

# 3.7 WITS 3 Customer Premises Equipment (L.30.1.3.3)

Verizon provides an objective, vendor-independent approach to delivering CPE that meets the Government's specific requirements. As an integrated communications provider, Verizon offers a broad portfolio of voice and data products to give customers comprehensive solutions to meet their current and future business needs. Verizon provides a one-stop shop for all Federal customers, saving agencies time, money, and hassles. In addition, Verizon's strength and experience in the current WITS2001 contract proves customers can rely on the company to deliver and maintain solutions for the long term. Verizon's trained maintenance staff and variety of maintenance plans can be tailored to meet WITS 3 customers' specific needs and further protect their CPE investments.

- Verizon's CPE offerings include most equipment required for voice, data, and video communications including PBXs, Voice-over-IP (VoIP) hardware and software, handsets, video- and audio-conferencing hardware and software, data communications devices, storage, free space optics, and satellite networks devices. Thousands of individual CLINs are represented in the Verizon CPE electronic WITS catalog.
- Verizon provides multiple choices of equipment for each CPE classification. Best in class vendor partners are represented in the Verizon CPE offering.
- Verizon provides optional staging, configuration, installation, deinstallation, and software and hardware maintenance of CPE for customers.
- Verizon has a large group of support personnel across the WITS 3 NCR to provide CPE maintenance 24x7. Many personnel have security clearances, as required.



Breadth of Offerings	A full range of solutions, best-in-class vendors, and next-generation technologies supported by a single point of accountability.
Consultative Approach	Assistance in selecting offerings from a wide range of vendors helps ensure the Government's unique business needs are met.
Flexibility	Hardware, installation, maintenance, and management options to meet the Government's specific requirements.
Ongoing Support and Expertise	Single point of contact for all CPE orders, requests, and tickets. All action items are funneled through a single organization and tracked to ensure corresponding SLAs are met. All needs are handled by experienced and certified CPE personnel from Verizon and its partners.
Network Operation Center (NOC)	24x7 national NOC support for customer CPE.

### Verizon's CPE offering provides the following customer benefits:

# 3.7.1 Equipment (C.4)

Verizon has proposed a large group of vendors to provide network equipment for WITS 3. Each vendor and their product sets are presented in the following sections. CPE CLIN lists are provided in the pricing volume of this proposal. Verizon will continually refresh CPE offerings throughout the life of the contract.

# 3.7.1.1 General Requirements (C.4.1)

Verizon will meet all general requirements in acquiring, provisioning, operating, administering, and maintaining required equipment. All Verizon proposed equipment will be commercially available "off the shelf" items that require no further development and have been fully tested. The breadth and depth of Verizon's vendor relationships allows it to provide the best solutions to meet the Government's critical needs. Verizon will ensure that all Verizon-provided CPE is compatible with the existing WITS network. Verizon agrees to handle the ordering of all CPE via service orders in accordance with *RFP Section C.3.2: Service Ordering*. Except for drop-shipped equipment, Verizon agrees to work with all applicable national and local codes and to permanently mark all equipment purchased by the Government with the



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maintenance contractor's name and local repair number, the date of acceptance, and the date that the warranty ends.

# 3.7.1.2 Representative Equipment (C.4.2)

*Table 3.7.1.2-1: CPE Matrix* displays the variety of vendors and product sets Verizon has selected to satisfy the government's CPE requirements.

Vendor												CPE											
	Handsets	Key Systems	PBXs	Multiplexers	ACDs	IVRs	Messaging Systems	Gateways	Wireless Equipment Systems	Cable Modems	CSU & DSU	Servers	Switches	Routers	Storage Network Systems	Free Space Optics Systems	Power and Battery Systems	Circuit Termination Equipment	Ancillary Equipment	Broadband over Powerline Systems	LAN Systems	Voice & Video Conferencing Systems	Satellite Networks
Aastra	x									-	-						_						
Adtran				х							х		х	х			х	х	Х				
Avaya, Inc	х	Х	Х		х	Х	х	х											X				
AVST Captaris							х																
Cisco Systems, Inc	х		х			Х	х	х	X		х	Х	X	Х	X							X	
Compunetix																						X	
Conveyant					x		х												x				
Dialogic																			x				
Extreme Networks, Inc													х	x									
fSONA																х							
Fujitsu Network Communications				х																			
GN Netcom	х																						
Hughes Network Systems																							X
Juniper Networks, Inc													X	х					X				
Kentrox											х												
Mutare						х	х																
Nortel	х	Х	Х	х	х	Х	х	х					X	х				х	X				
Plantronics, Inc	х																	х					
Polycom, Inc																						X	
SEI																	X						
Syntellect/Teloquint						Х																	
Tandberg																						X	
Tellabs				х										х									
Tone Commander Systems	х				1			1				1	1										

Table 3.7.1.2-1: CPE Matrix



Table 3.7.1.2-2: Vendor Descriptions displays an alphabetical list of the vendors and the proposed equipment to be offered under WITS 3.

Company	Description
Aastra	Aastra is a worldwide leading manufacturer of digital and analog telephones providing solutions for Federal Agencies of all sizes including large mission-critical enterprise environments.
	Proven technology and superior reliability are hallmarks of Aastra's M5000, M8000, M9000, Business Series and Power Touch telephones. Their phones offer feature-rich performance and high reliability for any WITS3 office environment. Aastra has over twenty (20) years of market presence, and their products are .favored by governments, institutions, call centers and Fortune 500 companies.
Adtran	Adtran is a leading global supplier of networking and communications equipment for service providers and enterprises. It's the number 1 Market share leader in TDM and packet/cell-based
	Integrated Access Devices, T1 DSU/CSUs, Sub-rate DSU/CSUs, HDSL loop deployment, and license-free Wireless. Adtran has a large suite of access and routing products for use by WITS customers. These products include:
	The ATLAS Series of Integrated Access Devices (IADs) offer the highest capacity and most advanced set of networking services. From a single platform, ATLAS can support multiple technologies including T1, T3, and ISDN. ATLAS provides ISDN conversion and oversubscription features, ISDN PRI/BRI switching, multiple T1/PRI DACSing and grooming, T3 applications, and videoconferencing.
	The M, C, and E-Series deliver carrier Ethernet services across an RPR network. They support redundant, field-replaceable power supplies and accept Gigabit Ethernet and T1/E1 plug-in modules.
	ADTRAN's MX Series of M13 multiplexers provide carrier-class service in space saving configurations and a cost effective bandwidth consolidation solution.
	The NetVanta portfolio includes managed Layer 2 Fast Ethernet switches, integrated switch-routers, T1/multi-T1/T3 routers, and Internet security/firewall appliances.
	The feature set, small footprint, low cost, and diverse deployment options of the OPTI- 6100 make it a powerful tool for optical delivery of DS1, DS3/EC-1 (STS-1 electrical interface), OC-3, OC-12, OC-48 and Gigabit Ethernet.
	The Total Access Series are Carrier Class multi-service access platforms, integrated access devices (IADs), and concentrators, along with system management and services.
	The Total Reach products incorporate the latest in loop technology to extend deployment ranges and eliminate the need for costly repeaters. With 2-wire SC PAM based technology, Total Reach utilizes the existing copper plant more efficiently while saving costly labor expenses and reducing service order delivery times.

# Table 3.7.1.2-2: Vendor Descriptions



Company	Description
Avaya	Avaya communication solutions are designed to meet the most demanding needs of the US Federal Government. From JITC Certified solutions for the US Department of Defense to the most advanced contact center solutions to deliver service to citizens, businesses and government employees, Avaya products and service can help the government achieve their communications objectives.
	Avaya has achieved Joint Interoperability Test Command (JITC) certification for Avaya
	Communication Manager systems for Small End Office (SMEO) use. Avaya has continually pursued JITC certification and has many of its DEFINITY Enterprise Communication Systems in operation today serving the US Department of Defense for their Command and Control operations. A notable distinction is that Avaya was the first company to certify a PBX1 and PBX2 IP Telephony solution, and the first to certify the more rigorous SMEO category. With JITC certification, the US defense departments as well as certain government contractors are assured that the Avaya communication system will interoperate within their network and support the MLPP feature set. JITC certification also attests to the system's ability to meet certain "Information Assurance" requirements which cover security and survivability capabilities.
	Communication Manager
	Communication Manager is the facilitator of Intelligent Communications and is the next generation of Avaya call processing software. Designed as an open, scalable, and highly reliable telephony solution, Communication Manager (CM) effectively scales from under 100 users to as many as 36,000 on a single system and to more than one million users on a single network allowing WITS3 customers ultimately flexibility and value.
	Enterprise Survivable Server (ESS)
	The Avaya Enterprise Survivable Server (ESS) solution allows WITS3 Agencies that are using an Avaya CM 3.0 driven solution to have greater flexibility of consolidation by providing new survivability options that provides maximum up time to WITS3 users as well as supporting the goals of many Federal COOP initiatives.
	Modular Messaging
	Modular Messaging is a powerful IP- and standards-based voice and fax messaging platform designed for single- or multi-site global enterprises. This strong compliment to the CM platform offers exceptional scalability and a superior feature package of call answering and voice messaging capabilities. Messages are accessible any time, anywhere from a wide array of access devices including telephones, fax machines, or PC graphical user interfaces.
	Unified Communications Center
	Unified Communication Center (UCC) lets mobile, remote and office workers easily access important communications tools and information via any telephone using simple and intuitive speech commands. UCC helps WITS3 users respond to their customers faster and with higher quality, stay connected to enterprise associates, make better and faster decisions, and to build a competitive advantage through superior customer service and increased productivity. Avaya Unified Communication Center (UCC) provides mobile, collaborative and management associates with a unified interface to their most important information and communications tools and enables them to turn downtime into productive time.
AVST	AVST's CallXpress multimedia messaging systems are installed in more than 35,000 organizations worldwide ranging from small businesses to multi-site enterprises. With



Company	Description
	scalable solutions that support thousands of users on a single platform with matching networking capabilities, the CallXpress is positioned to handle every WITS3 Agency's messaging needs today and in the future.
	CallXpress is a modular and scaleable multimedia messaging system. CallXpress supports hundreds of features and is easy to configure. New features and enhancements have been added with every new release of software. Rather than a turnkey voice mail system, CallXpress is a highly programmable call processing platform that can help Federal Agency's manage their voice messages, incoming calls and other informational requests. The proposed CallXpress solution can be broken into three major components: CallXpress Advanced Messaging, CallXpress Unified Messaging and CallXpress Speech. An added value of the CallXpress is the capability to provide a Telephone User Interface (TUI) that mimics the Octel Aria® user interface; a prevalent TUI in current WITS users. Other TUIs are available on a user-by-user basis controlled by the system administrator.
Cisco Systems	As Cisco's Gold Partner, Verizon was Cisco's top service provider in 2006. Cisco has a large suite of products for use by WITS customers. These products include:
	Routers The Cisco Integrated Services Routers (ISRs) (800, 1800, 2800, 3800, 7200, and 7600 series) enable organizations to take advantage of numerous built-in technologies such as voice, wireless, and advanced security systems while ensuring the quality of service (QoS) prioritization their network applications demand. Because the network services are built in or can be easily added to the integrated services network router, customer can install one sophisticated device rather than purchase separate products to provide each individual function. An integrated services network router allows companies to transfer responsibility for security and reliability from individual computers and users to the network itself. This helps protect companies from the influx of viruses, malicious code, and other infections that end users' laptops might unknowingly acquire.
	Switches
	Cisco Catalyst switches (500, 2960, 3560, 3750, 4500, and 6500 series) are used at the core of networks, providing high-speed connectivity among users, applications, and communication systems. Catalyst switches support demands for more network switch capacity to support bandwidth-hungry applications, converged services including IP telephony, voice over WLANs, and video services, high availability and uninterrupted access to information assets enterprise wide, greater protection against internal and external security threats, and more manageable solutions as IT administrators seek to reduce cost and complexity of network switches.
	Storage Networking
	Cisco® MDS 9000 Family IP Storage devices offer the following features:
	Flexible IP Storage Services-4-port and 8-port configurations deliver both Fibre     Channel over IP (FCIP) and Small Computer System Interface over IP (iSCSI) storage     services.
	Simplified business continuance and storage consolidation-Use widely known IP to cost-effectively connect to more servers and more locations over greater distances than previously possible.
	Simplified management-Provide unified management environment independent of whether servers use Fibre Channel or IP to connect to the storage network.
	Comprehensive security-Combine ubiquitous IP security infrastructure with Cisco Virtual SANs (VSANs), hardware-based zoning, and hardware-based access control lists (ACLs) to provide robust security.
	FCIP for remote SAN extension:
	Simplifies data protection and business continuance strategies by enabling backup, remote replication, and other disaster recovery services over WAN distances using open-standard FCIP tunneling.
	Optimizes utilization of WAN resources for backup and replication by tunneling up to three virtual Inter Switch Links (ISLs) on a single Gigabit Ethernet port, and enabling



Company	Description
	compression, FCIP Write Acceleration and FCIP Tape Acceleration.
	<ul> <li>Reduces SAN complexity by eliminating the need to deploy and manage a separate remote connectivity platform.</li> </ul>
	<ul> <li>Preserves Cisco MDS 9000 Family enhanced capabilities including VSANs, advanced traffic management, and security across remote connections.</li> </ul>
	iSCSI for extension of SAN to Ethernet attached servers:
	• Extends the benefits of Fibre Channel SAN-based storage to Ethernet attached servers at a lower cost than possible using Fibre Channel interconnect alone.
	<ul> <li>Increases storage utilization and availability through consolidation of IP and Fibre Channel block storage.</li> </ul>
	<ul> <li>Transparent operation preserves the functionality of existing management storage applications.</li> </ul>
	Security and VPN
	The Cisco® ASA 5500 Series SSL / IPsec VPN Edition enables organizations to gain the connectivity and cost benefits of Internet transport without compromising the integrity of corporate security policies. By converging Secure Socket Layer (SSL) and IP Security (IPsec) VPN services with comprehensive threat defense technologies, the Cisco ASA 5500 Series delivers highly customizable network access tailored to meet the requirements of diverse deployment environments while providing advanced endpoint and network-level security. The PIX security appliances provide advanced security services including firewalling capabilities.
	Cisco VPN 3000 Series Concentrators provide cost savings through flexible, reliable, and high-performance remote-access solutions. The Cisco VPN 3000 Series offers solutions for the most diverse remote-access deployments by offering both IP Security (IPsec) and Secure Sockets Layer (SSL) VPN connectivity on a single platform.
	Wireless
	Cisco has the most complete WLAN solution encompassing the Client, APs, outdoor bridging and Mesh, as well as location tracking, all under the same unified management. Cisco currently is the market leader across all markets at over 60% market share, and is the only WLAN provider that Gartner rated as having the ability to execute and the completeness of Vision. For Federal deployments Cisco has Clients, Access points and Wireless LAN controllers that have received FIPS approval, have been submitted for Common Criteria in complete line with OSD's 8100.2 Secure Wireless LAN Policy. Cisco has a range Wireless Products depending on user density. Indoor Access Points include 1130AG, 1000, 1240AG, 1230AG. The Cisco 1300, 1400, and 1500 are outdoor Access Points. Cisco manages these "thin" Access Points with their controllers. Cisco's uses the 4402 and the 4404 in various configurations to support up to 300 simultaneous Access Points.
	Voice and Unified Communications.
	The Cisco MCS 7800 Series Media Convergence Servers (MCS 7800) to support call processing and VM. The MCS 7800 Series is a high-availability server platform for Cisco Unified Communications solutions and is an integral part of the scalable architecture to meet a new generation of high-quality IP PBX solutions. The MCS 7800 Series is easy to deploy, and delivers the high performance and availability demanded by the Agency's enterprise networks. The MCS 7800 Series runs a variety of Cisco IP communications applications, such as Cisco CallManager for Call Processing, Unity Voicemail as a voicemail and auto-attendant application, IP communications manager for ACD services, Emergency Responder for Enhanced 911 (E-911), and music-on-hold. The modularity of the 7800 Series allows for future growth by the Agency. An integral part of a complete, scalable architecture for a new generation of high-quality IP voice solutions that run on enterprise data networks, the MCS 7800 series delivers the high performance and availability demanded by the Governments next generation enterprise IP networks.
	Both the VG224 analog gateway and the ATA 180 series gateway provide line side functionality for existing Agency analog sets. VG224 is a 24-port analog gateway that



Company	Description
	provides a foreign exchange service (FXS) dial-tone directly out of each port. The ATA 180 series provides a two-port analog FXS dial-tone directly out of each port. Both gateways enable the Agency to terminate a regular analog telephone, an analog conferencing unit, a modem, or a fax machine directly into each port to provide dial-tone for the analog set. The analog connection enables the legacy phone sets to interface with the VOIP network and utilize the Managed IP PBX system for call services.
	The Cisco IP phone 7900 Series IP Phone sets. Cisco IP phones provide communication devices designed to take full advantage of converged voice and data networks, while offering the convenience and user-friendliness found in a standard third party PBX business phone. The IP phone systems can help improve productivity by meeting the needs of different users throughout Government Agencies.
Compunetix	Compunetix develops state-of-the-art multimedia multipoint telecommunications systems for audioconferencing, videoconferencing, and mission-critical applications. Compunetix manufactures MCU Video bridges scaleable from eight ports to hundreds of video ports. They manufacture and support the Vituoso supporting from one (1) PRI to Eight PRI (approximately 32 ports), the Mini-Contex which will support up to about 72 ports and the Contex which supports ports beyond 72.
Conveyant	Conveyant Systems, an industry-leading provider of PC Based Attendant Consoles, Paging and Notification Solutions, offers the TeleDirectory Network System <sup>™</sup> as a powerful attendant console solution for WITS3 customers. The TeleDirectory Network System <sup>™</sup> is a high performance, multi-user, advanced PC-based directory and attendant position applications package that may be used with various telephony interfaces including Centrex, Centrex IP, ISDN, TAPI, and multiple PBX and Call Center solutions. This PC-based platform consists of Conveyant's TeleDirectory Network System application operating in a multi-tasking, open Microsoft Windows environment. TeleDirectory combines user configurable directories and information access applications with integrated call processing. Conveyant's products have been designed to simplify and increase the speed of telephone operations as several current WITS customers are already aware. The TeleDirectory Network System is designed with value added application software packages such as multiple on-line directories, integrated messaging and paging, comprehensive statistics, web-based directories and more. Conveyant's Notifications Solutions deliver real-time alerting of significant events via wireless notification technologies such as pagers, cell phones, electronic mail, LED boards and more. Either installed as a standalone event and disaster notification Solutions greatly improve the speed and efficiency of notifying groups and individuals in a timely fashion. All of Conveyant's products have been developed with reliability, network compatibility,
Dialogic	ease of use and advanced features to provide WITS3 customers with benefits including improved customer service, lower labors costs and increased employee productivity. Dialogic is a leading provider of open systems platforms for the converged communications market. Dialogic's Emergency Notification Service offering is a crucial component to any
	agency's continuity of operations plan. Their product, The Communicator, can be purchased as a turnkey offering or as customer premises equipment managed by agency personnel. A geographic component can be added to alert people in specific sections of a city, state or country.
	The Dialogic Communicator delivers the following capabilities:
	Automates any manual notification process
	Contacts personnel through all communications media available
	Delivers incident-specific information or potentially life-saving instruction
	Qualifies individuals available for response efforts
	Accepts recipient feedback
	Provides comprehensive reports via e-mail or fax
	Depending on the system size selected, calls can be made from a minimum of 100 numbers to a maximum of 800 numbers within 5 minutes. The system will contact a wide



Company	Description
	variety of devices until the user acknowledges that the message is received. Devices includes phone, cell phones, pagers, PDAs and fax machines, all predefined by the system administrator.
	Benefits of this service include:
	Rapid exchange of information
	Appropriate and timely response
	More efficient use of existing communications technologies
	Improved Communication at All Levels of Government
	Faster Deployment of First Responders, Military personnel, emergency response teams, etc.
	Broader-reaching solution for warning communities-at-risk
	Free to focus on situation at hand versus coordination of message delivery
	Immediate proof of notification for complete audit trail
Extreme Networks	The Summit and Black Diamond switches provide a high bandwidth, non-blocking architecture for demanding edge applications, high density gigabit ports with optional 10 gigabit uplinks that provide high-performance aggregation, support for advanced routing protocols such OSPF, BGP and multicast for an efficient and productive small network core, and exceptional Quality of Service (QoS) with advanced traffic management capabilities for triple play services in metro Ethernet networks.
fSONA	fSONA is a premier provider of free space optics (FSO) solutions. The SONAbeam products transmit through the atmosphere to provide point-to-point communications over the air. SONAbeam is immune to electro-magnetic (EM) and radio-frequency (RF) interference, as well as offering the benefit of eliminating the requirement for costly spectrum licenses. The SONAbeam's narrow, highly directional transmission all but eliminates eavesdropping or interception.
	The ability to rapidly and cost-effectively extend your agency's network will allow you to fulfill the growing need to share information through data networking. As well, the SONAbeam <sup>™</sup> product family is ideal for physical diversity and redundancy programs initiated to protect networks from failure due to disaster or attack.
	SONAbeam <sup>™</sup> products are available in various bandwidths from 1.5 Mbps up to 1.5 Gbps allowing you to extend your agency's network using familiar protocols and maximize investments made in existing data infrastructure. The SONAbeam <sup>™</sup> 1250 series is rate adaptive so your agency can seamlessly ramp up capacity as needed.
	SONAbeam <sup>™</sup> systems are designed, engineered and tested to ensure exceptional reliability. Building on their extensive experience in laser communications systems for military and space applications, their design engineers have ensured that critical sub-systems are manufactured using high-reliability components. These products offer long-term investment protection and allow you to meet reduced telecommunications budget requirements with:
	Secure wireless communications
	Scalability that accommodates your agency's growth
	Reliable operation and minimal downtime
	Rapid deployment
	Rugged, environmentally sealed outdoor/indoor equipment
Fujitsu Network Communications	Fujitsu FLASHWAVE® portfolio of voice, data, and video optical solutions deliver industry- leading flexibility, reliability and performance. Powerful functionality and carrier-grade features optimize networks and bring best value to the Federal customer. Whether LAN or WAN or wireless mobility, Fujitsu's strategic alliance with Verizon, has one objective, to provide the best solution to the Federal customer.
	The FLASHWAVE solutions are field-proven with more than 320,000 telecommunications systems in the network infrastructure of North America serving the RBOC, Enterprise and

Company	Description
	Federal markets. Along with Verizon, Fujitsu forge strong bonds of trust with the various Federal agencies they serve. This highly scalable and flexible platform will help create a next-generation optical transport network that supports a wide variety of innovative services, while delivering CAPEX and OPEX savings.
	The FLASHWAVE 4000 product family is our suite of next-generation optical transport solutions. The FLASHWAVE 4100 offers traditional private line advanced Ethernet with Resilient Packet Ring (RPR) efficiencies and storage services in a single SONET platform that can scale from OC-3 to OC-48. The carrier-class FLASHWAVE 4500 platform provides a quantum leap in network efficiency by delivering a carrier-class, multiservice optical transport solution for telecom, Multiple System Operator and wireless network service providers The Flashwave 4500 functionality can provide support for TDM, Ethernet and DWDM transport over a broad range of network architectures on a single platform.
	The FLASHWAVE® 7500 Reconfigurable Optical Add/Drop Multiplexer (ROADM) is our next-generation Dense Wavelength Division Multiplexing (DWDM) system. The optical core of the FLASHWAVE 7500 platform is based on an advanced Wavelength Selective Switch (WSS), which delivers the most flexible wavelength routing and topology available today. Remote software provisioning and sophisticated self-tuning features allow rapid service activation. Advanced optical line cards provide efficient on-ramps to customers' photonic backbone.
	Service providers use our integrated management solution NETSMART 1500 software to quickly and efficiently monitor and manage Ethernet, Dense Wavelength Division Multiplexing (DWDM), SONET, Synchronous Digital Hierarchy (SDH) and ATM services. This software includes a full suite of network and element management features that grow with the network as complex services are introduced.
GN Netcom	GN Netcom is a leading supplier of hands-free communications solutions. The GN 9120 series provides wireless headsets allowing complete wireless freedom in the office. The GN 2000 and 2100 series provide wired headsets with exceptional sound quality in busy and noisy environments.
Juniper Networks	Juniper Networks provides network solutions from Layer 1 up to Layer 7. Juniper has a large suite of products for use by WITS customers. These products include:
	The Juniper Networks Steel-Belted Radius is a complete family of AAA/RADIUS and policy management servers and appliances for enterprises and service providers, available in a variety of form factors.
	Juniper Networks Odyssey is a complete family of secure 802.1X access clients for the enterprise and government markets. The DX and WX/WXC application acceleration platforms provide secure and assured application delivery by improving the performance of client-server and web-enabled business applications for central sites, branch offices, and remote and mobile users.
	The Netscreen line of firewall/VPN solutions provides strong firewall security for access control, user authentication, and network and application-level attack protection; lower capital investment, support, deployment, and operations costs for overall lower TCO; and predictable performance for a highly reliable, available, and secure network.
	The Networks Intrusion Detection and Prevention products (Juniper Networks IDP) integrate application and network visibility with incident investigation and remediation to help customers quickly and confidently deploy inline attack prevention.
	Juniper Networks offers a comprehensive portfolio of routing and security solutions to meet the demands of widely-distributed enterprises that are deploying business-critical applications across the LAN and WAN.
	Juniper Networks enterprise routing solutions include:
	M-series routers designed for head offices, campuses and corporate backbones
	J-series routers designed for regional, branch and remote office locations
	Secure Services Gateway designed to consolidate security and routing into a single



Company	Description
	platform in regional or branch office locations and medium businesses
	The SSL VPN products provide a single platform for employee and partner remote access. They provide clientless access to enterprise applications and resources, best-in-class endpoint security, granular access control and threat prevention, coordinated threat control with Juniper Networks IDP, and scalability to meet the remote and extranet access requirements of companies of all sizes.
Kentrox	Kentrox is a leading supplier of reliable and feature-rich network access equipment, Data Service Units (DSUs) and Channel Service Units (CSUs). The Q-Series <sup>™</sup> family of QoS Access Routers, providing all-in-one networking solutions to small and medium offices. With the Q-Series, customers get the functions of an IP router, Quality-of-Service (QoS) appliance, Virtual Private Network (VPN) appliance, firewall, WAN access device and Ethernet switch - all in a single, affordable device. Integrating six devices into a single unit significantly reduces capital outlay and management and maintenance expenses over the life of the product. Kentrox Data Service Unit/Channel Service Units (DSU/CSUs) are high-performance, reliable WAN access devices that combine the data formatting of a DSU with the FCC-mandated line protection and diagnostic capabilities of a CSU.
Mutare Software	Mutare Software is a leading developer of interactive voice & internet response (IVIR) applications with over 1,000 successfully deployed applications throughout the world. Mutare Software's applications fall into 3 categories: enhancement of voice mail systems, emergency notification and custom applications.
	Enhancement of voice mail systems:
	Enabled Voice Mail (EVM) - is a unified messaging application that works with Avaya voice mail systems – Octel, Intuity and Modular Messaging. EVM adds value for WITS3 customers by providing a uniform web interface for users to determine text message addresses and email addresses for notification and delivery of voice mail messages to emails. In addition, EVM works with any email system and can work with Blackberry, Treo and other PDA's. The application resides on a dedicated Windows2003 server in the customer's LAN.
	Message Mirror - is a software product that will mirror voice messages from a primary voice mail system to either another voice mail system or to a client server and is designed to support business continuity in the Federal customer's environment. The real value of this application to a WITS3 Agency is that a message is created in the primary voice mail system is "mirrored" to another server thereby providing one of the keys in continuity of operations.
	Emergency/Event Notification - the EEN application was specifically designed to support continuity of operations (COOP). EEN's value lies in its ability to quickly disseminate information to groups of people using 5 points of contact for each person: phones, emails, text messages, and SNPP pagers. It is a web based application that resides in the customer's network and broadcasts can be initiated via phone or through the web.
	Custom Interactive Voice and Web Response applications -Mutare Software develops applications designed to meet specific needs of WITS3 Agencies and their callers or customers. It can be as simple as speaking back data from a database to gathering data from the caller to put into a database.
Nortel	Nortel is a global leader in networking technology providing the Federal Government with secure, end-to-end network solutions supporting mission critical communications.
	Nortel's portfolio of traditional telephony as well as converged IP telephony solutions deliver seamless, scalable real-time communications with the flexibility and reliability that enable WITS3 customers to cost-effectively serve the demanding telecom requirements of their user communities. Many WITS3 Agencies have the added value of leveraging their existing investments in Nortel's portfolio by considering a cost-effective migration to packet-based networks providing value to an increasingly mobile and geographically disperse Federal work force.
	Nortel OPTera Metro Optical Networking
	The Nortel Networks OPTera Metro family of products delivers one of the industry's most powerful non-blocking bandwidth management switching architectures, based on one of

Company	Description
	the smallest, most flexible transport platforms available on the market today. Multi-rate, multi-service optical transport platform series addresses a broad range of application needs in metropolitan fiber-optic networks, including new generation Optical Ethernet services. Optical Ethernet unlocks new capabilities by allowing customers to optimize their networks through new types of service. Government customers can take advantage of vast amounts of Wide Area Network (WAN) bandwidth offering converged services and streamlined operations, while staying within LAN-related formats and protocols. Nortel's OPTera products leverage leading technologies to offer optical switching, photonic systems, SONET/SDH systems, open management, and control platforms to foster next-generation data networking solutions.
	The Communication Servers
	The Communication Server 1000 and 2100, the Multimedia Communication Server 5100 and Business Communications Manager all allow WITS3 Agencies to manage the strategic transformation and convergence of their network at a pace that makes sense for each Agency while eliminating business disruption. The CS1000 and CS2100 are both available in JITC certified configurations.
	Communication Server (CS) 1000 - a server-based, full-featured IP PBX, providing the benefits of a converged network plus advanced applications and over 450 world-class telephony features. CS 1000 supports business-critical applications, including unified messaging, customer contact center, IVR, wireless VoIP and IP phones and soft clients
	The Communication Server (CS) 2100 - a large-scale Enterprise converged solution based the Communication Server 2000, deployed in the worlds leading Service Providers networks. The CS 2100 addresses the needs of demanding large enterprises with a highly scalable converged solution. The CS 2100 incorporates Nortel's leading Enterprise features, applications and client support, with the carrier attributes of scalability, reliability and networking typically only found in carrier solutions
	• The Multimedia Communication Server (MCS) 5100 - a network-based, SIP application server solution that seamlessly integrates IP Telephony, multimedia conferencing, instant messaging (IM), presence and other end user collaboration tools improving the effectiveness of communications and reducing communication costs.
	Business Communications Manager
	Business Communications Manager (BCM) delivers small/medium-sized businesses and branch offices the only converged voice/data solution in the industry, providing a choice of IP-enabled or pure-IP strategy.
	Meridian
	Nortel's broad product spectrum also includes the more traditional TDM-based Meridian Communications Portfolio. From remote and branch office solutions to large campus networks with 60 to 80,000 lines, Federal Agencies have come to trust and depend on Meridian's profit-building advanced applications and features for their mission-critical voice communications. The Meridian product is available in a JITC certified configuration.
	Call Pilot
	As a complement to the CS and Meridian platforms, Nortel's CallPilot Unified Messaging systems combine voicemail, fax and e-mail into a single location that can be accessed from anywhere, whether over the Internet or by telephone. Nortel's CallPilot Unified Messaging allows government employees to be more productive and stay connected with customers and business affiliates, while reducing operating expenses. The Call Pilot is available in a JITC certified configuration.
	Contact Center
	For added value built on the voice platforms described above, Nortel's Contact Center portfolio of products provide the means for customers or clients to do business with WITS3 Agencies consistently and seamlessly. By providing blended multimedia capability and outbound calling campaigns that utilize existing TDM investments or powerful converged IP infrastructures, Nortel's Contact Center portfolio allows WITS3 Agencies to choose their optimum deployment approach.
	For added value, Nortel's voice platforms can give WITS3 users wireless mobile voice and multimedia applications over a secure Wireless LAN infrastructure with Nortel's leading



Company	Description
	WLAN portfolio. The broad portfolio includes the right solution for any Federal application from reliable wireless voice and multimedia services to cost-effective indoor/outdoor coverage and point solutions.
Plantronics	Plantronics manufactures and distributes a product line of full function headsets. There are many styles to choose from, single ear piece, dual ear piece, monaural and binaural, behind the head and over the head. The technologies provided are wired, wireless and they have recently introduced a Bluetooth enabled headset. Many of the units have Echo-Cancellation. The Plantronics headset may include a capability to manage 'Off-Hook Control" on the telephone instrument.
	The amplified handsets with a separate audio control make Plantronics Headset and Handsets an important player in Section 508 Compliance. In most cases installation consists of unplugging the existing handset and replacing it with the Plantronics Hand or Headset.
Polycom	Polycom delivers end-to-end collaborative applications for voice, video, data, and the Web Polycom manufactures ITU-T compliant video equipment and has been the innovator of the most recent addition to the T.120 ITU-T sanctioned collaboration protocol suite. They manufacture and distribute one of the industry's leading MCU Bridges in the MGC-25, MGC-50 and the MGC-100. Polycom manufactures and supports a total IP Video Solution.
SEI	SEI Power, headquartered in Fredrick, MD, is a telecommunications products and power company that manufacture a full line of ISDN Power Supplies, Battery Back-up and NT1s. SEI also manufactures and distributes uninterruptible power for VoIP and wireless applications as well.
Syntellect	Syntellect is a leading provider of self-service speech and advanced call center solutions. Syntellect's Customer Interaction Management solutions enable contact centers to empower employees, leverage current investments, provide a flexible communication platform, enable intelligent business decisions, control costs and maximize profitability, and consistently support all customer interactions.
Tandberg	Tandberg manufactures ITU-T compliant H.320 (ISDN) and H.323 (IP Networking) teleconferencing equipment and services. They are the innovator of the Tandberg Expressway <sup>™</sup> witch allow easier Firewall and NAT transversal. All Tandberg VTC equipment and bridges are SIP and SCCP (Skinny Client Control Protocol) compliant. Tandberg products were a part of TEMPO and WITS2001 CLIN items. According to the Wainhouse Research Bulletin for Q1 2006 Polycom held 21% of the market.
Tellabs	Tellabs designs, develops, deploys, and supports solutions for telecom service providers worldwide. Tellabs's customers include wireline, wireless, cable TV companies, and government agencies. Tellabs is focused on fiber access for "triple play" services, optical and data networking for true service convergence, and mobile solutions for moving networks to 3G and beyond. Tellabs product solutions include Access Networking, Digital Cross-Connects, Transport Switching, Managed Access, Data Networking, Optical Transport, Network Management, and Voice-Quality Enhancement.
	Included in the WITS catalog are the Tellabs 7100 Optical Transport Platform and the Tellabs 8800 Multi-Service Router. Additional product lines may be added as required.
	Tellabs 7100 Optical Transport System (OTS) combines the most advanced optical networking and services layer technologies on one seamless platform. Designed to support current Add/Drop Multiplexer (ADM) and Wavelength Division Multiplexing (WDM) ring capabilities, the Tellabs 7100 OTS ensures a smooth migration to future packet-based services over mesh networks. Unique and multi-patented system technologies enable true next generation multi-service delivery. An integrated dynamic optical core combined with an intelligent services interface delivers ADM cross-connect and Layer 2 switching capability on a single blade. The Tellabs 7100 OTS not only addresses current network requirements in a cost-effective, efficient manner, but supports strategic deployment of future native packet-based solutions.
	The optical core meets today's network needs while supporting the ability to effortlessly deploy additional nodes for future expansion via a multi-degree Reconfigurable Optical Add/Drop Multiplexer (ROADM). Expanded ROADM capabilities offer 44 wavelengths of

Company	Description
	bandwidth in each direction to economically transport the full triple play of voice, data and video. Each one of the 44 wavelengths gives service providers fully integrated ADM functionality on a single blade.
	An intelligent services interface mimics currently installed ADM rings and Layer 2 aggregation with a simple pair of modules, eliminating the costly implementation of stacked rings, back-to-back boxes between rings and multiple rows of supporting equipment.
	The Tellabs 8800 series supports any-to-any Layer 2 and Layer 3 network and/or service inter-working reliably and concurrently. It provides converged MPLS-enabled IPnetworking and enables connection-oriented network characteristics such as Quality of Service (QoS) and security with powerful MPLS traffic engineering capabilities, while maintaining the superior scalability and flexibility of pure IP networks. Customer Benefits include: Enhanced Service Level Agreements (SLAs), Superior traffic management, Enabled new revenue streams, Evolutionary migration of legacy networks, High availability and reliability, Investment protection, Opex reduction, and Capex reduction. Major Features include: Comprehensive Signaling and Routing Support, Any-to-Any True Service Interworking, Any Service-Any Port-Any Flow, Per-Flow Guaranteed QoS, Carrier-Class Reliability, and Next Generation Ethernet Support.
Tone Commander	Tone Commander manufactures a complete line of ISDN Telephones, standalone and rack-mount NT1 ISDN Network Terminations and Centrex Attendant Consoles. Tone Commander's products are designed and manufactured in the USA. With universal compatibility and "best in class" performance, every Tone Commander ISDN phone provides easy installation, automatic setup, and user friendly operation. Just select the interface type, style, and number of buttons that best meets your needs. ISDN Telephones
	Tone Commander 8810, 8610, and 6210 10-button sets, and 8620 and 6220 20-button sets provide full service compatibility for all ISDN applications. These phones automatically configure for Lucent, Siemens, Nortel and AG Communication Central Office environments and line provisioning, and are also compatible with Lucent Definity PABX systems. These station sets are available with "U" or "S/T" interfaces (the "U" models have a built in NT1). They can be expanded to 40 or 50 buttons with the addition of a Button Expansion Module.
	VoIP Telephones
	Tone Commander 7310 10-button sets and 7320 20-button sets use Voice over Internet Protocol to transparently provide high quality ISDN Centrex service on a managed data network. ISDN service from any Class 5 Central Office (5ESS, DMS-100, EWSD, or GTD- 5) is transported through an AG Communication Systems iMergeTM Centrex Feature Gateway and over a wide-area network to the phone. These phones are also expandable to 40 or 50 buttons with the addition of a 6030X Button Expansion Module and have a built- in 10/100BaseT repeater to allow daisy-chain connection of a PC workstation without additional equipment.
	NT1 ISDN Network Terminations
	NT1 ISDN Network Terminations connect 4-wire (S/T interface) ISDN voice and data equipment to the 2-wire (U interface) telco network. Tone Commander NT1 models include desktop, wall mount, and open card versions, with several powering options. Racks and battery backup are available for high-density applications.
	All Tone Commander NT1 models are compatible with any telco Central Office that supports the ANSI standard 2B1Q U-interface, and are also compatible with both National and Custom ISDN.
	ISDN Centrex Attendant Consoles
	Tone Commander ISDN attendant consoles integrate Centrex services into a complete solution by providing central answering, Direct Station Selection (DSS) and monitoring for all stations, regardless of location. In addition, the consoles are specifically designed for efficient call processing in high-traffic environments.
	Station status for up to 120 stations can be provided over a single Basic Rate line. Calling number and call type identifiers are provided for each incoming call so that comprehensive call information may be presented to the attendant.



Company	Description
	The Tone Commander 40d120 is an advanced attendant console system that takes full advantage of the cost efficiency and features available with ISDN technology. One to four 120d consoles may be added to provide Direct Station Selection and Busy Lamps for up to 480 stations. Each console uses one ISDN BRI line.
	Designed for small business or departmental answering applications, the Tone Commander 2260d provides the same console operation as the 40d but incorporates 60 Direct Station Selection and Busy Lamps on a single console using one ISDN BRI line.

# 3.7.1.3 CPE Requirements

Verizon has proposed a comprehensive set of CPE that supports and complements the voice and data services. For most services, Verizon has proposed multiple vendors to support the service categories and satisfy user requirements as appropriate.

### 3.7.1.3.1 Provisioning Process

Verizon understands that the equipment acquired under this contract will be provisioned in accordance with the process described in *RFP Section C.3.2 Service Ordering*. The WITS 3 service ordering process will support the following functions and requirements to interface with the Government's ordering and billing system.

- Provide service price quotes
- Initiate service orders
- Track service orders
- Change service orders
- Accept service orders
- Disconnect service orders

Verizon will provide a single, toll-free point of contact in the WITS 3 Customer Service Center and will maintain a Web page for agencies and GSA to obtain price quotes, place service orders, track service orders, and change them using information from the Client's Guide.

#### **Drop Ship Benefits**

• Eliminates cataloging, warehousing, and staging expenses



- Fast delivery and low prices through multiple direct agreements with market leading manufacturers and distributors
- Delivered directly to Government agency location(s)
   Staging Benefits
- Eliminates need for multiple vendors
- Provides configuration and testing by trained experts for the Government's specific applications
- Offers warehousing options for longer implementation cycles
- Delivered directly to Government agency location(s)

# 3.7.1.3.2 Installation and Site Services

Verizon will furnish, install, and make operational all equipment in the design ordered by the customer through the WITS 3 procurement vehicle. Verizon will also provide all required installation hardware, supplies, and tools necessary to install, move, program, test, maintain, and repair Verizon-provided equipment purchased under WITS 3. The equipment installation will be done using commercial best practices and in accordance with the manufacturer's recommendations and with applicable codes. All Verizon-performed work under this contract will conform to accepted voice and data installation and repair practices and the equipment manufacturers' recommended practices.

#### Benefits:

- One source for network deployment
- Easy and efficient network preparation
- Streamlined implementation and change management
- On-site expertise through Verizon's experienced engineering team
- 24X7 coverage in contiguous 48 states
- Customization available for any size Government agency



# 3.7.1.3.3 De-installation

The de-installation of equipment proposed by Verizon will include all labor, tools, incidental parts, and material necessary to accomplish equipment removal, including equipment cabling, when requested by the Government. The proposed de-installation will also include the storage and packaging for shipment or transportation. Verizon understands that the Government can order de-installation of any equipment purchased from Verizon under the WITS 3 contract via a service order in accordance with *RFP Section C.3.2 Service Ordering*.

#### **Cabling and Wiring Benefits**

- Offers complete design services by experienced professionals
- Provides remediation services on existing locations and certifications for new applications
- Delivered from a single source as an extension of Government network
   services

#### Manage Network Services Benefits

- End-to-end network and equipment management enables the Government to focus on its core mission
- Expertise in managing customer networks



- Reduces total cost of network ownership
- Industry-leading time to repair SLA
- Award-winning management systems





#### 3.7.1.3.4 CPE Maintenance

Verizon will maintain Verizon-provided CPE during the warranty period and afterward when the customer orders post warranty maintenance. Verizon will also provide support for discontinued products as long as parts are available from the after market suppliers.

Benefits:

- Multi-vendor equipment support and expertise
- Remote monitoring, diagnostics, and repair
- Skilled local technicians with optional, dedicated onsite support
- Flexible coverage options to meet the Government's specific needs

### **Project Management Benefits**

- Offers trained, certified teams to fully manage implementation
- Supplements internal resources
- Provides accountability through a single point of contact for management and maintenance