

Verizon Business Clarification Items for the Commonwealth of Pennsylvania

RFP# 6100004339

1. *Each page of your responses includes the following disclaimer at the bottom: "This document contains Verizon material that shall not be disclosed, duplicated, or used for any purpose other than to evaluate this proposal." Please confirm that you have read Part I-20 of the RFP and understand that the disclaimer will be given no effect by the Commonwealth.*

Verizon Business Response

Verizon has read Part I-20 and understands that the disclaimer will be given no effect by the Commonwealth.

2. *In Exhibit C - SOW after page 3, you have included the document "Business Continuity & Emergency Management Strategies". Is this document meant to be internal to Verizon only, or is it in response to the Commonwealth's emergency preparedness requirement?*

Verizon Business Response

Emergency preparedness is a critical element to continuity planning. The 'Business Continuity & Emergency Management Strategies' document is an internal publication that showcases the Verizon teams, tools, and resources associated with preparedness. It was included in our response to further demonstrate that Verizon has contingencies in place that will enhance our ability to provide critical business services to the Commonwealth with little or no interruption. More specifically, this publication provides an overview of Verizon's Business Continuity (BC) Program, the fully dedicated internal organization that manages the program world-wide, Business Continuity plan content, and an Emergency Management program with descriptions of the emergency response teams and resources that support it upon activation. When teamed with Verizon's "Global Pandemic Planning" document, the combined preparedness profile fully addresses the Commonwealth's emergency preparedness requirement, as stated.

3. ***Please provide a listing of all partners and subcontractors you are including as part of your response. For each partner/subcontractor provide a brief description of that entity, the roles and duties assigned to it, and the length of their service under your proposal.***

Verizon Business Response

Verizon has assembled a robust, service oriented team of subcontractors to support the Commonwealth's requirements over the next 7 to 10 years. Our team members include:

Verizon Subcontractor	Company description	Subcontractor Role	Length of service for proposal
Adept Consulting Services, Inc.	Adept Consulting Services, Inc., a PA certified Disadvantaged Business, is a leading provider of IT services with strengths in delivering project management, full life cycle application development services, technical operational and network support services, IT staffing, and help desk services to Commonwealth agencies. Adept and Transfer Technology, Inc. joined in 2008 under the Adept Consulting Services, Inc company name.	Adept will provide the 7x24x365 Help Desk services in support of the Verizon proposed services. Adept will develop and maintain all call flow and trouble resolution scripts necessary to provide Tier 1 trouble resolution and coordination with the appropriate Verizon Network Operations Center. Adept will develop and maintain escalation procedures and contact lists for all Verizon provided services, and will manage the escalation process through to trouble resolution. Adept will provide project coordination and management for all voice cpe and cabling services provided by their subcontractor Blackbox.	Services will be provided for the duration of the Commonwealth contract term.
Clark Resources	Clark Resources, a PA certified Disadvantaged Business, provides strategic government and public affairs services and staffing to local, county and state entities throughout the Commonwealth.	Clark Resources will provide two resources to support Verizon's Program Management Office. They will provide a Third party Vendor Management (TPV) Specialist who will provide oversight and management of the TPV's on the Verizon team, and a Change Analyst who will assist with the overall coordination of the standard change management process in support of the Verizon program.	Services will be provided for the duration of the Commonwealth contract term.

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Verizon Subcontractor	Company description	Subcontractor Role	Length of service for proposal
PC Network Inc.	PC Network Inc. is a PA certified woman-owned managed IT services provider delivering staffing, managed services and systems engineering solutions to commercial, government and educational customers.	PC Networks will provide services in support of the End User Satisfaction Surveys for the Commonwealth. They will develop, administer and report on the End User Satisfaction Surveys requested by the Commonwealth, including creation of a dashboard.	Services will be provided for the duration of the Commonwealth contract term.
Integralis	Integralis, Inc. provides a full portfolio of managed security, IT infrastructure, consulting and technology integration services. They help organizations achieve a greater depth of security protection, compliance and service availability. Integralis, Inc. is a division of Integralis AG, a leading global IT security services provider.	Integralis will provide 7x24x365 managed security services in support of the Commonwealth Telecommunications Managed Services contract. Integralis will support services from their redundant Hartford, CT, and Alisa Viejo, CA, SOCs for both the enterprise and individual Commonwealth agencies. Integralis will support managed security services for the Commonwealth in several areas such as Firewalls, Intrusion Prevention Systems, Content Filtering appliances, and Email Scanning. Managed services include policy management, platform management, patching, change management, incident management and escalation, remote system management and rebuild and reporting.	Services will be provided for the duration of the Commonwealth contract term.
Fujitsu Network Services	Fujitsu Network Services is a leading provider of optical equipment management and IT-based business solutions for the global marketplace. Fujitsu manages a variety of optical networks for Verizon across many markets.	Fujitsu will provide the 24x7x365 NOC monitoring services for COPANet. Fujitsu will provide 4-hour On-site Technical Support, as well as, Spares Management coordination with Cisco SmartNet, and Fiber Maintenance Management coordination with Sunesys for troubleshooting and opening tickets, when needed.	Services will be provided for the duration of the Commonwealth contract term.

Verizon Subcontractor	Company description	Subcontractor Role	Length of service for proposal
Sunesys	Sunesys provides a comprehensive range of services, including the design, installation, maintenance and repair of virtually every type of network infrastructure. They specialize in providing best in class routine maintenance and emergency response on outside plant facilities.	Sunesys will provide the COPANET fiber maintenance and repair services required for the Commonwealth, including location support for PA One-Call Services.	Services will be provided for the duration of the Commonwealth contract term.
Level 3 Communications	Level 3 is a Tier 1 Internet provider.	Verizon will utilize Level 3 as the second Internet Service Provider for dedicated Internet service.	Services will be provided for the duration of the Commonwealth contract term.
Bryn Mawr Alliance, LLC	Bryn Mawr Alliance is an IT consulting firm specializing in IT business alignment, solution architectures, and program management.	Bryn Mawr Alliance will provide services in support of the Verizon Program Management Office to ensure Verizon services are aligned with the Commonwealth requirements and business needs.	Services will be provided for the duration of the Commonwealth contract term.

4. ***The Commonwealth's RFP was aimed at encouraging creativity and resourcefulness. A component of the recently passed federal stimulus program (American Recovery and Reinvestment Act of 2009) calls for the acceleration of broadband across our nation. All states will be involved in this effort which will require coordination with providers and with stakeholders, communities and constituencies that will benefit from the deployment. While this is not a requirement of the RFP, what incentives, efforts, resources (financial or otherwise), coordination, could be brought to bear as a "value-add" proposition to assist the Commonwealth in achieving enhanced success under the federal broadband stimulus effort?***

Verizon Business Response

Since 1995, Verizon and Texas A&M University's have a unique strategic relationship that combines the technical expertise of the industry with the academic and training expertise of education and healthcare. The relationship has developed a suite of consulting services focused upon enabling healthcare communities, K-12 schools, higher education, and government to better utilize technology via successful telecommunications models and distance learning implementations. To date, this partnership has provided technical assistance and program assistance to over 1000

Verizon client organizations. This same opportunity is being made available to the Commonwealth of Pennsylvania as a value-add enhancement. The Academy for Advance Telecommunications and Learning Technology continually enhances research programs and can assist by capitalizing on other technology expertise found throughout Texas A&M University system.

In response to the Commonwealth's question seeking a provider that utilizes "thought leadership" in acceleration deployment and adoption of broadband across the Commonwealth of Pennsylvania, Verizon would like to offer to host a two day planning session with Dr. Walt Magnussen (see attached bio), Director of The Academy for Advance Telecommunication and Learning Technology. This session would be designed to formulate a strategy which could include working collaboratively with Pennsylvania's top universities to identify how and in which area to capitalize on NTIA (NTOP grant) and RUS funding for Pennsylvania.

The two day planning session with the Commonwealth will aid in developing the key elements of a Pennsylvania plan:

- Identify business model and financial plans to secure and efficiently leverage diverse sources of funding and integration of for-profit providers;
- Performance of needs assessments to ensure service offerings meet stakeholder needs;
- Development of scalable network architecture, infrastructure and technology roadmaps to ensure the network meets projected needs and future expansion including integration and interoperability with other provider networks, home telehealth, and integration of new technologies supporting mobility; and
- Marketing activities to include additional participants.

Verizon's Government Affairs organization has been closely monitoring the American Recovery and Reinvestment Act of 2009. The Broadband and Rural funds associated with this Act total \$7.2B and will be disbursed via a Grant process by the National Telecommunications and Information Agency (NTIA) and the Rural Utilities Service (RUS). Verizon has followed the series of meetings, including the public comments sessions and is fully prepared to provide information on the Grant request process as it is defined by the NTIA and RUS.

5. ***It is presumed that a portion of the network that will be used is owned by Verizon North, yet Verizon North is not referenced in the response. Please confirm if Verizon North network will be used. If it will not, please clarify what network will be used.***

Verizon Business Response

Verizon North facilities will be used by Verizon Business to provide access services where required.

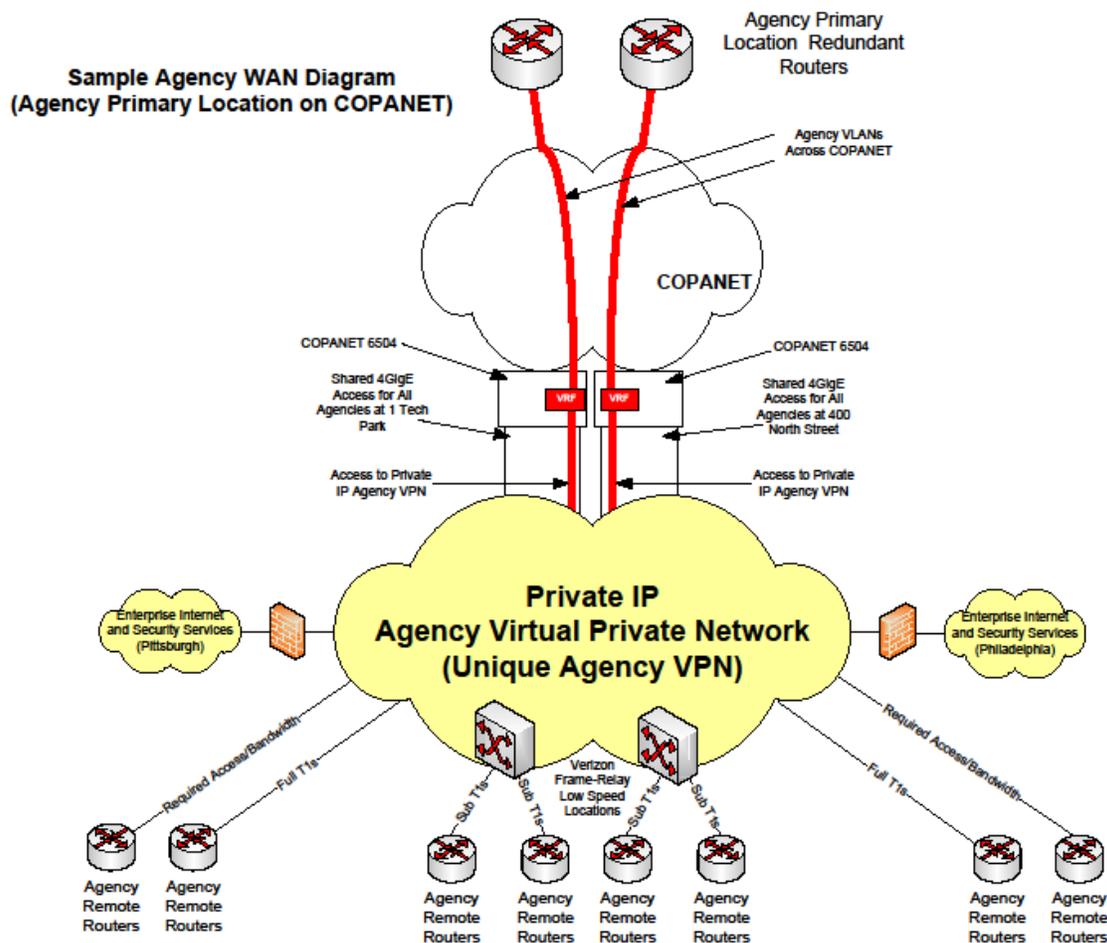
6. *The proposed COPANET design incorporates the existing COPANET fiber network, with the addition of 4 1GB Ethernet circuits at 1 CTC and 4 1GB Ethernet at 400 North Street. Please explain the rationale behind the need for additional bandwidth.*

Verizon Business Response

Utilizing the circuit inventory and bandwidths provided by the RFP, Verizon determined how much bandwidth would be required to connect COPANET to the PIP Data Network. This connectivity will provide access to all locations not residing on COPANET from those residing on COPANET. For building locations residing on COPANET, Verizon consolidated ATM circuits from the circuit inventory onto these Ethernet circuits for delivery across COPANET to the appropriate terminating building. The following circuits from the inventory were consolidated onto 8 1GB circuits:

COPANET Location	Circuit Quantity
1 Technology Park	4 - DS3's and 5 - OC3's
1006 Hemlock Drive/43 N. Circle Drive	3 - OC3's
101 S 2nd St	2 - DS3's
1010 N 7th St	2 - DS3's
1400 N Cameron St	2 - DS3's, 6 - OC3's, 2 - OC12's
17 N 2nd St	2 - DS3's
2301 N Cameron St	2 - DS3's
30 N 3rd St	1 - DS3 and 2 - OC3's
310 North St	2 - OC3's
333 Market St	1 - DS3 and 2 - OC3's
303 Walnut Street	6 - DS3's and 2 - OC3's
5 N 5th St	2 - OC3's
501 North St	4 - DS3's
55 Walnut St	1 - DS3 and 2 - OC3's
601 Forster St	4 - DS3's and 1 - OC3
613 North St	2 - OC3's
651 Boas St	4 - OC3's
901 N 7th St	2 - DS3's
910 Capitol St	2 - DS3's
400 Market St	2 - OC3's
400 North St	4 - OC3's
Total Bandwidth	8.442 Gbps

The following diagram depicts a sample of how each agency's unique VPN on Private IP will be provisioned across COPANET and the 8 consolidated GigE circuits.



It was determined that traffic to and from COPANET, to and from other locations would require a total of 8GB of bandwidth to Verizon's Private IP network. Two locations were utilized for redundancy purposes. All agency traffic between COPANET and other agency locations will be provisioned across these 8 circuits on each agency's MPLS based Virtual Private Network (VPN). Upon award, Verizon would work with the Commonwealth to determine exact traffic patterns to design the most effective connectivity to COPANET from locations off COPANET, in the event the bandwidth requirements are different than determined from the circuit inventory.

7. *The proposed statewide solution states that all network sites will connect to the Private IP (PIP) network when they are installed. Please explain the expected benefits of this approach and how it relates to COPANET.*

Verizon Business Response

Verizon will utilize COPANET for the metropolitan area network access in the Harrisburg area. Verizon will also utilize COPANET to provide access services to

Private IP via 1 Technology Park and 400 North Street for all COPANET locations utilizing a combination of VRF Lite technology and VLAN technology inherent in the COPANET 6504s as well as the MPLS VPN capabilities inherent in Verizon's Private IP service. Private IP would be utilized to provide connectivity to locations statewide.

Private IP is Verizon's MPLS based network architecture that provides any to any connectivity across the state of Pennsylvania. Private IP will be the means by which all locations not on COPANET will gain access to the network. Agencies will be able to take advantage of the following benefits of Verizon's Private IP network:

- The ability to expand networks to higher speeds or to multiple locations in a fully meshed any-to-any environment.
- No need to add a connection-oriented overlay to the Private IP network to encrypt tunnels as the Private IP network is as secure as a layer 2 network.
- Agencies can leverage the extensive in region Ethernet footprint Verizon has built to support data networking requirements. Ethernet access provides high bandwidth options, is cost effective, provides significant bandwidth granularity and simplicity and Ethernet technology is familiar to data network engineers.
- Utilizing the Class of Service capabilities provided by PIP, the Commonwealth is able to leverage the benefits of IP (Layer 3) and the benefits of the Data Link layer (Layer 2) to obtain network performance levels required for mission critical applications.
- Private IP is the platform that enables all Verizon Business e-business applications. This will allow Verizon to partner with the Commonwealth in developing overall communication solutions as opposed to merely providing transport.
- Using Private IP's MPLS technology, the Commonwealth can create multiple secure connections to trading partners, vendors, and customers without implementing and managing IP Security (IPSec) tunnels.
- Enhanced disaster recovery. PIP's any-to-any structure allows it to easily re-route all data from or destined to a disaster-struck site. PIP can re-route the data to or from a site that is running normally and intact. Unlike ATM and Frame-Relay networks, in which backup PVCs are required at all locations during an event, PIP remote sites can quickly and easily re-route to backup locations when needed. This allows applications to be available at any networked location during an event. As these application requirements change, Verizon will work with the Commonwealth to see that the required multiple redundant layers are incorporated into the network.

8. ***Your proposal response describes Verizon Internet Cable services as reliable, high bandwidth communications using circuits installed by Internet Cable providers. Please name the proposed providers of this service.***

Verizon Business Response

The Internet Cable service is provided, via New Edge Networks to Verizon, utilizing Charter Communications, Cox Communications, and Time Warner Cable in their respective areas of service.

9. *Your proposal response states that the Commonwealth's Remedy system will be e-bonded with the Verizon internal trouble ticketing system. Please describe the e-bonding process as it relates to Remedy and how this process is identified in the project plan.*

Verizon Business Response

The E-Bonding interface is the artery that will connect the COPA Remedy system to Verizon systems for trouble-ticketing.

Verizon's e-bonding services include integration adaptors which present the e-bonding messaging in a range of interface protocols and client emulations. Verizon supports both web services clients and Remedy API clients.

The Verizon systems appear to Remedy as a Remedy user, and it typically interacts with "staging forms" that are mapped by the Remedy workflow logic to the production Remedy user forms. As part of the e-bonding implementation, Verizon will provide project management and IT resources who will work with COPA staff to establish both process maps and data maps to ensure a proper end-to-end business process that support both system's functional requirements. The Verizon e-bonding integration provides the scripting support to tailor the interface as needed to meet the mapping requirements.

By e-bonding with Verizon Business, COPA will benefit from a system-to-system interface that enables automation of the troubleshooting of communications services, rather than relying on manual processes.

There are three phases in the project plan for e-bonding activities:

IT Project Plan - Phase 1	180d	Wed 6/24/09	Tue 3/2/10
IT Project Plan - Phase2	180d	Wed 10/28/09	Tue 7/6/10
IT Project Plan - Phase 3	150d	Wed 7/7/10	Tue 2/1/11

10. *Your proposal response states that you provide security services to seven Commonwealth agencies today. Additionally, you state that since the security infrastructure is in place, these agencies will not be subject to transition activities. Please identify the seven agencies, describe all the security services provided to each agency and illustrate what security infrastructure is already in place.*

Verizon Business Response

There are seven existing Commonwealth agencies who are leveraging a variety of Integralis managed security services for managed firewalls, intrusion detection/prevention, SSL VPN's, IPSec VPN's, and security proxies. In leveraging Integralis managed services, existing agencies have deployed SSA appliance infrastructure and the necessary managed services network connectivity.

The following are the levels of security services currently in use by the Commonwealth agencies and the descriptions of what each service provides.

■ SecureWatch Classic

Fault Monitoring

■ SecureWatch Premium

Vulnerability Monitoring, Rulebase Management, Full Logfile, Analysis, Security Alerting & Escalation (Includes SecureWatch Classic)

■ SecureManage Classic

Remote System Rebuilds and Platform Management (Includes SecureWatch Premium excluding Logfile Analysis and Security Alerting and Escalation)

■ SecureManage Premium

Fully Managed Service (Includes all services from SecureWatch Classic and Premium and SecureManage Classic)

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The following is a listing of the services provided to each existing agency and the quantities of devices involved.

Gaming Control Board	SecureWatch Classic	
	Cisco PIX Firewalls	Qty. 2
PA State Police	SecureManage Premium	
	Nokia Firewalls	Qty. 9
	ISS IDP Devices	Qty. 2
OPRS	SecureManage Premium	
	Nokia Firewalls	Qty. 6
DPW	SecureManage Premium	
	Nokia Firewalls	Qty. 10
	ISS IDP Devices	Qty. 2
	BlueCoat Devices	Qty. 2
	Checkpoint Connectra	Qty. 1
DCNR	SecureManage Premium	
	Nokia Firewalls	Qty. 2
OAG	SecureManage Premium	
	Nokia Firewalls	Qty. 2
	Proventia IPS	Qty. 2
AOPC	SecureManage Premium	
	Nokia Firewalls	Qty. 8
	Proventia IPS	Qty. 2

11. ***Your proposal response states that a Security Service Appliance (SSA) will be installed at each agency's site and located as close as possible to the devices under management. Please describe how these devices will be installed at each location and how many devices will be deployed throughout the enterprise.***

Verizon Business Response

The SSA appliance is placed at the edge between an organization's high speed enterprise infrastructure and its lower speed wide area network (WAN) connections. The SSA appliance provides secure connectivity to the security operations center and at the same time efficiently correlating events. We are deploying two SSAs in high availability mode with dial backup for each enterprise COPA site. Agencies already using Integralis security services will leverage already-deployed SSA devices.

12. ***Your proposal response states that devices being monitored by the SOC are configured to send their logs to the SSA. Servers being managed also have agent software installed for performing additional Verizon services. Please describe how many SSA agents will be installed and on what Commonwealth servers.***

Verizon Business Response

The SSA appliance communicates with devices under management using the most appropriate method. Depending upon the particular vendor device being managed, this method may involve native communication with the device (an agentless configuration) or may require an Integralis agent be installed on the device-- this is referred to as an "SSA Agent." SSA Agents only communicate with the SSA appliance. Examples of agentless managed devices include Juniper firewalls, Juniper IDP, Juniper SSL VPN, and Bluecoat security proxies. Examples of devices requiring SSA agents are Checkpoint firewalls, Checkpoint management server and Juniper management server.

13. ***Your proposal response states, "given that Verizon will not have access to the technical details of the CTMS platform until February 2011, the Commonwealth understands appropriate due diligence shall be required in order to ensure the success of this development and subsequent transition. The focus of this due diligence will be to gain a complete understanding of CTMS' system interfaces, process flows, and data flows." Please state if you completed any due diligence activities as it relates to the CTMS platform and responding to the CTMS requirements outlined in the RFP? If so, please explain this activity.***

Verizon Business Response

No, Verizon has not been able to complete any due diligence in relation to the CTMS platform since the specifics of the platform will not be available to us until the conclusion of the existing providers' contract.

14. *Your proposal response states that you are “a respected authority and provider of industry-leading security products.” Can you explicitly name all the security products proposed in the solution and what security services each security product can provide to the Commonwealth?*

Verizon Business Response

Security products in the proposed solution include:

- Juniper firewalls for stateful packet inspection and access control;
- Juniper Intrusion Detection and Protection (IDP);
- Juniper Secure Access Solution for Client and Clientless Virtual Private Networking (VPN) for Remote Access;
- Bluecoat SG for web security content filtering;
- Webroot in-the-cloud for email security and anti-spam services.

15. *Your proposal response states that you will offer a solution that allows the Commonwealth to evolve to technology that will result in measurable cost savings. Specifically, you plan for the consolidation of multiple facilities into a single location, thereby reducing overall circuit cost. Can you identify which specific Commonwealth facilities can be consolidated and the location where they will be consolidated?*

Verizon Business Response

As was done for COPANET locations, as part of the due diligence process in responding to the RFP, Verizon analyzed all the high speed ATM circuits and consolidated the bandwidth requirements onto redundant Ethernet Private IP connections.

The locations where the consolidation occurred were as follows:

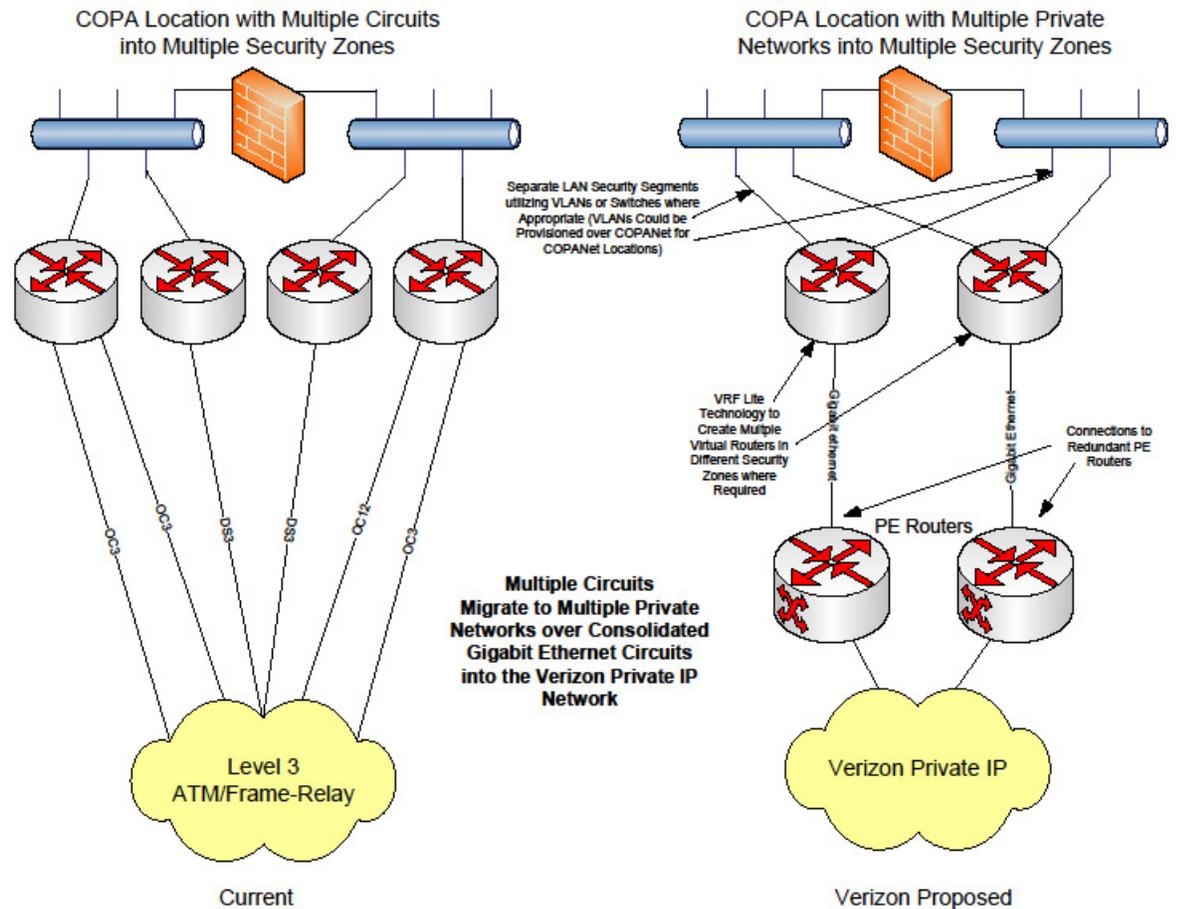
Location	Circuit Consolidation
100 LACKAWANNA AVE SCRANTON PA 18503	Qty. 5 OC3s and 1 DS3 consolidated onto Qty. 2 400M GigE Private IP Circuits

Verizon Business Clarification Items

Location	Circuit Consolidation
1000 ROUTE 522 SELINGSGROVE PA 17870	Qty. 1 OC3s and 2 DS3 consolidated onto Qty. 2 150M GigE Private IP Circuits
1101 S FRONT ST HARRISBURG PA 17104	Qty. 1 OC3s and 2 DS3 consolidated onto Qty. 2 150M GigE Private IP Circuits
1400 SPRING GARDEN ST PHILADELPHIA PA 19130	Qty. 7 DS3s consolidated onto Qty. 2 150M GigE Private IP Circuits
15200 KUTZTOWN RD KUTZTOWN PA 19530	Qty. 4 OC3s and 1 DS3 consolidated onto Qty. 2 300M GigE Private IP Circuits
1825 STANLEY DR HARRISBURG PA 17103	Qty. 3 OC3s consolidated onto Qty. 2 250M GigE Private IP Circuits
200 PROSPECT ST EAST STROUDSBURG PA 18301	Qty. 4 OC3s consolidated onto Qty. 2 300M GigE Private IP Circuits
2140 HERR ST HARRISBURG PA 17103	Qty. 2 OC3s and 1 DS3 consolidated onto Qty. 2 200M GigE Private IP Circuits
2300 VARTAN WAY HARRISBURG PA 17110 DS3	Qty. 5 DS3s consolidated onto Qty. 2 100M GigE Private IP Circuits
2601 N 3RD ST HARRISBURG PA 17110	Qty. 3 DS3s consolidated onto Qty. 2 100M GigE Private IP Circuits
2986 N 2ND ST HARRISBURG PA 17110	Qty. 4 OC3s consolidated onto Qty. 2 200M GigE Private IP Circuits
300 LIBERTY AVE PITTSBURGH PA 15222	Qty. 5 DS3s consolidated onto Qty. 2 100M GigE Private IP Circuits
301 CHESTNUT ST HARRISBURG PA 17101	Qty. 3 DS3s consolidated onto Qty. 2 100M GigE Private IP Circuits
400 E 2ND ST BLOOMSBURG PA 17815	Qty. 4 OC3s consolidated onto Qty. 2 300M GigE Private IP Circuits
72 CAMPUS DR LOCK HAVEN PA	Qty. 4 OC3s consolidated onto Qty. 2 300M GigE Private IP Circuits
821 S MATLACK STWEST CHESTER PA 19382	Qty. 3 OC3s consolidated onto Qty. 2 200M GigE Private IP Circuits
840 WOOD ST CLARION PA 16214	Qty. 3 OC3s and 1 DS3 consolidated onto Qty. 2 200M GigE Private IP Circuits
ACADAMY ST & COLLEGE AVE MANSFIELD PA	Qty. 4 OC3s consolidated onto Qty. 2 300M GigE Private IP Circuits
BUILDING 27A SHIPPENSBURG PA	Qty. 6 OC3s consolidated onto Qty. 2 500M GigE Private IP Circuits

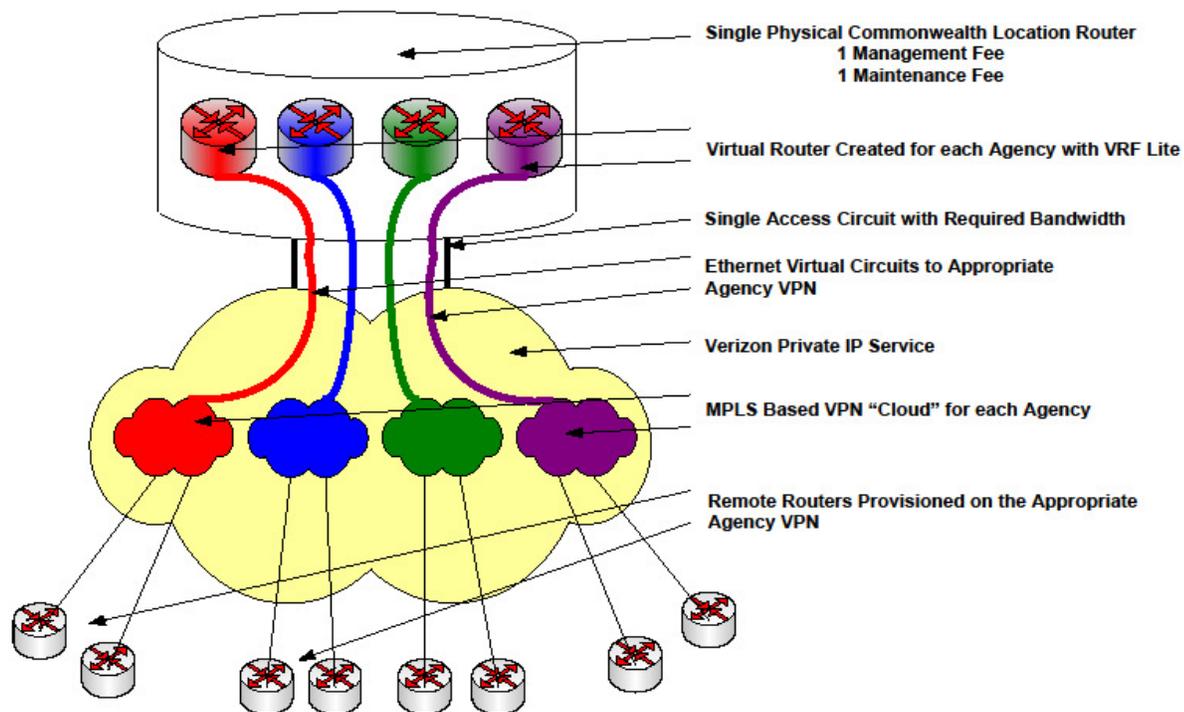
Location	Circuit Consolidation
VAUX & LOGAN ANNEX CHEYNEY PA	Qty. 4 OC3s consolidated onto Qty. 2 300M GigE Private IP Circuits
W FREDERICK ST MILLERS VILLE, PA	Qty. 3 OC3s consolidated onto Qty. 2 200M GigE Private IP Circuits

The following diagram depicts the technology utilized for this consolidation:



Verizon will work with the Commonwealth to accomplish this type of consolidation at any other locations where multiple agencies and/or security zones exist, and may not have been apparent in the circuit inventory. Private IP's virtual private network (VPN) capabilities allow Verizon to segment agency networks onto separate private networks. In addition, Verizon will utilize the Virtual Routing Forwarding (VRF) Lite capability mentioned in our RFP response to maintain separate VRF tables to extend the privacy and security of the MPLS VPN network down to the various LANs in each

multi-agency office. This enables the Commonwealth to segment the network, thus dedicating bandwidth for each agency and/or security zone based on its unique needs.



With VRF Lite, each agency can access one Cisco router at the multi-agency location. Each LAN segment will have its own VRF table, thereby separating its traffic from other agencies to help ensure privacy. As a result of using VRF Lite, the Commonwealth can recognize a cost savings by eliminating the need to purchase and install multiple routers and dedicated connections.

16. ***Your proposal response states that you will offer a solution that allows the Commonwealth to evolve to technology that will result in measurable cost savings. Specifically, you propose enhanced voice technology capabilities that will allow for a dedicated rate for all local calls originating from a Centrex line, thus eliminating the additional costs associated with switched calls. Can you clarify what these enhanced voice technologies are and if the Commonwealth currently utilizes them today? If it does utilize them, where are they utilized and by what agencies are they utilized.***

Verizon Business Response

Verizon's voice solution to the Commonwealth will afford cost savings through a number of financial and technical plans. In a standard TDM environment, Verizon can rate the originating LD as Dedicated Originated which will extend cost savings to the Commonwealth. Additionally, Verizon has proposed an IP based voice solution that can incorporate both local and long distance rates within a bundled price element per concurrent call (IP call).

17. *Throughout the proposal response, you state the use of many web portal technologies in the following service areas: System Management Services, Integralis Security Information Service, Customer Management, Verizon Hosted IP Centrex, Service Desk, a customer portal for Managed Wireless LAN, Voice over IP, Verizon Enterprise Center Administrator Dashboard web portal, a secure portal for security incidents. Can you clarify all the web portal technologies that would be used as part of your service offering and how these web portal technologies are integrated with one another?*

Verizon Business Response

The VEC Portal is the umbrella entry point for all Verizon customer-facing Web access. This includes support for key functions such as ordering, order status, trouble management, bill inquiries/payments, network management/monitoring, and various reporting capabilities. In addition, the VEC Portal provides the gateway to affiliate and third-party functionality as required for our offered services. Where appropriate, the VEC Portal provides drill down and/or pass-thru capabilities to more detailed management functions in additional systems. The VEC Portal may be customized to provide customer-specific "launch" pages to key tasks or with customer-specific terminology used as needed.

18. *Your proposal response includes plans to provide some network rates on a universal basis. As stated in the proposal some services, such as Private Lines, are distance sensitive, and they would be a banded rate structure. Can you clearly identify all services that will have universal rates and those that will have banded rates?*

Verizon Business Response

Detailed below are the services which will be offered at Universal (Statewide), and Banded rates:

Universal/Statewide Rates

- MPLS
- Voice Services

- Security
- ISS Support
- CoPANet Support
- Internet
- Frame Relay
- ISDN
- Managed WAN Devices
- Premise Wiring
- Voice Systems
- Network Manager
- Access

[Note: As stated in Section 1.18 of the Schedule C (SOW), at the time a service order is acknowledged/received, the Offeror shall determine unusual installation factors that require additional cost and notify the Commonwealth requestor of service. The Offeror shall give an itemized bill for additional cost and specified reasons to the Commonwealth. For FUTURE high bandwidth services (50M or greater), beyond the metro areas of Pittsburgh, Philadelphia and Harrisburg, in accordance with the SOW requirement, special construction or custom rates may apply.]

Banded Rates

- Private Line

19. ***As part of the transition plan, you outline a three phase approach to implement and transition inbound 800 services (857 lines). Can you clarify each of the proposed three phases and define the roles and responsibilities for both the Commonwealth and Verizon?***

Verizon Business Response

The three phased Verizon approach to implementing and transitioning inbound 800 services includes, Planning, Implementation, and Migration. The project plan will clearly define the roles and responsibilities of both the Commonwealth and Verizon.

- The planning phase of the project plan will include data gathering, training, intelligent routing integration, Communications & Documentation, and Change Control.
- The implementation phase of the project plan will include Toll Free Number Reservation, Access Implementation, and Configurations & Route Plan Builds.

- The migration phase of the project plan will include a detailed 3 phase approach to migration where each phase will have a detailed approach and timeline to each phase. A Post Migration Evaluation will also be provided as part of the migration planning.
20. ***Your proposal response proposes the following technologies for web proxies, email scanning and instant messaging: BlueCoat, Webroot and Microsoft Office Communications Server. Can you provide network architecture diagrams of each of the proposed solutions and identify if the service resides inside or outside the Commonwealth network?***

Verizon Business Response

Security point solutions will reside in the Commonwealth except for those provided by Webroot. Webroot data centers servicing COPA will be in the continental U.S (San Francisco Bay Area and Denver, CO). Integralis managed security operations centers will be operated in Connecticut and California. In the RFP response Verizon proposed the ability to offer Microsoft Secure IM as an option but did not include it as a definitive solution component.

Network architecture diagrams have been included in our presentation for reference.

21. ***Please describe in more detail the location of the test center as described in 1.151 and the offer to make the test center available for the Commonwealth's use (cost/no cost (without providing the cost), limitations, access times, etc.).***

Verizon Business Response

The Customer Test Center (CTC) is located in Richardson, Texas, just north of Dallas. The address is: 906 North Bowser Road, Richardson, TX 75081.

Access to the facility is 8:00 A.M. - 5:00 P.M., Monday through Friday. The security access badges provided to all CTC guests are available and active during normal business hours, per VzB security policy. The services of the Customer Test Center are provided at no charge. Travel, lodging, and meal expenses are the responsibility of the customer.

Equipment required for many tests is available in the test center inventory. However, additional specialized equipment would need to be acquired from any vendor as necessary. The Commonwealth may also choose to ship any equipment necessary for their test to the test center.

Verizon will work with the Commonwealth to engage a test center project team and once a team is assigned and a kick-off conference call is held, the discovery and setup process will occur over 4-6 weeks, depending on circuit and equipment availability. Once this process is complete, testing can occur. Actual test execution

time for most tests is no longer than 2-3 business days. The Commonwealth would be allocated five (5) business days (1-week) to complete the execution of your test. In certain situations additional test execution time may be granted.

The Commonwealth will be encouraged to participate in the test as much as possible. Test center engineers are experienced with working closely with customers to ensure all test objectives are clearly defined prior a customer's visit.

Engineers assigned to a Commonwealth test will be responsible for the development of a formal Test Plan. This document will be the "road map" of the test to be executed and the results to be expected. It includes the test objectives, a network diagram of the test environment, an equipment list complete with all OS versions and test tools, and the actual test steps to be executed. Through a series of conference calls with all project stakeholders, engineers will gather all the information required to successfully develop the Test Plan. The Test Plan will be reviewed and finalized with all project stakeholders prior to execution of the test.

- 22. *Please provide further detail on specific qualifications and experience that will be required for the various management positions indicated in the response.***

Verizon Business Response

Upon finalization of the solution and award to Verizon Business, Verizon Business will complete the hiring process and identify the individuals who will perform the key roles in the Program Management Office. Verizon Business takes the hiring process very seriously, and works diligently to ensure the personnel we hire have all the appropriate skills, experience, education and certifications required.

The Verizon Program Management Office management personnel will at the very least possess or maintain the following education and certifications:

- Minimum BS/BA, or equivalent, with 10-15 years of job-related experience, MBA a plus
- Extensive supervisory experience in telecommunications preferably in managing large international accounts
- Project Management (PMP) certification preferred
- ITIL Foundation Certificate and ITIL conversant a plus

- 23. *Please clarify what is meant by “cannot be held to unknown standard” in reference to the Commonwealth ITBs, standards and policies.***

Verizon Business Response

Verizon was referring to the requirement of section 41(b) that refers to the standards of “leading providers of Services similar in scope, scale and geographic coverage”. Those standards are unknown to Verizon. Accordingly, Verizon proposes that any such standards be reviewed by Verizon and agreed to by the parties before Verizon would be held to them.

24. *Is your Telecommunications Management System once evolved into a CTMS “like for like” state, capable to perform service ordering, service inventory and reporting for multiple vendors outside of this contract?*

Verizon Business Response

The solution proposed by Verizon includes the capability to perform service ordering, service inventory, and reporting for the services being provided by Verizon and our Third Party Vendors. At this time, our proposed solution does not incorporate the ability to provide those functions for services not offered by Verizon. Verizon does have products and solutions that can provide similar functionality for vendors outside of the contract, and will work with the Commonwealth during due diligence to determine the exact requirements and propose a solution to meet those needs.

25. *Based on your proposal, is it your intent for the Commonwealth to decommission CTMS at some point and use the Verizon application?*

Verizon Business Response

Verizon's proposed solution includes the replacement of CTMS with the Verizon Service Management Platform (SMP), our SingleView billing system, and Web portal. It is our belief, based upon the information available to Verizon, that our offering will meet the Commonwealth's needs for a comprehensive ordering, inventory, change management, billing and reporting system. By utilizing the Verizon systems, the Commonwealth will reap the benefit of the development we are doing to provide these services to all of our customers, while enjoying a reduction in the support costs and upkeep in maintaining a separate, dedicated platform.

During due diligence, Verizon will work with the Commonwealth to develop a detailed understanding of the requirements and capabilities of CTMS. If it is determined that our offering does not fully meet the expectations of the Commonwealth, Verizon will use the new information to design and propose a solution which will provide the functionality required.

26. *Please clarify the discrepancy regarding SLAs. In section IV-4 Tasks, the response is “Verizon has read, understands and will comply”. In the requirements, #1.29, the compliance has a “N” and there is a section with the Verizon objections referencing SLAs.*

Verizon Business Response

For clarification purposes, the Verizon response for Section IV-4 should have stated "Verizon has read and understands". The non-compliance response for Requirement #1.29 is correct. The Verizon solution is comprised of a series of products and services, most of which provide SLA measurements and credits. A number of these solution components have SLAs that meet or exceed the requirements of COPA. There are however products/services in the solution that do not offer SLAs.

There are also defined SLA measurements in Schedule F that Verizon does not measure and will have difficulty in reporting to COPA. Verizon has however proposed a solution that maximizes network availability and reliability, and utilizes a support infrastructure to minimize service interruption. Accordingly the Verizon proposal is rich in the latest technology and service quality.

27. *If the Commonwealth would agree to Verizon’s SLAs, what is the intent to fit them into the proposed SLA methodology?*

Verizon Business Response

Where the Verizon proposed solution components offer SLAs, Verizon is willing to map these SLAs, where able, to the Methodology. The solution components for which Verizon does not provide SLAs, will be excluded from the Methodology; however, Verizon anticipates discussing the design and support that may achieve the SLA measurements with the Commonwealth in the next phase of this process.

28. *Where is the detailed implementation plan for Inbound Toll Free as agreed to in requirement #1.310?*

Verizon Business Response

A Toll Free implementation plan has been included at the end of these questions for the Commonwealth’s review.

29. *The response to #1.364 is not a valid response based on the requirement. Please clarify.*

Verizon Business Response

Correct, the wrong response was included for 1.364. The accurate response to 1.364 is: Verizon will not remove any coin/card station(s) without the concurrence of the Commonwealth and when such said instance occurs, no charge will be assessed for the station removal(s).

30. *Please explain how commissions are determined/calculated.*

Verizon Business Response

On a monthly basis the PMO financial management analyst will receive the payphone revenue data from the Public Group. This data will be used by the PMO analyst to perform the calculations and create a commission report for the Commonwealth. The PMO analyst will work with the Commonwealth to determine an appropriate format for payout of the commission to the Commonwealth.

31. *Please clarify your objections to requirement #1.589 (changes to CTMS).*

Verizon Business Response

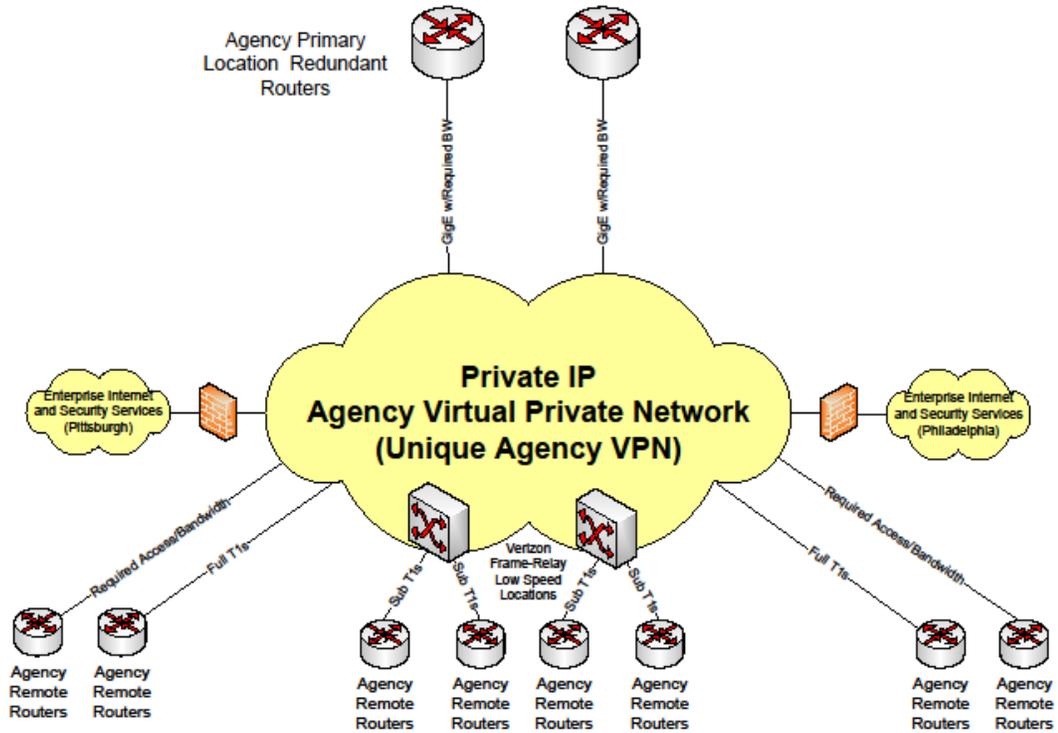
The Verizon Service Management Platform is a shared application providing services to many of Verizon's customers on a 24x7x365 basis. As such, Verizon must coordinate testing and system changes such that they present a minimum impact to our customers.

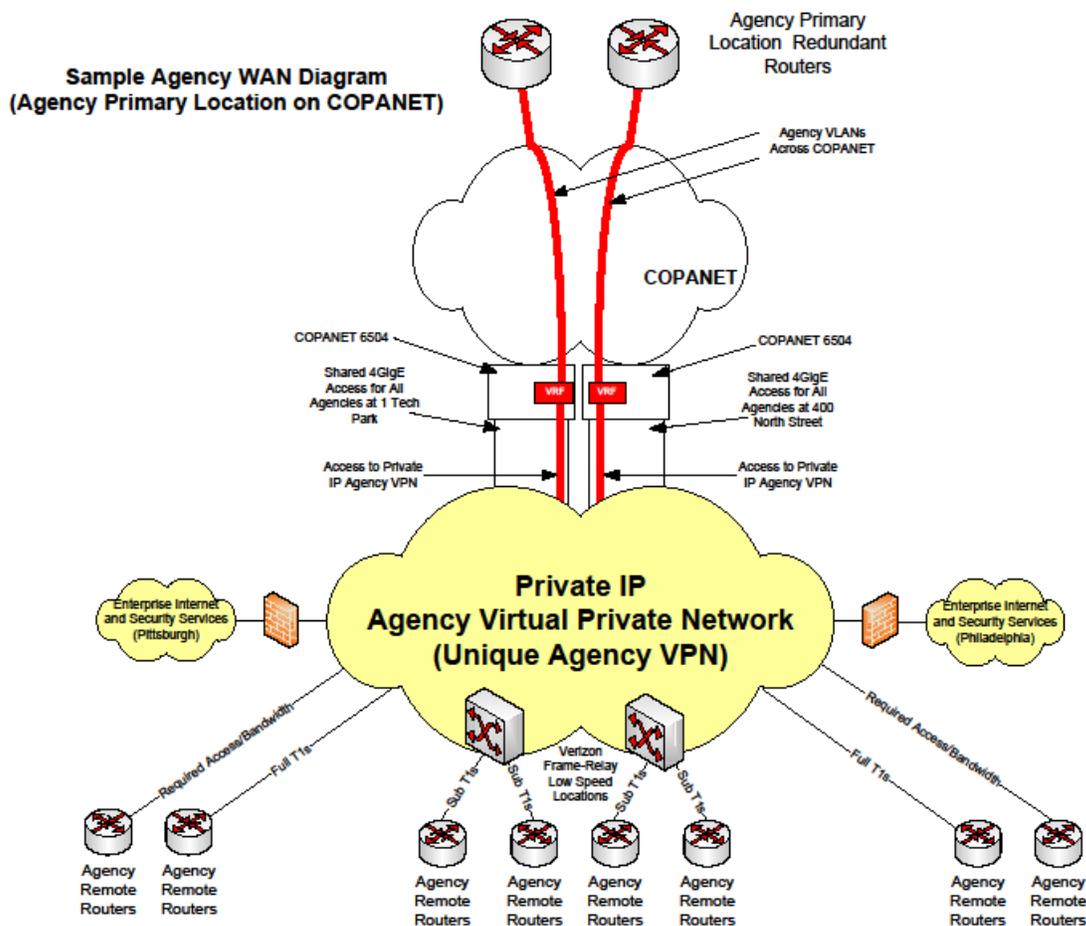
32. *Please provide a sampling of agency network profiles to include recommended diagrams and recommended class of service profiles based on your proposed MPLS-based private IP network.*

Verizon Business Response

The following diagrams are examples of the two primary types of agency access to Private IP. An agency whose primary location resides on COPANET and an agency whose primary location resides off COPANET.

Sample Agency WAN Diagram
(Agency Primary Location Not on COPANET)





Agencies with primary locations not on COPANET will utilize individual Private IP Ethernet access services. Agencies with primary locations on COPANET will utilize the 8 Full GigE circuits provided as Private IP connectivity to COPANET. Each agency would have a Virtual Private Network (VPN) in the Private IP network and that VPN would be carried through COPANET to the agency primary location utilizing a combination of VRF Lite and VLANs on the COPANET 6504s.

Agencies have varying requirements for class of service. Agencies may be currently utilizing any number of quality of service profiles in their agency edge devices. These profiles could be based on application TCP/UDP port and/or priority application server IP addresses. This approach only addresses part of the class of service requirements of the agencies, as with the current Frame-Relay and ATM network, the layer 2 switches within the network ignore the class of service information and the information is only acted upon reaching the other side of the layer 2 network. Verizon's Private IP network allows the agencies to extend the class of service capability throughout the entire network.

Verizon will work with each individual agency to marry existing quality of service profiles to the traffic classes provided by Private IP or design new profiles to meet

agency requirements. Verizon has already implemented quality of service functionality within several agencies' networks. Below details the policy Verizon could utilize to align existing Department of Public Welfare QOS policies with the classes provided by the Private IP network.

Expedited Forwarding (EF) - Available for VoIP and or Video in the future.

Assured Forwarding 4 (AF4) - Domain Controller traffic and DPW Critical Apps like ECIS, Human Services, Mainframe and PELICAN.

Assured Forwarding 3 (AF3) - Telnet, TACACS, Terminal Services and Business Partner access

Assured Forwarding 2 (AF2) - Email, SNMP

Assured Forwarding 1 (AF1) - Other non-critical Applications

Best Effort (BE) - Internet, SMS, PC and server backups.

- 33. *Please provide definitions for Feature Option 2 Customers and Feature Option 3B Customers referenced in requirement #1.201.***

Verizon Business Response

The features available for Toll Free service offered on Option 2 and Option 3 are not different and all features between both Option 2 and Option 3 are identical. These Options are primarily internal billing system options and have no bearing on the Commonwealth.

- 34. *If the VoIP solution is selected, how does Verizon propose to provide enhanced toll free routing capabilities? Requirement #1.324 indicates this cannot be provided with the proposed VoIP solution.***

Verizon Business Response

With the VoIP solution Verizon will be able to provide the enhanced toll free routing capabilities that the Commonwealth has requested in the RFP. For example, all time of day, day of week, percent allocation routing will be able to be used by the Commonwealth when terminating these TDM originating calls via VoIP.

In Verizon's response "Enhanced Toll Free" was used to define "IP Toll Free service". Verizon did not propose IP Toll Free service to the Commonwealth. The enhanced features of traditional TDM Toll Free service will work with the Verizon VOIP service.

35. *Based on the response to requirement #1.454, what types of security incidents and breeches would not get reported to the Commonwealth?*

Verizon Business Response

All security incidents are reported. The following describes the relationship between security events, incidents, and customer policies and procedures. Security events are generated in large numbers by security devices and not all of these events represent "security incidents." A security incident occurs when the managed services operations center, through analysis and correlation, determines that one or more events represent a possible security incident. All security incidents are logged and reported within the managed security portal. Security incidents are escalated according to specific customer policies and procedures.

36. *Please describe which Verizon products will require up to 10 business days after order receipt for delivery.*

Verizon Business Response

For the majority of Verizon services, we are able to provide a facility ready date in 5 business days. Higher bandwidth services may take up to 10 business days after receipt of an order. When facilities are not available, Verizon will contact the agency requesting service to work out an agreeable date.

37. *Is the Verizon portal and service management platform redundant so that scheduled maintenance can be completed without impacting the Commonwealth's access?*

Verizon Business Response

Yes. Verizon customer-facing systems are designed to operate 24x7x365.

38. *Does Verizon offer single sign-on to all portals for each of the service offerings?*

Verizon Business Response

The VEC Portal does support single sign-on and pass thru to most service management environments related to service fulfillment. For some services there may be a secondary authentication required for security purposes. As an example, this may be required for users to access or modify their personal voice mail boxes.

39. Please describe the standard Verizon service level methodology.

Verizon Business Response

Verizon offers a variety of SLAs developed to address customers' key concerns regarding their Verizon products and associated services, collectively known as "Services". Based on customer feedback as well as the knowledge of the industry and the associated components involved with each Service, Verizon carefully designs an SLA offering to provide our customers clear and meaningful assurances regarding Service quality based on quantifiable SLA thresholds.

Customers typically have three main levels of concerns regarding communication network services. Tier 1 SLAs are designed to provide performance assurances for our customers' most critical concerns regarding uptime. Obviously, the availability to utilize a Service must remain as the utmost concern; and, as such, Verizon has developed an SLA portfolio emphasizing the importance of guaranteeing the availability and time to repair of the various Services. As one would expect, these SLAs are developed to ensure internal support teams correct any downtime service issues as a top priority.

The second tier of Service Level Assurance involves the actual performance of Verizon Services. Depending on the particular Service involved, these SLAs typically address the specific quality of the Service itself. These Tier 2 SLAs differ from Tier 1 SLAs in that they do not involve actual downtime. These SLAs are developed to address key concerns in the area of performance such as latency, voice quality, etc. in order to guarantee our customers, not only the uptime of their Services, but that their Services are actually performing at acceptable quality levels.

Rounding out Verizon's SLA portfolio, a third tier of service-related SLAs are also offered which involve assurances surrounding key customer service issues including items such as the timely installation of services, the time needed to make changes to a service, or guarantees surrounding the proactive notification of outages. Obviously, this last category of service level guarantees can vary and apply differently depending on each Service offered.

When setting metrics/thresholds and associated credit remedies for service level assurances, two main theories in the industry exist. One theory is to set SLA metrics that are the most competitive in the industry with minimal associated credit payouts in order to mitigate the amount of the expected credit payout. With this approach specific SLAs may "appear" to be the most competitive in the industry, and the customer can expect small amounts of regular SLA credit payouts; however, the SLA does not actually reflect the expected quality of service or performance. The second school of thought in the industry is to set SLA metrics that reflect the actual anticipated performance of each individual service with credit payouts that reflect appropriate remediation based on the type of service issue experienced. With this model the service provider is actually attempting to set appropriate expectations with the customer regarding service performance and would not expect to be making regular credit payouts on each SLA.

At Verizon, we recognize that customers are not looking for regular SLA credit payouts as a revenue stream; instead, they want a reliable service and simply want to be compensated for the rare times that any service might fall below acceptable levels. With that in mind, Verizon SLAs are developed with the second theory described above in which the attempt is to actually define the expected Service experience for the customer and establish meaningful tiers of credit remedies. In addition, Verizon is able to offer some of the most competitive SLAs in the industry while adhering to this philosophy, due to the quality and distinction of Verizon Services; therefore, our customers get the best of both worlds.

Verizon's SLA portfolio includes a variety of Service Level Guarantees which may differ based on many factors including the individual product or service, service location, access method, traffic class, etc. Regardless of the type of SLA offered, Verizon makes every attempt to provide meaningful guarantees that are quantifiable, that clearly describe the SLA and any associated parameters, and that reflect the anticipated performance levels our customers can expect.

40. *Please describe how the additional savings of 5% could be achieved.*

Verizon Business Response

Verizon believes additional Commonwealth savings can be achieved by several means including:

- the consolidation of circuits
- convergence of voice, data and video services
- migration to Next Generation Service
- elimination of ongoing hardware/software costs for CTMS utilizing Verizon solution