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U.S. General Services Administration

Federal Acquisition Service

Enterprise Infrastructure Solutions (EIS)
Briefing to the JET

Jeff Smith/GSA

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Information Technology Category
Federal Acquisition Service
General Services Administration

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Agenda

- EIS Overview
- EIS Contract Status
- Service Offerings (JET Members Interests)
  - Managed Services
    - Network, Security, MTIPS
  - Optical Wavelength Service
  - Dark Fiber Service
  - Ethernet Transport Service
  - Virtual Private Network Service
  - More …
- GSA Tools and Support

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EIS Potential Connectivity Opportunities

- Is not the intent of the EIS contract to substitute or replace existing Internet2 services, agreements, partnerships, etc.
- The EIS contract could be an option for:
  - Network access to Internet2 and RONs … if the agency is the "customer of record" with WAN service providers
  - Cloud, Data Center Hosting Services
- Goal of this briefing is to inform government agencies the EIS contract may:
  - Provide a better alternative for purchasing Telecom & IT services
  - Save money for Telecom & IT services
  - Provide a more streamline acquisition process for Telecom & IT services

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Basic EIS Contract Basics

- **15 year Period of Performance**
  - 5-year base, two 5-year options
  - Mandatory price resubmission for option periods
  - Last 3 years of contract will be used for transition to eliminate need for contract extensions
  - $50B Ceiling
- **Replaces Networx, Washington Interagency Telecom System (WITS), and other Network Services Regional Contracts; Multiple Award / Indefinite Delivery Indefinite Quantity (IDIQ) Task Order Contract (FAR Part 16)**
- **Firm Fixed price w/ Economic Price Adjustment**
- **Support of Federal mandates**
  - **E.g., FISMA, MTIPS, IPv6, National Policy and NS/EP**
  - **OMB IT Modernization Report**

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Basic EIS Contract Status

- EIS Awarded July 31, 2017
- 10 Suppliers Received Awards
- Task Order Awards can start on ~10/2018
  - Business Support System (BSS) Testing for all Contractors must be completed by 7/31/2018
  - After BSS Testing is completed, FISMA Certification to Moderate Level can begin

Offeror	Company Category	CBSAs Awarded
AT&T	Large Business	588 CBSAs Awarded
BT Federal	Large Business	87 CBSAs Awarded
CenturyLink	Large Business	929 CBSAs Awarded
Core	8A - Small Disadvantaged – Woman Owned	909 CBSAs Awarded
Granite	Small Business	624 CBSAs Awarded
Harris	Large Business	929 CBSAs Awarded
Level 3	Large Business	929 CBSAs Awarded
Manhattan Telecommunications	Small Business	653 CBSAs Awarded
*Microtech**	SDVOSB	25 CBSAs Awarded
Verizon	Large Business	667 CBSAs Awarded

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EIS Services

Service Area	Service
Data Services	*Virtual Private Network Service (VPNS), *Ethernet Transport, Private Line Service, Internet Protocol Service, Synchronous Optical Network (SONET), Optical Wavelength Services, Dark Fiber
Voice Services	*Voice Service, Circuit Switched Data Service, Toll Free
Contact Center Services	Contact Center Services
Data Center Services	Colocated Hosting Center Services
Cloud Services	Infrastructure as a Service, Platform as a Service, Software as a Service, Content Delivery Network Services
Wireless Services	Wireless
Satellite Service	Satellite (Mobile and Fixed)
Managed Services	*Managed Network Service (includes Network Operations Centers/Security Operations Centers), Web Conferencing Service, Unified Communications Service, Integrated Performance Monitoring Service, Managed Trusted Internet Protocol Service, Managed Security Services, Intrusion Prevention Security Service, Managed Mobility Service, Audio conferencing, Video Teleconferencing
Service Related Equipment	Equipment
Service Related Labor	Labor
Cable and Wiring	Cable and Wiring
Access Arrangements	Dedicated Access Arrangements (required for all mandatory services)

Mandatory Services listed in Red and Asterisked *

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Services By Supplier

Service	AT&T	BT Federal	CenturyLink	Core Technologies	Granite	Harris	Level 3	MetTel	MicroTech	Verizon Federal
Access Arrangements (2.9)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Audio Conferencing Service (2.8.7)	Yes	-	-	Yes	Yes	Yes	Yes	-	-	Yes
Cable and Wiring (2.12)	Yes	-	Yes	Yes	Yes	Yes	Yes	Yes	-	Yes
Circuit Switched Data Service (2.2.4)	-	-	-	-	-	-	Yes	-	-	Yes
Circuit Switched Voice Service (2.2.2)	-	-	Yes	-	Yes	-	Yes	Yes	-	Yes
Colocated Hosting Service (2.4)	Yes	-	Yes	-	-	Yes	Yes	Yes	-	Yes
Commercial Fixed Satellite Service (2.7.2)	-	-	-	-	-	Yes	Yes	-	-	-
Commercial Mobile Satellite Service (2.7.1)	-	-	-	-	-	Yes	Yes	-	-	-
Contact Center Service (2.3)	Yes	-	-	-	-	-	Yes	-	-	Yes
Content Delivery Network Service (2.5.4)	Yes	-	-	-	-	-	Yes	-	-	-
Dark Fiber Service (2.1.6)	Yes	-	-	-	-	-	Yes	-	-	Yes
DHS Intrusion Prevention Security Service (2.8.9)	Yes	-	Yes	-	-	Yes	Yes	Yes	-	Yes
Ethernet Transport Service (2.1.2)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
General (4.1)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Infrastructure as a Service (2.5.1)	-	-	Yes	-	-	-	Yes	-	-	-
International Mobile Roaming (2.6.6)	-	-	-	-	-	-	-	Yes	-	Yes
Internet Protocol Service (2.1.7)	Yes	-	Yes	-	Yes	Yes	Yes	Yes	-	Yes
Internet Protocol Voice Service (2.2.1)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Labor (2.11)	Yes	-	Yes	Yes	Yes	Yes	Yes	Yes	-	Yes
Managed Mobility Service (2.8.6)	Yes	-	-	-	-	Yes	Yes	Yes	-	Yes
Managed Network Service (2.8.1)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Managed Security Service (2.8.5)	Yes	-	Yes	-	-	Yes	-	Yes	-	Yes
Managed Trusted Internet Protocol Service (2.8.4)	Yes	-	Yes	-	-	Yes	Yes	Yes	-	Yes
National Security and Emergency Preparedness (3)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Optical Wavelength Service (2.1.3)	Yes	-	Yes	-	-	Yes	Yes	-	-	Yes
Platform as a Service (2.5.2)	-	-	Yes	-	-	-	Yes	-	-	Yes
Private Line Service (2.1.4)	Yes	-	Yes	-	-	-	Yes	-	-	Yes
Service Related Equipment (2.10)	Yes	Yes	Yes	-	Yes	Yes	Yes	Yes	-	Yes
Software as a Service (2.5.3)	-	-	Yes	-	-	-	Yes	-	-	Yes
Synchronized Optical Network Service (2.1.5)	Yes	-	-	-	-	Yes	Yes	-	-	Yes
Toll Free Service (2.2.3)	Yes	-	-	-	-	-	Yes	-	-	Yes
Unified Communications Service (2.8.3)	Yes	-	Yes	-	-	Yes	Yes	Yes	-	Yes
Video Teleconferencing Service (2.8.8)	-	-	-	-	-	Yes	Yes	-	-	Yes
Virtual Private Network Service (2.1.1)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Web Conferencing Service (2.8.2)	Yes	-	-	-	-	Yes	Yes	-	-	-
Wireless Machine to Machine (2.6.7.3)	Yes	-	-	-	-	Yes	-	Yes	-	Yes
Wireless Service (2.6)	Yes	-	-	-	-	Yes	-	Yes	-	Yes

EIS High-Level Service Descriptions

Optical Wavelength Service (OWS)

- The EIS Optical Wavelength Service (OWS) is a fiber optic based service that provides dedicated, point-to-point, single-fiber data transport at speeds ranging from 1 to 100 Gbps. (NOTE: Some EIS contractors may be able to provide higher speeds.) The OWS contractor always provides the optical devices and fiber connectivity, thus enabling an agency to acquire high broadband transport without the cost of developing, owning and operating the network infrastructure.
- OWS comes in three different variations to meet the needs of a government agency for a dedicated, broadband transport network that interconnects agency offices in different: (1) parts of a metropolitan area (Metro Wavelength Services); (2) regions in the U.S. (Domestic Wavelengths); or (3) countries (Non-domestic Wavelengths).

EIS High-Level Service Descriptions

Dark Fiber Service (DFS)

- The EIS Dark Fiber Service (DFS) is an optical fiber infrastructure that consists of cabling, repeaters, and customer-provided transport light. DFS gives an agency the unconditional right to use a fiber route, which includes transport capacity through a fiber pair in a fiber-optic cable, or through the entire fiber-optic cable. DFS configurations can range from a simple point-to-point connection between two locations to one that interconnects the agency to any number of selected locations.
- Agencies that acquire DFS may either use their own optronics equipment or lease it from a service provider. An agency that prefers not to design, implement, and manage its own optical network can use Managed Network Service (MNS) as a Managed Dark Fiber Service to have the contractor design, implement, and manage the fiber network per the agency's unique mission requirements.

EIS High-Level Service Descriptions

Managed Security Service (MSS)

The EIS Managed Security Service is a comprehensive service that protects an agency's information technology assets—hardware devices, network, software, and information—from malicious attacks. It includes capabilities such as authentication, anti-virus, anti-malware/spyware, intrusion detection, and security event management. MSS comprises:

- **Managed Prevention Service (MPS)**
  - Monitors computer devices, network traffic, email, and application activity to identify and mitigate suspicious activity.
- **Vulnerability Scanning Service (VSS)**
  - Performs external scans by remotely probing a network for vulnerabilities, and internal scans to detect flaws originating from the inside.
- **Incident Response Service (INRS)**
  - Provides an effective method of combatting and documenting security intrusions, thereby ensuring operational continuity and the capture of forensics data that can assist in apprehending and prosecuting offenders. INRS consists of both proactive and reactive activities.

EIS High-Level Service Descriptions

Ethernet Transport Service (ETS)

The Ethernet Transport Service (ETS) enables secure, high-speed transmission (10 Mbps to 100 or higher Gbps) of video, audio and data between different local, national and international agency locations. This flexible and cost-effective service can provide Intranet and intra-agency communications or Extranet and inter-agency communications. It can interconnect Local Area Networks (LANs) in a city, forming a Metro Area Network (MAN), or interconnect LANs and/or MANs in different cities or countries, forming a Wide Area Network (WAN).

- ETS runs on a Multiprotocol Label Switching (MPLS) backbone, which ensures the required quality of video, audio and data communications. Point-to-point connections can also be provided by ETS over a self-healing Synchronous Optical Network (SONET).

- The service is offered in two different versions:
  - Ethernet Private Line (E-LINE): This is a point-to-point service with reserved bandwidth.
  - Ethernet Private LAN (E-LAN): E-LAN supports both point-to multipoint and multipoint-to-multipoint configurations.

EIS High-Level Service Descriptions

➢ Virtual Private Network Service (VPNS)

The EIS Virtual Private Network Service (VPNS) provides secure, reliable transport of agency applications across the provider's high-speed, unified, multi-service, IP-enabled backbone infrastructure. The service can provide secure tunnels between remote Intranet sites using broadband or dedicated access, enable authorized users to securely access agency resources via an Extranet, and enable remote users to securely access their files. VPNS is flexible and can accommodate a variety of bandwidths ranging from 64 Kbps to 100 Gbps.

EIS High-Level Service Descriptions

Collocated Hosting Service (CHS)

- The EIS Collocated Hosting Service (CHS) provides hosting of customer-owned equipment in a secure location complete with cage, racks, and site surveillance. CHS also provides external traffic access (e.g. Internet, Private Line, Ethernet, etc.), bandwidth, storage space, maintenance support, and operational support as specified in task orders.
- The co-location facility supports the following capabilities:
  - Redundant and high-availability power to Government Furnished Equipment (GFE).
  - Redundant Uninterruptible Power Supplies (UPS). UPS systems receive power both from commercial power feeders and alternate power sources.
  - A Very Early Smoke Detection Apparatus (VESDA) system that provides for fire detection.
  - A fire suppression system. Acceptable systems include (but are not limited to) multi-zone, pre-action, and dry pipe systems.
  - Redundant cooling systems.
  - CHS customers have 24x7 access to leased space and GFE in the co-location facility.

EIS High-Level Service Descriptions

- **Infrastructure as a Service (IaaS)**
  - Infrastructure as a Service is one of four EIS cloud services. It provides an agency with a secure, cloud-based IT environment with all of the typical components such as computers, servers, network storage, etc. IaaS consists of two sub-services:
  - Private Cloud: Provides a secure, segregated IT environment for an agency. It includes virtual machines, storage, server hosting, security components, storage backup, continuity of operation and disaster recovery services. The cloud platform provides the necessary network infrastructure such as LANs, load balancers and firewalls.
  - Data Center Augmentation with Common IT Service Management (ITSM): Enables augmentation of already virtualized agency premises data center resources with dynamically expandable and contractible virtualized cloud-based resources that also includes a common IT management framework for agency data center resources and cloud resources.
- **IaaS meets all federally required security standards for Cloud services supporting requirements for the FedRAMP and Trusted Internet Connection (TIC), a technology designed to provide fast and secure computing for mobile federal personnel.**

EIS High-Level Service Descriptions

➢ Platform as a Service (PaaS)

- The EIS Platform as a Service offering (PaaS) is a cloud-based service that provides a ready-made environment for the development, testing and deployment of applications. The service supplies all of the IT components needed for application development including developer and testing tools, database systems, and a Big Data solution platform. Unlike Infrastructure as a Service (IaaS), PaaS is typically not used to replace an agency's entire infrastructure, but rather as a platform for the development, testing and/or deployment of one or more applications.
- PaaS meets all federally required security standards for Cloud services supporting the FedRAMP and TIC overlay, a technology designed to provide fast and secure computing for mobile federal personnel.

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GSA Tools and Support

- **EIS Pricer**
  - **EIS Public Pricer - https://eis-public-pricer.nhc.noblis.org**
  - **EIS Agency Pricer - https://portal.nhc.noblis.org**
- **Conexus Portal – https://conexus.gsa.gov**
  - **Ordering**
  - **Inventory**
  - **Billing**
- **GSA EIS Task Order Support**
  - **Offer SOW development via in-house tool**
  - **SOW In-scope Review**

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Large Agency Managers Assignments

Large Agencies defined as >$10M/yr

- Andrew Low
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  - DOC
  - Judiciary

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Additional Resources

- **https://interact.gsa.gov/EIS**
  - White Papers
  - RFP and Amendments
  - Industry Day Q&A
  - Subscribe to get EIS Contract Related Updates
- **http://www.gsa.gov/portal/category/106303**
  - GSA NS2020 Strategy Website
  - EIS specific information
- **https://www.fbo.gov/index?s=opportunity&mode=form&tab=core&id=1719f5f50ed2757c1984491f04bfb93d#sthash.BlHmqJd1.dpuf**
  - FedBizOpp link to the EIS RFP
  - Section C is the Technology Requirements Section

If you have any Questions, please contact

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"Any opinions, findings, conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the Networking and Information Technology Research and Development Program."

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