**GSA**

# Federal Acquisition Service

# GSA Networx Program Update

**Lieutenant General Charles E. Croom**

**Director**

**Defense Information Systems Agency**

**Fred Schobert**
**Networx Program Manager**
**FAS Integrated Technology Services**

**January 3, 2007**

Federal Acquisition Service

# Agenda

➢ Program History/Program Schedule
➢ Developing the Networx Program Architecture
➢ Networx Universal and Enterprise
➢ Networx SLAs and Critical Levels of Service
➢ Networx Services
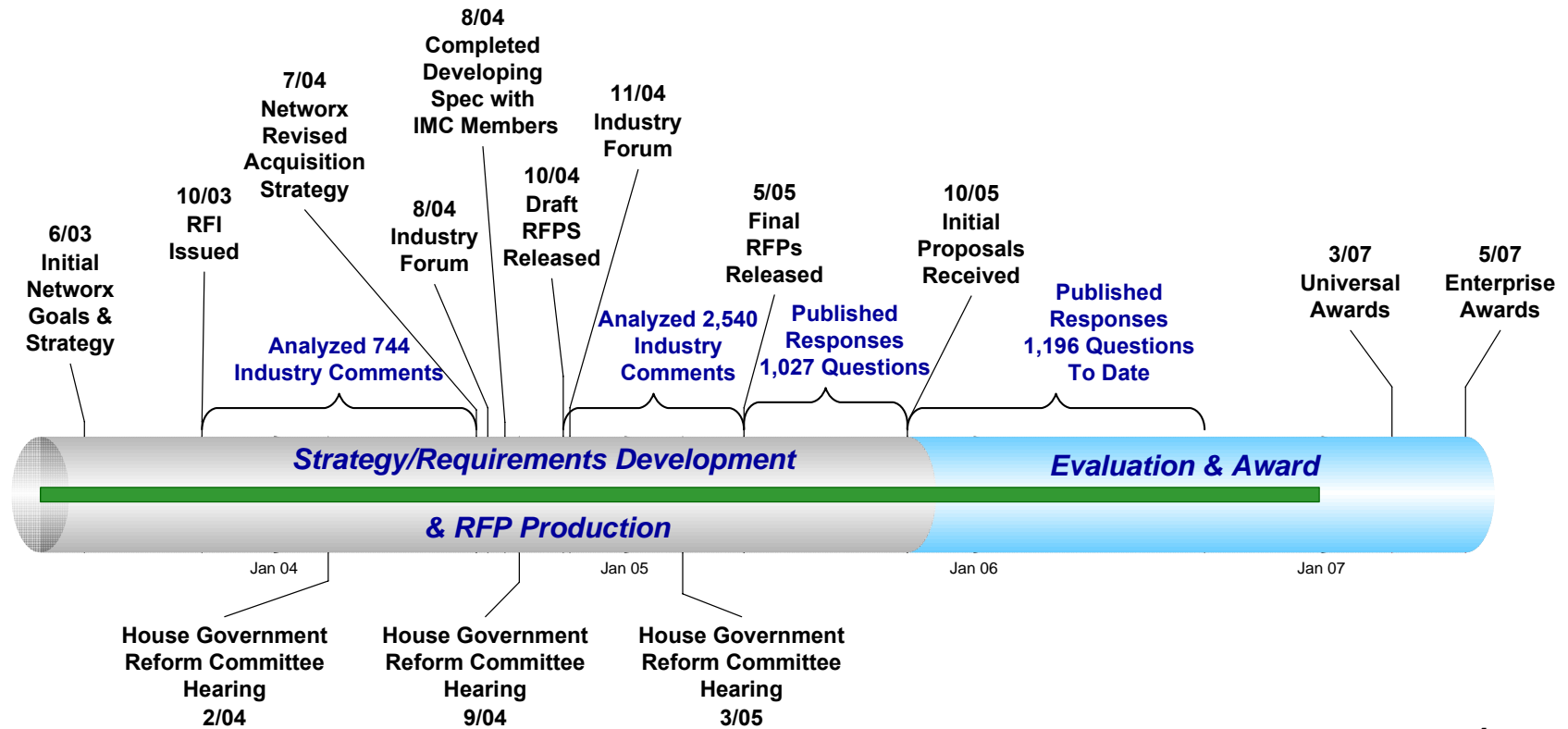➢ Networx Pricing Structure
➢ Summary

# Networx – Program History

➢ Networx is the third in a series of major competitive telecommunications programs

➢ FTS 2001 provides eight-year pricing that has saved over $3 billion to date
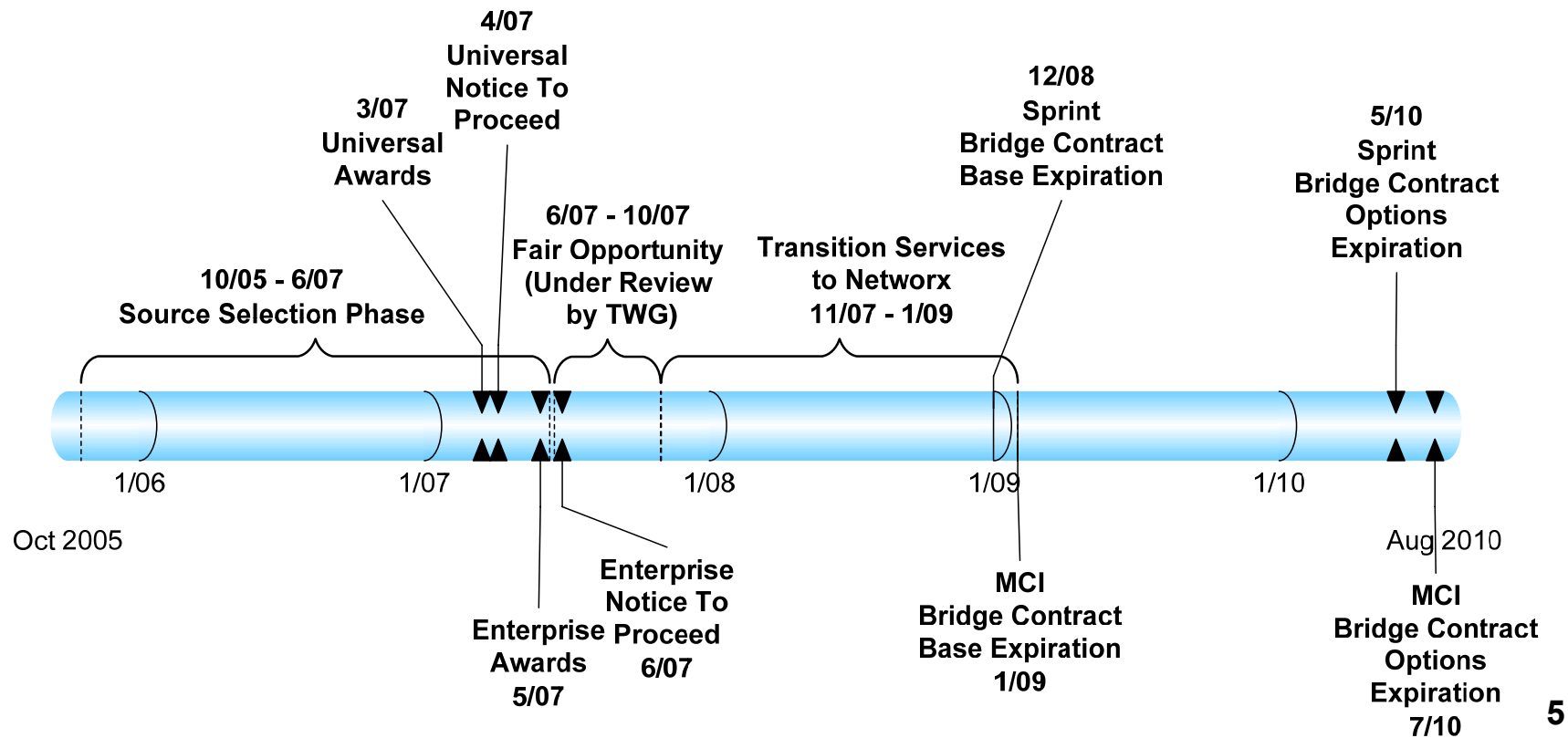
➢ Networx projected revenue - $20 billion over 10 years

## Federal Acquisition Service

# Networx – The Acquisition Cycle



**8/04**
**Completed Developing Spec with IMC Members**

**7/04 Networx Revised Acquisition Strategy**

**11/04 Industry Forum**

**10/03 RFI Issued**

**8/04 Industry Forum**

**10/04 Draft RFPS Released**

**5/05 Final RFPs Released**

**10/05 Initial Proposals Received**

**6/03 Initial Networx Goals & Strategy**

**3/07 Universal Awards**

**5/07 Enterprise Awards**

**Analyzed 744 Industry Comments**

**Analyzed 2,540 Industry Comments**

**Published Responses 1,027 Questions**

**Published Responses 1,196 Questions To Date**

*Strategy/Requirements Development*

*Evaluation & Award*

*& RFP Production*

Jan 04    Jan 05    Jan 06    Jan 07

**House Government Reform Committee Hearing 2/04**

**House Government Reform Committee Hearing 9/04**

**House Government Reform Committee Hearing 3/05**

4

# Federal Acquisition Service

# Networx – The Program Plan After Award



4/07
Universal
Notice To
Proceed

3/07
Universal
Awards

12/08
Sprint
Bridge Contract
Base Expiration

5/10
Sprint
Bridge Contract
Options
Expiration

6/07 - 10/07
Fair Opportunity
(Under Review
by TWG)

10/05 - 6/07
Source Selection Phase

Transition Services
to Networx
11/07 - 1/09

1/06          1/07          1/08          1/09          1/10

Oct 2005                                          Aug 2010

Enterprise
Notice To
Proceed
6/07

Enterprise
Awards
5/07

MCI
Bridge Contract
Base Expiration
1/09

MCI
Bridge Contract
Options
Expiration
7/10

5

# Networx – Supporting the Transformation of Government

- Voice, IP, wireless, satellite, optical connectivity services
- IP-centric application services (hosting, content management, teleworking, etc.)
- Embedded security with flexibility to meet range of needs
- Built-in compliance with policy mandates
- Performance-based services and operations
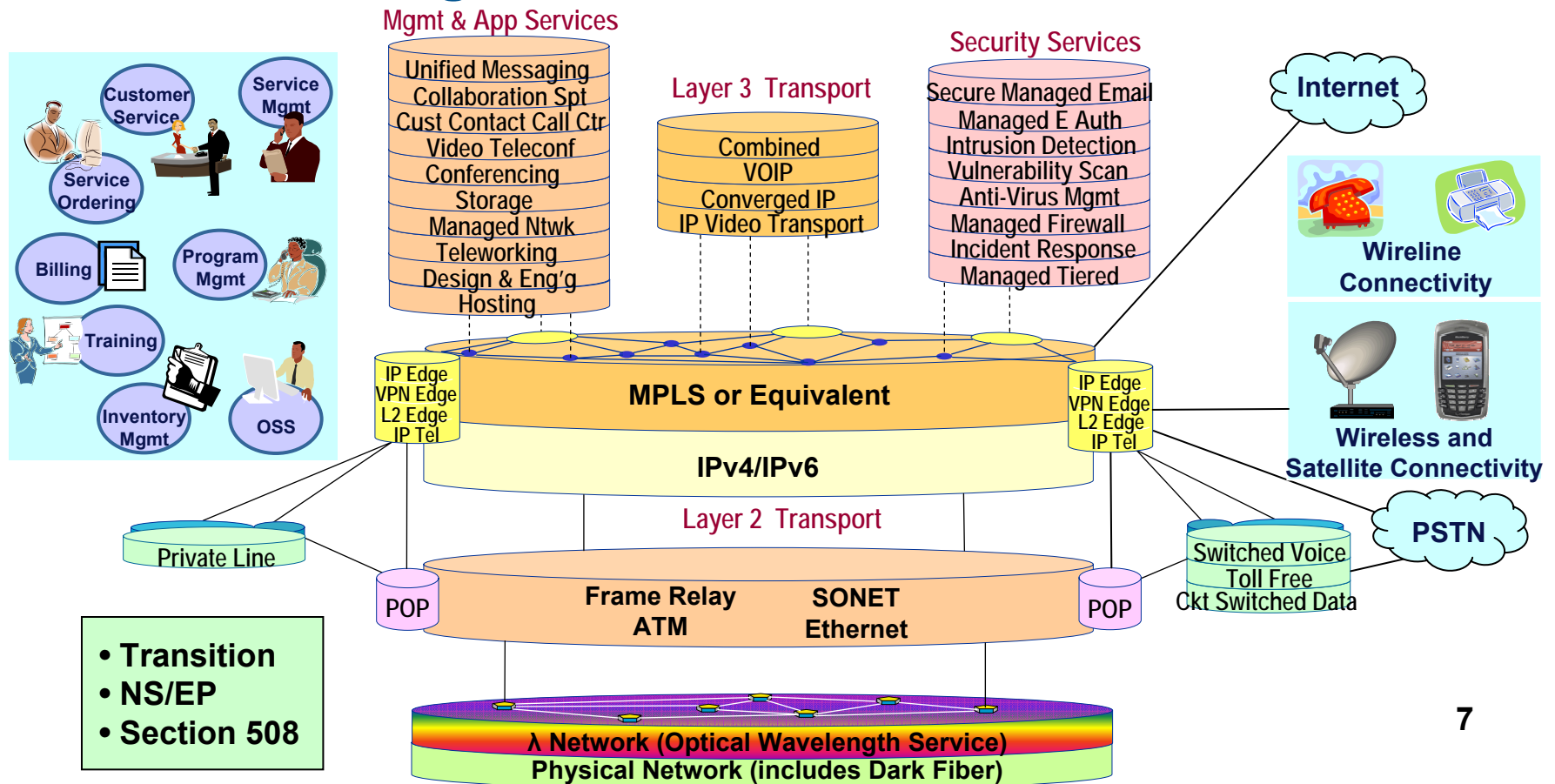- Built in technology refreshment

**Seamless, Secure, Interoperable**

Network Infrastructure

Best Available Fixed Prices

Solution Flexibility

App, Mgmt, Security Svcs

6
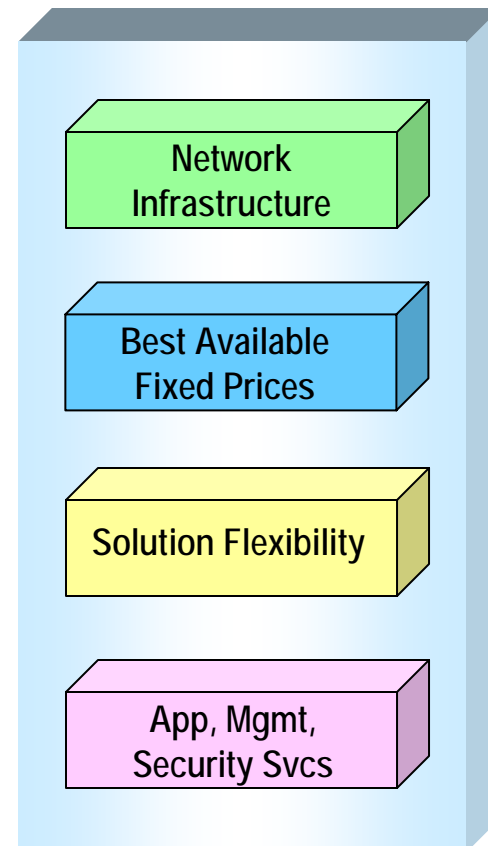
Federal Acquisition Service

# Networx – Program Architecture

## Federal Acquisition Service

# Networx – Universal

**Telecommunications Services**

**Communications Transport**
– Voice
– Circuit Switched Data
– Toll-Free
– Combined
– Private Line
– Frame Relay
– Asynchronous Transfer
  Mode
– Ethernet
IP-Based
– Premises-Based IP VPN
– Network-Based IP VPN
– Voice over IP Transport
– Content Delivery Network
– Converged IP
– IP Telephony
– Internet Protocol
– Layer 2 VPN
– IP Video Transport
Optical
– Synchronous Optical Network
– Optical Wavelength
– Dark Fiber

**Management & Application Services**

– Video Teleconferencing
– Managed Network
– Audio Conferencing
– Teleworking Solutions
– Call Center/Customer
  Contact Center
– Web Conferencing
– Dedicated Hosting
– Collocated Hosting
– Storage
– Customer Specific Design
  and Engineering
– Unified Messaging
– Collaboration Support
– Internet Facsimile

**Access Services**

– None

**Security Services**

– Managed Firewall
– Intrusion Detection and
  Prevention
– Managed E-Authentication
– Vulnerability Scanning
– Anti-Virus Management
– Incident Response
– Secure Managed Email
– Managed Tiered Security

**Special Services**

– Land Mobile Radio
– Mobile Satellite
– Fixed Satellite

**Wireless Services**

– Cellular/PCS
– Multimode Wireless
– Cellular Digital Packet Data
– Paging

Note: Services in green are optional.

➢ **Full range of services**

➢ **National and international coverage**

➢ **Strong competition for best prices**

➢ **Ensures continuity of current service**

➢ **Length: 4-year base with 3ea 2-year options**

➢ **Multiple awards**

➢ **MRG - $525M**

8

**Federal Acquisition Service**

# Networx – Enterprise (IP-Based)

**Telecommunications Services**

**Communications Transport**
– Voice
– Circuit Switched Data
– Toll-Free
– Combined
– Private Line
– Frame Relay
– Asynchronous Transfer Mode
– Ethernet

**IP-Based**
– Network-Based IP VPN
– Voice over IP Transport
– Internet Protocol
– Premises-Based IP VPN
– Content Delivery Network
– Converged IP
– IP Telephony
– IP Video Transport
– Layer 2 VPN

**Optical**
– Synchronous Optical Network
– Optical Wavelength
– Dark Fiber

**Management & Application Services**

– Customer Specific Design and Engineering
– Managed Network
– Audio Conferencing
– Teleworking Solutions
– Call Center/Customer Contact Center
– Web Conferencing
– Dedicated Hosting
– Collocated Hosting
– Storage
– Video Teleconferencing
– Unified Messaging
– Collaboration Support
– Internet Facsimile

**Access Services**

– Wireline Access
– Broadband Access
– Wireless Access
– Satellite Access

**Security Services**

– Managed Firewall
– Intrusion Detection and Prevention
– Managed Tiered Security
– Anti-Virus Management
– Managed E-Authentication
– Vulnerability Scanning
– Incident Response
– Secure Managed Email

**Special Services**

– Land Mobile Radio

**Wireless Services**

– Cellular/PCS
– Multimode Wireless
– Cellular Digital Packet Data
– Paging

Note: Services in green are optional.

➢ **Minimum requirement: must offer either 9 mandatory services for secure, IP, and managed network solutions**

➢ **May offer wide range of optional services**

➢ **National coverage required; international coverage optional**

➢ **Length: 4-year base with 3ea 2-year options**

➢ **Multiple awards**

➢ **MRG - $50M**

**9**

## Federal Acquisition Service

# Networx – Universal and Enterprise SLAs

*Telecommunications Services*

**Communications Transport**
- Voice
- Circuit Switched Data
- Toll-Free
- Combined
- Private Line
- Frame Relay
- Asynchronous Transfer Mode
- Ethernet

**IP-Based**
- Premises-Based IP VPN
- Network-Based IP VPN
- Voice over IP Transport
- IP Telephony
- Internet Protocol

**Optical**
- Synchronous Optical Network
- Optical Wavelength

*KPIs*
Av (SDP-to-SDP)
Av (POP-to-POP)
TTR

*Credits*
Av (SDP-to-SDP)
TTR
Service Outage
On-Time Provisioning
Billing Accuracy

*KPIs*
Av (VPN)
Latency (CONUS)
Latency (OCONUS)
TTR

*Credits*
Av (VPN)
Latency (CONUS)
TTR
Service Outage
On-Time Provisioning
Billing Accuracy

*Management & Applications Services* – Dedicated Hosting
*Access Services* – Wireline Access (Enterprise Only)

10

## Federal Acquisition Service

# Networx – Critical Service Levels

**Telecommunications Services**

**Communications Transport**
- **Voice**
- **Circuit Switched Data**
- **Toll-Free**
- **Combined**
- **Private Line**
- **Frame Relay**
- **Asynchronous Transfer Mode**
- **Ethernet**

**IP-Based**
- **Premises-Based IP VPN**
- **Network-Based IP VPN**
- **Voice over IP Transport**
- **IP Telephony**
- **Internet Protocol**

**Optical**
- **Synchronous Optical Network**
- **Optical Wavelength**

**Management & Applications Services**
- **Call Center**
- **Storage Services**

> *KPIs*
> **Av (SDP-to-SDP)**
> *Acceptable Quality Level*
> **Routine:  >99.5%**

> *KPIs*
> **Av (SDP-to-SDP)**
> *Acceptable Quality Level*
> **Critical:  >99.95%**

**Configuration to Support Critical Availability**

• **Primary working waves will supply routine availability (99.5%).**

• **Redundant waves SDP-to-SDP provide Agency with critical availability (99.95%).**



**11**
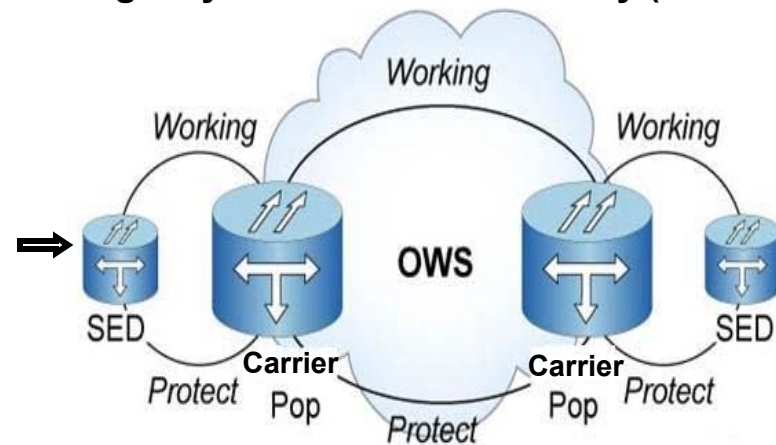
**Federal Acquisition Service**

# Networx – Managed Network Services

➢ **Comprehensive network management solutions**

- **Design and Engineering Services**
  - Network architecture design
  - Network design validation
  - Simulation and testing
  - Engineering Support
  - Evaluation of network technology alternative

Agency Network

Washington D.C.

Agency Node

- **Implementation, Management and Maintenance**
  - Real-time proactive network monitoring
  - Troubleshooting and Service Restoration
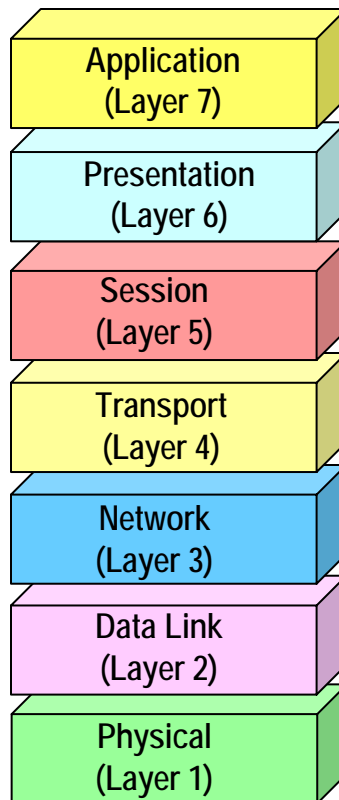  - Configuration changes and Backups

12
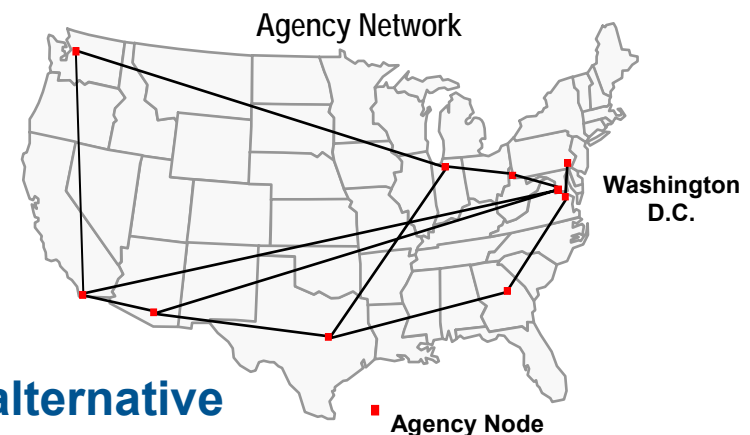
# Networx – Security: Services for Defense in Depth

## Network Protection Requirements

- ➢ **Boundary Protection**
- ➢ **Authentication**
- ➢ **Authorization**
- ➢ **Confidentiality/Encryption**
- ➢ **Message Integrity**
- ➢ **Access Control**
- ➢ **Availability**
- ➢ **Nonrepudiation**
- ➢ **Malicious Code Filtering**
- ➢ **Audit & Monitoring**
- ➢ **Config Mgmt & Assurance**
- ➢ **Access diversity**

Application (Layer 7)
Presentation (Layer 6)
Session (Layer 5)
Transport (Layer 4)
Network (Layer 3)
Data Link (Layer 2)
Physical (Layer 1)

**ISO/IEC 7498**

Requirements → ← Solutions

## Networx Services

- ➢ **Managed Tiered Security Service**
- ➢ **Managed E-Authentication**
- ➢ **Vulnerability Scanning**
- ➢ **Incident Response**
- ➢ **Secure Managed Email**
- ➢ **Intrusion Detection and Prevention**
- ➢ **Managed Firewall**
- ➢ **Anti-Virus Management**
- ➢ **Network-Based IP VPN**
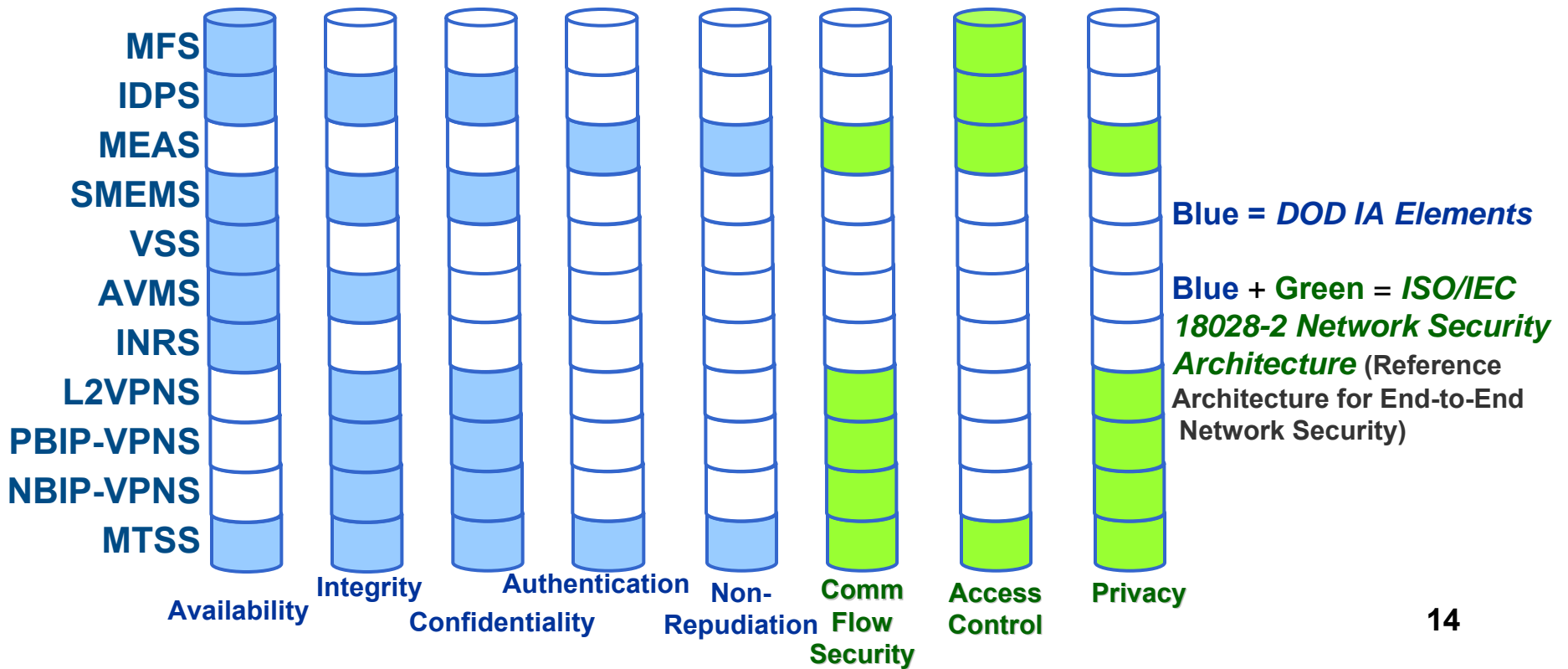- ➢ **Premises-Based IP VPN**
- ➢ **Layer 2 VPN**

**VPN Cluster**

13

Federal Acquisition Service

# Networx – Security Services Meet ISO/DoD Guidelines

*Spanning ISO Security Dimensions*

MFS
IDPS
MEAS
SMEMS
VSS
AVMS
INRS
L2VPNS
PBIP-VPNS
NBIP-VPNS
MTSS

**Blue = *DOD IA Elements***

**Blue + Green = *ISO/IEC 18028-2 Network Security Architecture*** (Reference Architecture for End-to-End Network Security)

Availability
Integrity
Confidentiality
Authentication
Non-Repudiation
Comm Flow Security
Access Control
Privacy

14

Federal Acquisition Service

# Networx – A Toolbox for Agency Network Security that complies with FISMA

## *Networx Security:*

### *13 Required Steps for Each Offeror (RFP Section C.3.3.2)*

- ➢ Security Plan
- ➢ Risk Analysis
- ➢ Risk Mitigation
- ➢ Information Security
- ➢ Information Assurance
- ➢ Security Breach Notification

- ➢ Alarms and Audit Trails
- ➢ Personnel Security
- ➢ Physical Security
- ➢ Procedural Security
- ➢ Ongoing Security Refreshment
- ➢ Non Domestic Services
- ➢ Fraud Prevention Management

Federal Acquisition Service

# Networx – Managed Tiered Security Service

| Security Enhancement Services | MTSP Service Tiers | | | |
|---|---|---|---|---|
| | Standard | Protected | High Assurance | Network High |
| Agency Dedicated Help Desk | ✓ | ✓ | ✓ | ✓ |
| Anti-virus | | ✓ | ✓ | ✓ |
| Firewall | | ✓ | ✓ | ✓ |
| Intrusion Detection/Prevention | | ✓ | ✓ | ✓ |
| Incident Response | | ✓ | ✓ | ✓ |
| Packet Filtering | | ✓ | ✓ | ✓ |
| Premises-based VPN | | ✓ | ✓ | ✓ |
| Secure Managed Email | | ✓ | ✓ | ✓ |
| Security Certification Support | | ✓ | ✓ | ✓ |
| Security Maintenance | | ✓ | ✓ | ✓ |
| Vulnerability Scanning | | ✓ | ✓ | ✓ |
| Proxy Server | | ✓ | ✓ | |
| Agency Sponsored Type 1 Encryption | | | ✓ | ✓ |
| NSA Approved Multilevel Security Solution | | | ✓ | ✓ |
| Network Isolation (Air Gap) | | | | ✓ |

16

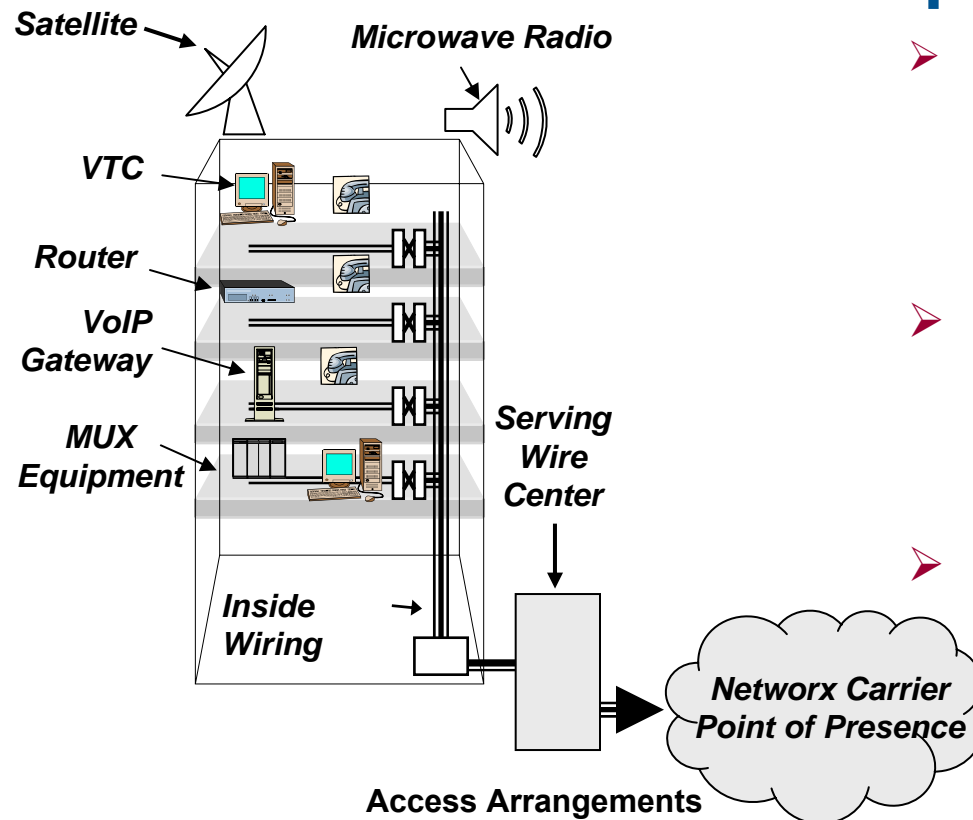Federal Acquisition Service

# Networx – Network Service Monitoring and Management

➢ NMM provides real-time performance information related to the health of Agency services.

➢ NMM includes real-time updates on the status of Trouble Resolution efforts.

➢ Contractor can provide KPI information for Agency services or provide Agencies with the capability to conduct own KPI measurements.

➢ Contractor shall provide additional hardware/software or other means of access to provide this capability.
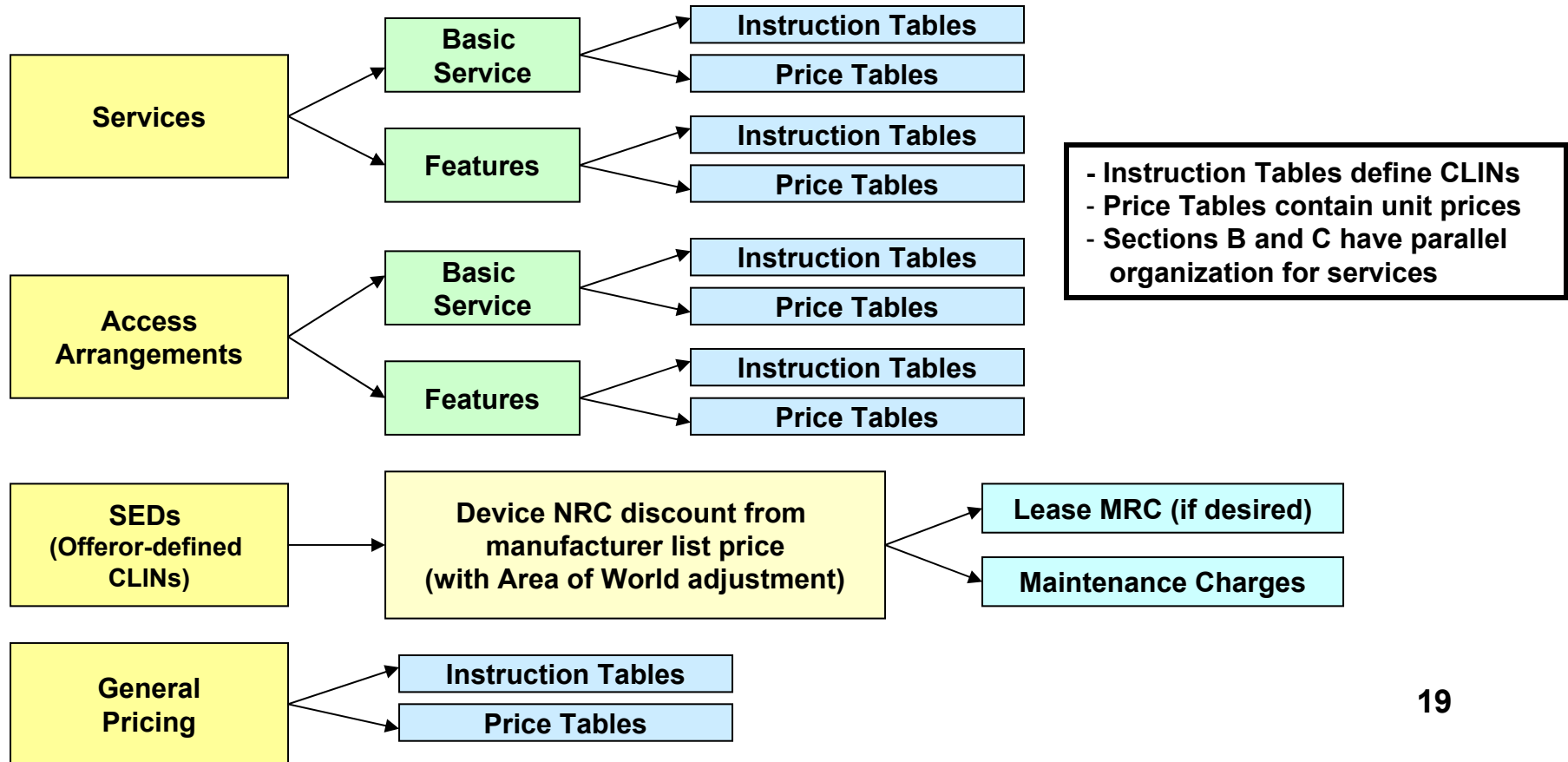
# Networx – SEDs Enable Optimum Service Delivery



*Satellite*

*Microwave Radio*

*VTC*

*Router*

*VoIP Gateway*

*MUX Equipment*

*Serving Wire Center*

*Inside Wiring*

*Networx Carrier Point of Presence*

**Access Arrangements**

➢ **Clear visibility into prices and costs**

- **Separate device, installation, and maintenance prices**
- **Device prices are fixed, based on discounts from MSRP**

➢ **Broad and flexible scope**

- **Includes routers, mux, cellphones, IP phones, security devices, applications, i.e., devices needed for service delivery (hardware & software)**

➢ **Flexible options for agency customers**

- **One-time rental charge or fixed term monthly payments**
- **Mechanism for users to assume ownership and continue contract maintenance**

18

Federal Acquisition Service
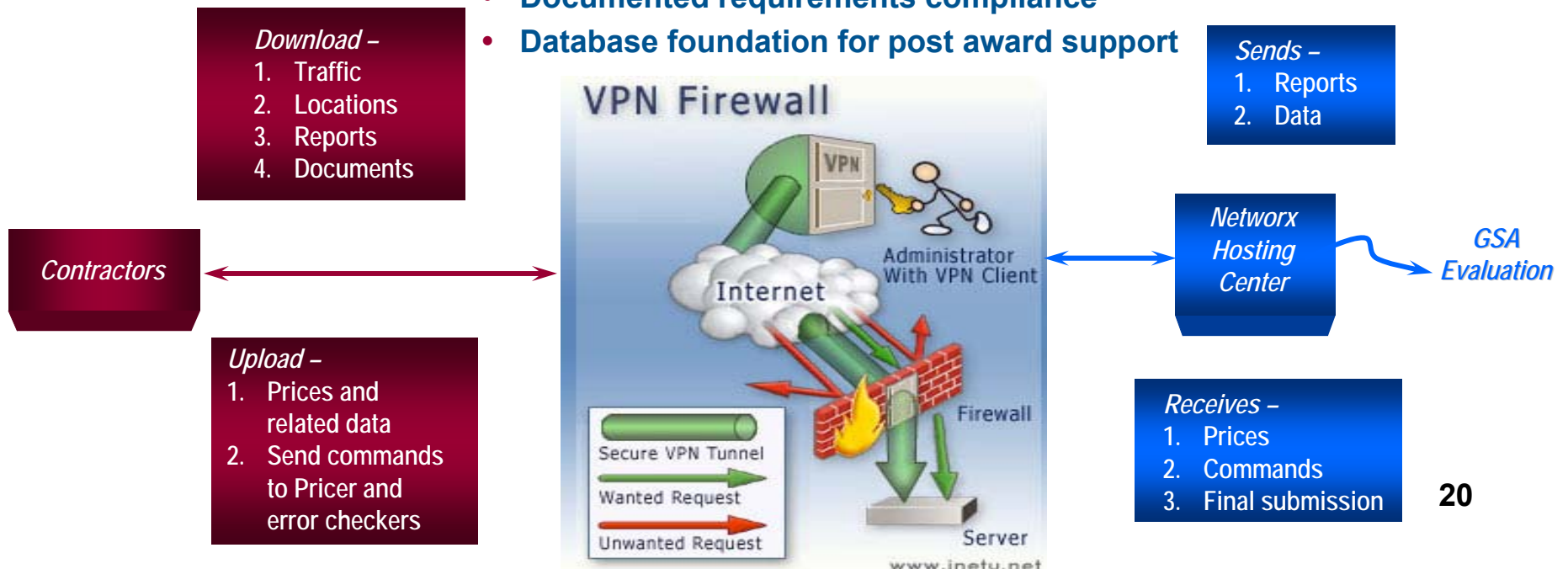
# Networx – General RFP Structure for Price

**Services**

**Basic Service** → Instruction Tables / Price Tables

**Features** → Instruction Tables / Price Tables

**Access Arrangements**

**Basic Service** → Instruction Tables / Price Tables

**Features** → Instruction Tables / Price Tables

- Instruction Tables define CLINs
- Price Tables contain unit prices
- Sections B and C have parallel organization for services

**SEDs (Offeror-defined CLINs)** → Device NRC discount from manufacturer list price (with Area of World adjustment) → Lease MRC (if desired) / Maintenance Charges

**General Pricing** → Instruction Tables / Price Tables

## Federal Acquisition Service

# Networx – Web Based

➤ **State of practice web based, fixed price evaluation**

- **Evaluate over 1.3 million price records worldwide using projected agency traffic**
- **Documented requirements compliance**
- **Database foundation for post award support**

*Download –*
1. Traffic
2. Locations
3. Reports
4. Documents

*Sends –*
1. Reports
2. Data

Contractors

*Networx Hosting Center*

*GSA Evaluation*

*Upload –*
1. Prices and related data
2. Send commands to Pricer and error checkers

*Receives –*
1. Prices
2. Commands
3. Final submission

**VPN Firewall**

VPN

Administrator With VPN Client

Internet

Firewall

Secure VPN Tunnel

Wanted Request

Unwanted Request

Server

www.inetu.net

**20**

![GSA logo]

**U.S. General Services Administration**

## Federal Acquisition Service

# Networx – RFP Online Availability

➢ **The Networx RFPs as amended are accessible online at:**

**www.gsa.gov/networx**

➢ **Additional data may be obtained, to include:**

- **Networx FAQ**
- **Amendments**
- **Networx Hosting Center**
- **RFP Question and Answers**
- **Networx Document Library**

Access GSA Networx website:
www.gsa.gov/networx ❶

Select Networx RFPs & Amendments ❷

Select appropriate document ❸ (i.e., RFP, section, amendment, etc.)



21

Federal Acquisition Service

# Networx – Summary

Performance Based/SLAs

Metrics

End-to-End Services

Operations Support

**Networx Services**

FTS2001 Continuity

Secure, Flexible Solutions

Best Prices

22