipment thereby making this option the most costly.

An Issuing Entity who requires Web Hosting Services or an Internet Service Provider may procure those services under this category of expertise or from the OGS PSG *Contract for Internet Access Services*. The Authorized user should investigate these two options based on its particular needs and scope of services it requires.

II.5.2.21 Workflow Management Services

Workflow Management applies many of the same concepts and benefits of factory automation and industrial engineering to the process of work management in an office environment. Some of these benefits are: the elimination of unnecessary tasks, the saving of worker and management time. Workflow management keeps track of the processes a document goes through and alerts users where operations are overdue. Workflow management services include analyzing current workflow processes, planning changes and improvements to these processes, implementing new, more efficient workflow processes and software systems and management and operating workflow management systems.

II.5.2.22 Year 2000 Services

Year 2000 services may include developing an awareness program; an application system inventory; a business priority, time horizon and cost impact assessment; a Year 2000 compliance implementation plan; as well as performing application system code modification, testing and implementation. Service vendors may provide a Year 2000 methodology and a project management methodology, and may assist in defining the structure and establishing a Year 2000 program management office to coordinate the various disciplines involved. Other services may include providing an operating environment (hardware, software, operation resources) for code conversion, correction, testing, and disaster recovery; providing proprietary Year 2000 tools and/or support of third-party tools; and performing operating system and environment system upgrade and testing.