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WV PURCHASING  
DIVISION

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**State of West Virginia**

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**State of WV RFP for Managed and Hosted Voice Services**  
**CRFP 0212 SWC1900000001 – Technical Proposal**

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**November 21, 2018**

Presented by:

**Lumos Networks LLC**  
**1200 Greenbrier Street**  
**Charleston, WV 25401**  
**(304) 414-0411**  
**(304) 720-2121 Fax**



**Greg Florence**

**Major Account Manager**

[florenceg@lumosnet.com](mailto:florenceg@lumosnet.com)

*Greg Florence*  
*11/21/18*



**LUMOS**  
NETWORKS

866.710.2243 |     
[LUMOSNETWORKS.COM](http://LUMOSNETWORKS.COM)



November 21, 2018

RE: State of WV CRFP 0212 SWC1900000001

Dear: Mr. Atkins,

Lumos Networks , LLC is a fiber-based service provider in the Mid-Atlantic region. We deliver leading-edge data, broadband, voice and IP services over an expanding fiber optic network. We follow a strategy of being first to our regional markets with technology and services initially introduced in large metropolitan areas by national service providers. Lumos Networks delivers communications services with excellence, innovation and integrity.

Following its merger with Spirit Communications in early 2018, Lumos Networks and Spirit own and maintain a super-regional fiber network of over 21,000 miles of fiber throughout 44 markets in the U.S. For purposes of this RFP, the combined company will be referred to as Lumos Networks throughout the response. The combined company offers a full range of Managed Ethernet, Managed Services, MPLS, advanced voice and cloud services to thousands of carrier, enterprise, and government customers, as well as connectivity to 44 data centers.

In summary, I want to thank you for considering Lumos Networks as a provider for the State of West Virginia. We continue to have the technology, support and financial strength to maintain the highest standards for communication services and infrastructure needs. More importantly, we are able to support you because of our local presence and commitment to your community.

With best regards,

A handwritten signature in blue ink that reads "Greg Florence".

Greg Florence  
Major Account Manager  
(304) 333-3020  
[florenceg@lumosnet.com](mailto:florenceg@lumosnet.com)

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**Response Reference: CRFP 0212 SWC1900000001**

To provide Managed Voice Services for the State's Legacy VoIP Environment, while working to migrate those Legacy Environments to a Hosted VoIP Platform, including Hosted Contact Center Services.



Purchasing Division  
 2019 Washington Street East  
 Post Office Box 50130  
 Charleston, WV 25305-0130

State of West Virginia  
 Request for Proposal  
 35 – Telecomm

Proc Folder: 462803

Doc Description: RFP for Managed and Hosted Voice Services (OT18027)

Proc Type: Statewide MA (Open End)

Date Issued	Solicitation Closes	Solicitation No	Version
2018-08-29	2018-10-24 13:30:00	CRFP 0212 SWC1900000001	1

**BID RECEIVING LOCATION**

BID CLERK  
 DEPARTMENT OF ADMINISTRATION  
 PURCHASING DIVISION  
 2019 WASHINGTON ST E  
 CHARLESTON WV 25305  
 US

**VENDOR**

Vendor Name, Address and Telephone Number:

Lumos Networks, LLC  
 1200 Greenbrier St  
 Charleston, WV 25311  
 4-414-0411

**FOR INFORMATION CONTACT THE BUYER**

Mark A Atkins  
 (304) 558-2307  
 mark.a.atkins@wv.gov

Signature X *Key Florence*

FEIN # 84-1452950

DATE 11/21/18

All offers subject to all terms and conditions contained in this solicitation

**ADDITIONAL INFORMATION:**

The West Virginia Department of Administration, Purchasing Division (hereinafter referred to as the "Purchasing Division") is issuing this solicitation as a request for proposal ("RFP"), as authorized by W. Va. Code 5A-3-10b, for the West Virginia Office of Technology (hereinafter referred to as the "Agency") to provide Managed Voice Services for the State's Legacy VoIP Environment, while working to migrate those Legacy Environments to a Hosted VoIP Platform, included Hosted Contact Center Services per attached documents.

**MANDATORY PRE-BID MEETING:**

DATE: 09/26/2018

TIME: 2:30PM EDT

LOCATION: WV Office of Technology  
1900 Kanawha Blvd. E.,  
Building 5, 10th Floor  
Charleston, WV 25305

NOTE: Online responses to this solicitation are prohibited. Please see the Instructions to Bidders in Section 2 for proposal submission.

INVOICE TO		SHIP TO	
ALL STATE AGENCIES VARIOUS LOCATIONS AS INDICATED BY ORDER		STATE OF WEST VIRGINIA VARIOUS LOCATIONS AS INDICATED BY ORDER	
No City	WV99999	No City	WV 99999
US		US	

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
1	Managed and Hosted Voice Services	0.00000	EA		See pricing response

Comm Code	Manufacturer	Specification	Model #
81161700			

**Required Description :**

See Attachment\_A Cost Sheet for proposal pricing.

Vendor shall use the Attachment\_A Cost Sheet for proposal pricing.

Note: online proposal submissions are prohibited.

Please see Section 5 Vendor Proposal Subsection 5.3 for further instructions.

**SCHEDULE OF EVENTS**

Line	Event	Event Date
1	Mandatory Pre-Bid Meeting @ 2:30pm EDT:	2018-09-26
2	Technical Questions due by 2:00pm EDT:	2018-10-05

<b>SWC1900000001</b>	<b>Document Phase</b> Final	<b>Document Description</b> RFP for Managed and Hosted Voice Services (OT18027)	<b>Page 3</b> <b>of 3</b>
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**ADDITIONAL TERMS AND CONDITIONS**

See attached document(s) for additional Terms and Conditions

## Response Reference – Executive Summary

On behalf of Lumos Networks, it is our pleasure to submit this comprehensive response for the RFP to provide the Managed Voice Services for the State’s Legacy VoIP Environment, while working to migrate those Legacy Environments to a Hosted VoIP Platform, including Hosted Contact Center Services for the West Virginia Office of Technology.

Lumos Networks has a longstanding partnership with multiple State of West Virginia agencies. As such, we have a comprehensive understanding of the challenges of delivering flexible and affordable solutions to these agencies. Lumos Networks understands the critical need of managing the existing VoIP platform while working to migrate it to a Hosted VoIP Platform.

Lumos Networks is a telecommunications company focused on providing unsurpassed long distance, local services, internet, private line, Ethernet, Hosted VoIP, Hosted Firewall, Interactive Voice Response (IVR) and Multi-Protocol Label Switching (MPLS) services to businesses, governments, wholesale, and carrier customers. The primary West Virginia office for Lumos Networks is located at 1200 Greenbrier Street. The office houses core network equipment, colocation services, voice switches and internet access points as well as account management and support resources.

Lumos Networks has read and understands the scope of this project and recognizes that the goal of the West Virginia Office of Technology is to realize maximum flexibility at the lowest possible cost while maintaining the highest quality service available. If awarded the contract to deliver the services required by this Request for Proposal, Lumos Networks will work with the West Virginia Office of Technology to manage the existing VoIP platform and migrate to a new Hosted VoIP platform.

Benefits of Lumos Networks’ Hosted VoIP Platform are:

- Unlimited inbound and outbound local calling as well as unlimited domestic Long Distance calling over our high quality, designed and built for West Virginia, best-in-class IP network.
- Simple, statewide pricing based on tiered levels of service.
- Offer includes Basic Seat service
- Offer includes Enhanced Seat service
- Offer includes Premium Seat service
- Offer includes Lumos Hosted Contact Center service
- Offer includes Lumos Interactive Voice Portal (IVR)



Lumos Networks believes that we have met or have exceeded the requirements of the VoIP hosted services RFP. We have utilized our experience with other state government hosted VoIP to respond to this RFP. Our RFP team's goal in responding to the RFP was to achieve all 70 potential points.

Lumos Networks will provide a single point-of-contact for network support, end-to-end network troubleshooting, fully managed network control and task-specific consulting services, which may be needed by the State of West Virginia on an ongoing basis.

Lumos Networks is a financially viable and technically competent company. We understand the challenges and demands of the marketplace and have developed products that will allow the West Virginia Office of Technology to provide its customers with current telecommunications, Internet and data communications products and services at an affordable price. Together, we offer the latest technology and remain committed to your success by providing the most sophisticated communication services available today at competitive prices.

Lumos Network management team are visionaries who realize that the future of educational, business, social, economic, healthcare and industrial development continues to rest in our hands within West Virginia. We clearly understand our strong telecommunications infrastructure will not only improve, but will also strengthen West Virginia for generations to come.

### **About Lumos Networks**

Following its merger with Spirit Communications in early 2018, Lumos Networks and Spirit own and maintain a super-regional fiber network of over 21,000 miles of fiber throughout 44 markets in the United States. The company has more than 9,000 on-net locations and 45,000 near-net locations across nine states. The Company offers a full range of Managed Ethernet, Managed Services, MPLS, dark fiber, advanced voice and cloud services to thousands of carrier, enterprise, data center and government customers. Nearly 10,000 enterprises, over 400 government agencies, and 300 school districts rely on us for their communications needs.

Our organization employs more than 800 people to deliver communication services with excellence and integrity that understands the mission critical requirements of the State of West Virginia. The organization understands the importance of a highly reliable and highly secure network that supports Government entities such as the State of West Virginia.

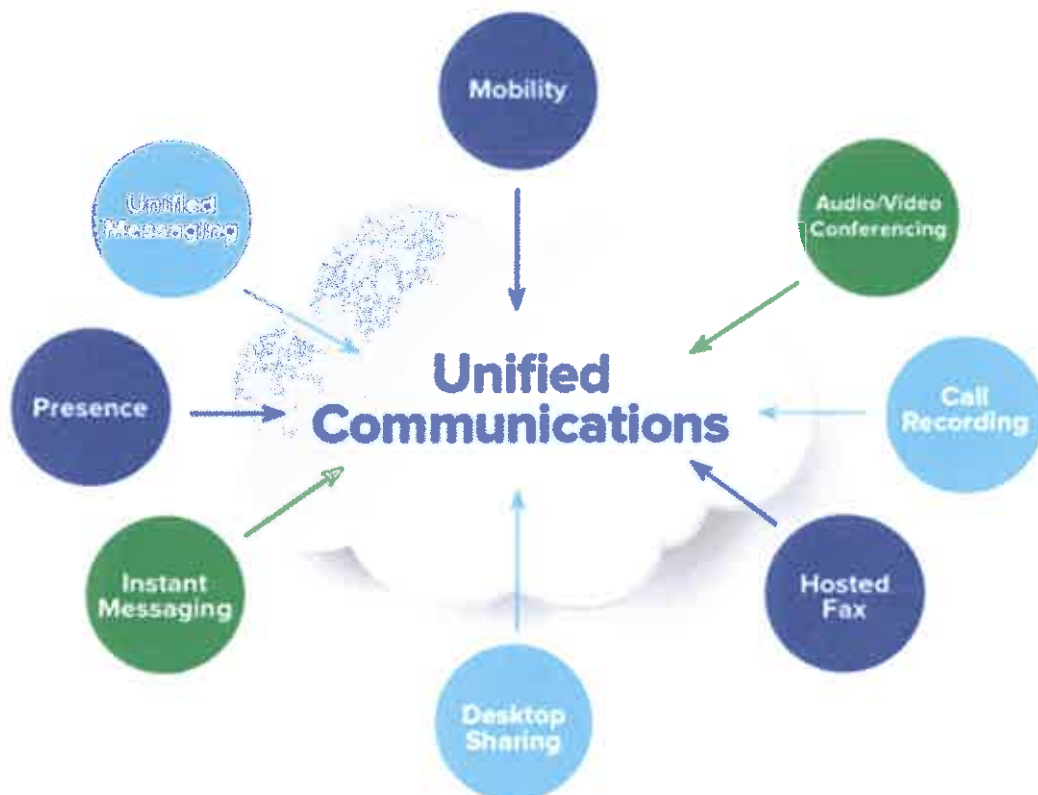
Lumos Networks is owned by EQT Partners Infrastructure Fund, a global private equity investment group known for investing in growth oriented portfolio companies. EQT Partners is a leading Global Investment firm with approximately 50 billion EUR or \$57 Billion U.S. dollars. EQT Partners portfolio companies span the globe including Unites States, Europe and Asia employing in excess of 110,000 employees.

EQT Partners shares the Lumos Networks' vision to transform and accelerate the business while maintaining the ongoing relationships with our owners and our customers that have made our business successful. Our senior leadership team has a deep industry experience. Our CEO, CFO, and CRO have more than 70 years of telecommunications experience. We will continue to invest in the network and advance new products with a plan to invest over \$700 Million in capital over the next several years to continue our support of serving critical mission customers.

## Overview of Lumos Solution – Hosted Voice

### Overview

Lumos Networks Hosted HD Voice VoIP platforms are powered by Lumos Networks' private and secure networks that we manage locally 24/7/365. We maintain the security and reliability of our network around the clock so the agencies can be assured their cloud based telephony services are monitored and measured for maximum uptime and availability. Utilizing best in class technologies and partnering with industry leading vendors such as Cisco\BroadSoft, Acme Packet and Metaswitch Networks. Lumos Networks' Hosted Voice over IP provides advanced telephony services that are dramatically changing the way people stay in touch and communicate. Some of these advanced features include Instant Message and Presence (IM&P), Enhanced Mobility, Collaboration and WebRTC to achieve a truly Unified Communications (UC) experience.



Lumos Networks' hosted IP infrastructure operates on industry leading NEBS Level 3 compliant hardware located in Lumos Datacenter's geographically diverse and redundant datacenters. The Bellcore GR-63-CORE and GR-1089-CORE compliance based levels are the highest rating that can be achieved. Lumos Networks does not deviate from these standards as they ensure our equipment has been thoroughly tested well above our operating conditions within our data centers.

The hosted service is comprised of many different servers that have unique functions. The complete system functionality is distributed across a number of platform network elements to enable maximum scalability, reliability and overall performance. The servers are high availability clusters for maximum resiliency and can perform live switchovers automatically if an event occurs degrading the health of the active unit or manually by our experienced support staff.

The servers are mostly hardware based systems running RedHat or vendor proprietary software deployed in fully redundant Cisco UCS Blade Center Chassis.

Lumos Networks infrastructure has been designed for high capacity and scalability. Our platforms have been validated to support millions of subscribers in a single deployment. The ability to scale quickly and seamlessly is key to the uptime and reliability in which the State demands and we deliver.

Below are list of the servers and their functions in the Hosted IP cloud.

#### Application Servers

The Application Server operates at the core of and is responsible for the execution of all enhanced personal and group features. The server's database maintains user and group profiles, as well as service and subscription data. The Application Server supports a variety of access side protocols in including SIP, MGCP and NCS.

#### Network Servers

Network Servers enable Lumos Networks to achieve massive scalability and geographic redundancy. It acts as a centralized SIP redirect server providing location services, as well as dial plan/digit translation and a rich set of routing policies, such as least-cost routing, E911 route selection, and enterprise-focused network applications such as Voice VPNs and web-configurable private dial plans.

#### Media Servers (Media Resource Function)

The Media Servers are an open standards-based SIP media server supporting scripting languages such as VoiceXML and CCXML, as well as media control protocols such as NetAnn, MSCML, and the new SIP Media Control Framework. The Media Server provides announcements, record, playback, digit detection, mixing and repeating functions.

The Media Servers are also a fully compliant IMS Media Resource Function (MRF), deployed in operator networks worldwide. All industry standard audio and video CODECs are supported on a highly scalable software based platform using industry standard hardware.

This enables Lumos Networks to deploy media rich features to any agency, such as Unified Messaging, N-way conferencing and Auto Attendants without investing in expensive proprietary hardware based media server platforms.

#### Web Servers

Web Servers are a complete service management and self-care web portal solution that can be extended to any agency in the state. A multi-tenant hierarchy allows multiple administrator roles for any agency administrator or end user to perform subscriber and service management.

#### XSP Servers

Lumos Networks' Xtended Service Platform (XSP) enables a variety of ancillary interfaces on Lumos Networks' Hosted IP Voice Platforms. The primary interface exposed by the XSP is the Xtended Services Interface (Xsi) – which provides a rich set of Web interfaces for integrating enhanced services with desktop clients as well as Internet based applications. The XSP also hosts the Device Management interface (DMI) so phones, soft clients and gateways can download their latest configuration files and software loads.

#### Profile Servers

Profile Servers (PS) provides a central repository for configuration files, access device firmware, client software, treatments, announcements and localization files. Centralizing all resource files in the Profile Server eliminates the management of keeping files in sync across multiple application servers and media servers in the network.

#### SIP Servers

SIP Servers integrate all SIP devices across the entire network into a common registration point and provide SIP trunking to the PSTN.

#### Reliability/Scalability

- Unprecedented enterprise wide scalability.
- Strong reliability, security, and redundancy support.
- Provides outstanding geo-redundancy with SIP server instances that safely tolerate a high level of network delays.

#### Feature Servers

Lumos Networks' Hosted VoIP offers an abundant amount of useful and enhanced features, many of which are included with our defined service packages. These features reside on our Feature Servers. Feature servers are set up in an active/standby configuration and provide telephony features to SIP and non-SIP endpoints. Features such as Find me/follow me call routing, Music on hold, Speech to Text, Auto attendant and conferencing.

In addition to the active/standby cluster, there are also backup servers in other geographic locations to provide alternate registration points for SIP devices in the event the main hosted site cannot be reached.

### IVR Portal Servers

Interactive Voice Response (IVR) systems provide a single platform for automated voice, multimedia and self-service options. IVR systems support inbound phone, video, SMS, and email applications. IVR systems also supports outbound phone, SMS, and email applications.

Some of the key features of IVR systems:

Inbound call routing for enhanced wait treatment and load balancing.

Dialer operations to support outbound phone, email, and SMS campaigns.

### Configuration

IVR systems are designed to withstand the failure of any single server. The system has enough servers of each type so that the system can continue to process calls and messages at full capacity even if one server goes out of service.

### Network Connectivity

With the large number of physical connections and VLANs necessary to insure connectivity, yet achieve Layer 2 segmentation and security, Lumos Networks deploys Cisco Catalyst network switches in high availability fashion. Each switch is equipped with redundant power supplies and Supervisor Controllers. The Catalyst family of switches are Cisco's foundation for widely deployed distribution deployments in the world.

### Session Border Controllers

Lumos Networks employs the Industry's highest rated Session Border Controllers to ensure security, service assurance and call control for our VoIP platform. We have deployed redundant High Availability Acme Packet Session Border Controllers (SBC) to provide the critical capability in the VoIP infrastructure to bridge together IP-IP communications.

Session Border Controllers are a critical network component that provides control functions to enable high quality interactive communications, voice, video and multimedia sessions, across IP network borders. A "session" is any real-time, interactive voice, video or multimedia communication using layer 5 IP session-layer signaling protocols such as SIP. The "border" is any IP-IP network border such as those between agencies or other service providers. The "control" functions satisfy new requirements in the areas of security, service assurance and CALEA regulatory compliance.

### Public Switched Telephone Network (PSTN)

Lumos Networks has multiple voice switching platforms that ensure all of Lumos Networks' customers can access the PSTN and receive calls from anywhere in the world. This includes all PSTN dialing services such as Local, Long Distance, Emergency 911, Operator Services and Directory Assistance. Lumos Networks has and continues to invest in new Softswitch technologies to ensure we have the most robust switching equipment in the industry.

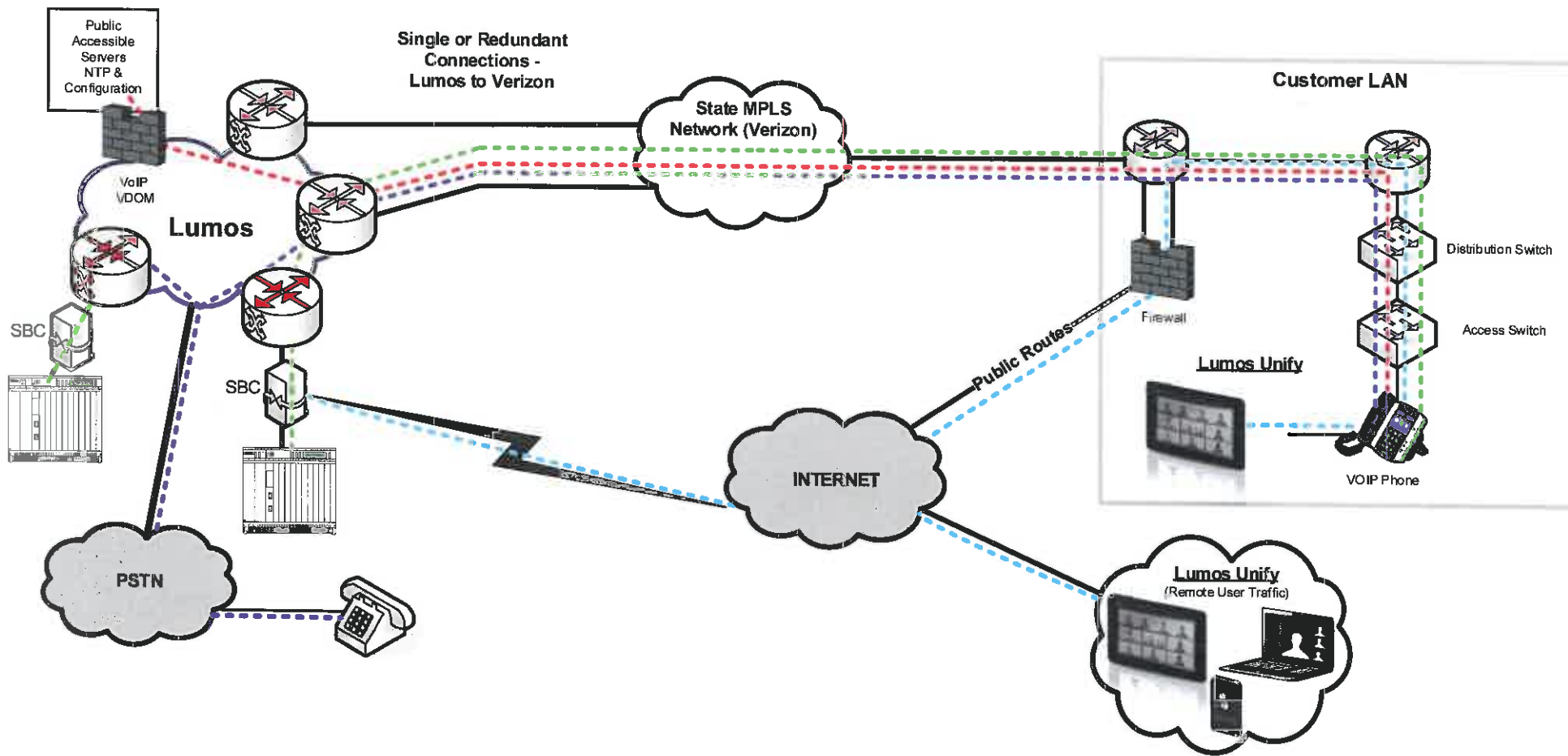
### Metaswitch Networks





The Metaswitch is the latest technology as it relates to next generation distributed switching. Lumos Networks deployed this new Switch in order to take advantage of the resiliency directly associated with distributed switching. The platform offers gateway functionality to the PSTN as well as SIP trunking and other enhanced features, but more importantly extends the call control functionalities to less dense distributed areas as needed.

Please see the high level diagram on the next page.

# Hosted VoIP Design

State of West Virginia – Lumos Networks



	Hosted IP Voice Traffic
	Initial Phone Bootup (Config. & NTP)
	Lumos Unify Traffic
	Inbound Call Traffic

Page: 1	Revision: 1.0.1
Revised by: Randy Jones	Date revised: 10/22/2018
Origin by: Seth Krisnow	Orig. Date: 10/18/2018
File name: NetworkDiagram-WV-HostedVoIPDesign-10.22.18.vsd	
Customer Name:	<b>State of West Virginia</b>



## Implementation Schedule

### Lumos Networks' High Level Project Plan for State of West Virginia.

#### Phases (Major Milestones Denoted by \*):

1. **Order Entry Stage**- in this phase, Order Entry team will work with Sales and Sales Engineering teams to ensure accuracy of the order and all information contained within (Contacts, addresses etc....)
2. **Project Review**- In this phase, the Engineering team will review node needs and bandwidth utilization for the proposed fiber route. Any network enhancements/augmentations will be identified at this time and shared with CUSTOMER as possible contingencies/dependencies.
3. **Site Walks**- in this phase, the Project Manager, Operations and Outside Plant teams will schedule and make site visits to gather as much information as possible about the fiber route and CUSTOMER premise needs. Also in this phase, the teams will identify any contingencies/dependencies that may alter or effect the overall Project Plan timelines.
4. **Discovery Calls\***- in this phase, the Project Manager will initiate a sequence of Internal and External Discovery Calls. The Internal Discovery Call will bring together all of the functional Lumos Networks teams to cover what was sold, all the way to how to get there. The External Discovery call will be the Project Manager's first official contact (first will be site walks) with CUSTOMER to cover all phases of the installation with CUSTOMER. The project manager will also convey timelines, contacts, contingencies and the Lumos Networks' escalation processes to CUSTOMER.
5. **Make Ready\***- In this phase (normally the longest phase), Outside Plant Engineering will have all fiber route easements, pole attachment agreements and local government zoning restrictions/policies resolved. In this phase, a job package will be built and released to the Outside Plant Construction group.
6. **Construction\***- In this phase, the Outside Plant group will build up to the CUSTOMER premise. The Outside Plant group will also work with CUSTOMER to get entrance conduits in place and internal fiber routes/conduit in place to reach the predetermined demarcation point.

7. **Equipment Installation\***- (phases 6, 7 and 8 will be worked in parallel) in this phase, the Operations group will work with CUSTOMER to get the needed Ethernet/DWDM equipment installed and powered at the predetermined demarcation point.
8. **Network Routing**- In this phase the Network Engineering group will be mapping the circuit through our network, in preparation for equipment turn up and CUSTOMER handoff.
9. **Node Insertion\***- in this phase, the Operations group will schedule internally and externally, maintenance window work for inserting the equipment into its intended fiber ring and verify ring integrity is re-established.
10. **Testing\***- in this phase, the Operations group will work with our Data Maintenance Engineers to admin up any CUSTOMER facing ports for testing purposes. The Operations group will run any required tests or predetermined testing parameters from CUSTOMER. If required by CUSTOMER, circuit testing birth certificates can be provided.
11. **Cutover Scheduling**- in this phase, the Project Manager will work with CUSTOMER to schedule a time for cutover to the Lumos Networks' network.
12. **Network Cutover\***- in this phase, the Operations group will work with CUSTOMER and the Data Maintenance Engineering group to groom traffic/services over to the Lumos Networks' network.
13. **Close out**- in this phase, the Project Manager will work with CUSTOMER to identify any additional needs that CUSTOMER may have. If none are identified, the Project Manager will close out the project and send out completion literature to CUSTOMER, effectively notifying CUSTOMER that all Networks work has been completed and Lumos Networks will place the project into billing.

NOTE: All major project milestones are tracked using a Workflow Management Application

**Lumos Networks' Standard Intervals for Ethernet and Wave Delivery**

Installation Type	Normal Delivery Ethernet	Normal Delivery Wave
On Network	24 days*	24 days*
Equipment Only	45 days*	45 days*
Equipment and Splicing Only	52 days*	52 days*
Full Fiber Build	139 days*	139 days*

**\*Intervals will be adjusted after site walks and any contingencies/dependencies are identified.**

## Issue Resolution and Maintenance

Lumos Networks has two 24/7/365 geo-diverse Network Operations Centers in Canonsburg, PA & Waynesboro, VA. Lumos Field Operations Support Teams are also located strategically in the markets served. Fiber restoration crews are also dispersed throughout our markets.

The NOC manages all change management network events (high-risk maintenance activities) along with delivering on SLA parameters for mission critical services.

The Lumos NOC tracks all events via trouble ticket. Customer event updates are provided via phone call. For any maintenance related activities, the Change Management group will notify customers via email of any service impacting scheduled work. LUMOS reserves the right to perform emergency maintenance during service impacting events.

### Maintenance

For purposes of notification, maintenance will be designated as one of two types —Scheduled Maintenance and Emergency Maintenance.

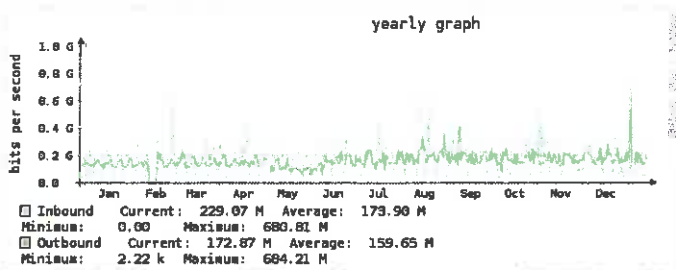
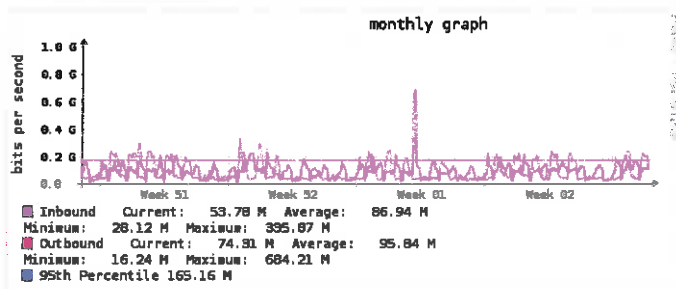
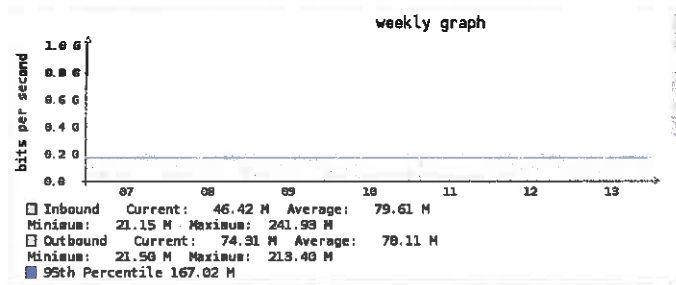
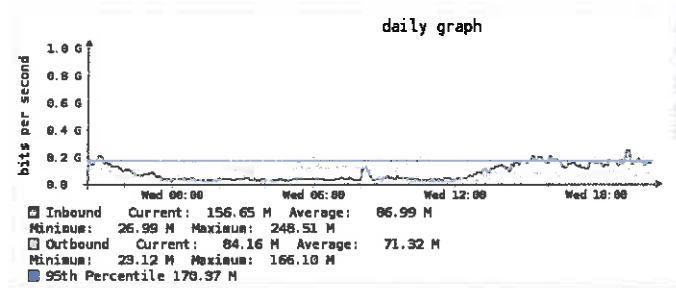
Scheduled Maintenance is any maintenance at LUMOS NETWORKS to which Customer's circuit is connected that is performed between 12:00 AM and 6:00 AM or if possible otherwise scheduled according to the Customer's or Company's request and is mutually agreed upon by both Parties. Customer will receive at least 48 hours advance notice of service-impacting Scheduled Maintenance.

Emergency Maintenance is performed in order to promptly respond and resolve emergency issues associated with service-affecting conditions. Customer will be contacted when Emergency Maintenance has been performed on service-impacting work.

In the case of Emergencies, Acts of God, and Natural Disasters etc.: Lumos Networks will, if practical due to the nature and scale of the emergency, make an attempt at notification. If however, the Lumos Networks NOC receives Equipment degradation or failure alarms that will require future repair or replacement, Lumos Networks will notify the customer of the imminent activity and estimated time of repair.

## Monitoring and Reporting

Lumos Networks offers its Ethernet customers a web portal to be able to see traffic utilization and errors on individual circuits in daily, weekly, monthly, and yearly graphs. The below pictures show utilization examples of a 1Gb circuit with Lumos:



## Managing Your Account

Lumos Networks has payment options as follows:

- Lumos has an on-line payment platform named **My Account**. The **My Account** portal allows for a customer to set up an on-line profile to be able to view invoices and make payments accordingly.
- Payments can be made by calling the Lumos Networks' customer service 800# 1-800-320-6144 and using the Bill Matrix payment option or the option to speak with a service representative personally.
- Payments made by check can be mailed to the Lumos Networks' address provided on the customers billing statement.
- Payments can also be made directly to Lumos Networks through ACH arrangements.

### Billing:

- Lumos Networks provide a monthly billing statement which encompasses all service installs, additions and changes to services.
- Lumos Networks also offers an electronic invoice format that produces a .CSV format file that can be FTP'd and uploaded.
- Lumos Networks manages all billing and service changes through our Enterprise Business Support team with a designated 800# for supporting escalations.

## **First Bill Review**

Lumos provides Bill Review as a value-added service to include contacting and meeting with customers as needed in order to establish a relationship. The review can be delivered as an onsite meeting at the customers premise or presented via phone conference. The Lumos representative performs a survey with the customer regarding their Lumos experience and they review the customer's First Bill in order to explain the charges and ensure the billing is in coordination with the customers signed contract/purchase order. The Bill Review process also includes the review and additions of contract changes and renewals throughout the contract period.

## Escalations List – Billing

### Enterprise Business Support

#### 1st Level

Customer Solution Center – Billing Support

[operationsupport@lumosnet.com](mailto:operationsupport@lumosnet.com)

(866) 710-2243

#### 2nd Level

Teresa Bright

Customer Solution Center – Billing Support Manager

[brightt@lumosnet.com](mailto:brightt@lumosnet.com)

Office/Mobile: (540) 946-6900

#### 3rd Level

Nicole Price

Senior Director Customer Care

[nicole.price@spiritcom.com](mailto:nicole.price@spiritcom.com)

Office: (803) 726-8302



## Escalations List - NOC

1 <sup>st</sup> Level			
<b>Service</b>	Metro-E, FTTC, DS3, OCn, Wavelength, SIP		
<b>Name:</b>	On-Duty		
<b>Title:</b>	Network Analyst		
<b>Office</b>	540-941-4800		
<b>Email:</b>	<a href="mailto:noc@lumosnet.com">noc@lumosnet.com</a>		
2 <sup>nd</sup> Level			
<b>Name:</b>	On-Duty		
<b>Title:</b>	Team Lead		
<b>Office</b>	1-877-411-6930		
<b>Email:</b>	<a href="mailto:noc@lumosnet.com">noc@lumosnet.com</a>		
3 <sup>rd</sup> Level			
<b>Name:</b>	Gay Sterman	Ryan Coffey	Marcos Correa
<b>Title:</b>	NOC Manager Days	NOC Manager Evenings	NOC Manager Mids
<b>Location:</b>	Waynesboro, VA		
<b>All Call:</b>	Group Ring with VM to Group EMAIL - 540-941-2187		
<b>Office</b>	(540)941-6799	(540) 941-7593	(540) 941-2471
<b>Mobile</b>	(540)241-9097	(540) 849-0763	(540) 448-3543
<b>Email:</b>	<a href="mailto:stermang@lumosnet.com">stermang@lumosnet.com</a>	<a href="mailto:lawrencel@lumosnet.com">lawrencel@lumosnet.com</a>	<a href="mailto:corream@lumosnet.com">corream@lumosnet.com</a>
4 <sup>th</sup> Level			
<b>Name:</b>	Cory Stringer		
<b>Title:</b>	Director – NOC		
<b>Location:</b>	Waynesboro, VA		
<b>Office:</b>	(540) 941-3609		
<b>Mobile:</b>	(804) 938-9302		
<b>Email:</b>	<a href="mailto:stringerc@lumosnet.com">stringerc@lumosnet.com</a>		
5 <sup>th</sup> Level			
<b>Name:</b>	Scott Wallhermfechtcl		
<b>Title:</b>	Vice President, Network Operations		
<b>Location:</b>	Reston, VA		
<b>Office:</b>	(540) 941-3773		
<b>Mobile :</b>	(540) 326-6667 (Preferred)		
<b>Email:</b>	<a href="mailto:walls@lumosnet.com">walls@lumosnet.com</a>		

## **Account Team**

Below please find short bios of the Lumos Networks key project team members that will support the State of West Virginia project. Our engineering, management, project management, support and sales teams not only bring a great deal of experience to the project but each and every team member supporting the State of WV project is committed to its success.

### **Glenn Lytle, Vice President of Enterprise Sales**

Glenn E. Lytle was appointed Vice President of Enterprise Sales in May 2014. Prior to joining Lumos Networks, Glenn was employed by Comcast Business Solutions since 2007, most recently as Regional Vice President of their Keystone region, which encompassed West Virginia, Pennsylvania, Ohio and Maryland. Prior to working for Comcast, Glenn was employed by Level 3 (formerly TelCove), where he served as General Manager of their Central Pennsylvania, North Carolina and Virginia markets. Prior to Telcove, Glenn held Account Executive positions at numerous telecommunications companies, including AirTouch Cellular, Sprint PCS, and Adelphia Business Solutions.

### **Warren “Chip” VanAlsborg, Director of Sales**

Chip joined Lumos in May 2016 as the Director of Enterprise Sales for WV, OH & KY. Prior to Lumos Networks, Chip was General Manager of Northern WV for Frontier Communications for 6 years where he directed the day to day operations, sales, marketing, PR and oversight of construction and engineering. Chip has an extensive back ground in telecommunications, IT and marketing with companies such as Suddenlink, Charter Communications, WV Radio and Bell Atlantic.

### **Greg Florence, Major Account Manager**

Greg Florence is a Major Account Manager who has been with Ntelos/Lumos Networks over 11 years. Greg has managed accounts in the Commercial, Government, Higher Education, Financial & Health Care market segments. Greg has worked in the telecom industry for 28 years. Greg is a graduate of WVU and lives in Charleston, WV with his wife and 3 sons.

### **Darald Boothe, Manager of Sales Engineering**

With more than 38 years of experience in the Telecom industry, Darald Boothe is a true expert in his field and currently works as the Sales Engineering Manager. Darald’s vast Telecom experience includes installations and repair, project management, and custom network design with a focus on Colocation, Ethernet, Internet, and VOIP. Currently Darald focuses on supporting the Sales Engineering team as well as providing sales support, customer and network design consultation, issue resolution, and supporting project management efforts.

### **Randy Jones, Sales Engineering**

Randy Jones is a Senior Sales Engineer who has been with Lumos Networks over 6 years. Randy has extensive experience designing and implementing cost-effective solutions for Ethernet wide area network educational and non-educational customers consistent with industry standards. He supports sales account managers with the technical solution and network design. Randy has worked in the

telecom industry for 26 years and his vast experience includes supporting Metro Ethernet, SIP, DWDM, and legacy voice and data services in the WV network. Randy Jones lives in Charleston, WV.

#### **Pam McGown, Director of Enterprise Sales Support**

Pam McGown has been with Lumos Networks for 18 years. Pam has vast experience in a number of positions, including Manager of Quality Assurance, Manager of Customer Care, Manager of Complex Business, Regional Manager of Retail and most recently, Director of Enterprise Support. Pam's experiences in these different areas focused on pre-installation and post installation efficiencies to ultimately improve the customer experience. Pam McGown works with new customers to ensure e-Rate billing requirements are met and is available to answer any billing related USAC questions.

#### **Katy Oberg, Manager of Enterprise Sales Support**

Katy Oberg has been with Lumos Networks for 18 years. Katy has held numerous positions throughout her career and has experience in Customer Care (Residential/Enterprise), Directory Services, Service Delivery/Order Entry, First Bill Review, Customer Satisfaction Surveys, and most recently, Manager of Enterprise Sales Support. Katy's experiences in these different areas is valuable for pre/post installation efficiencies.

#### **Teresa Bright, Manager of Enterprise Operations Support**

Teresa Bright has been with Lumos Networks for 10 years. Teresa has held various positions throughout her tenure providing her with experience in Complex Business where she was Team Leader, Customer Care where she served as Manager, Manager of Consumer Advocates and Directory, and most recently as Manager of Enterprise Operations Support. In her current role, Teresa manages a team of 7 where she helps to develop processes that improve billing accuracy while working with customers regarding billing disputes.

#### **Edward Fahner, Architect**

Edward Fahner's role and responsibilities are to implement and manage an ISO27K/NIST based security program at Lumos Networks. Mr. Fahner gathers consensus for and publishes security policy and standards. Mr. Fahner does risk management, security assessments, audits, penetration testing, lab work, research and development. Mr. Fahner designs and leads initiatives to improve Lumos Networks' security posture. Mr. Fahner has been doing information security research and development for 20 years across a variety of technical roles within the data service provider industry. Mr. Fahner has held roles including systems administration, general manager, network engineering, abuse and incident team lead, software development and security architecture.

## References

**4.3.1.1** Vendor should provide three (3) examples demonstrating at least three (3) years of experience in providing a Hosted VoIP solution of a similar size and scope -15,000 users across 200 sites with one example being a public entity. Vendor should provide a summarization of each project including goals and objectives, total number of phones deployed per site, length of time deployment took, if still in service, and reference for each example.

Date of Implementation	February 2008
Client Name	State of South Carolina
Client Address	4430 Broad River Road, Columbia, SC
Contact Name	Charlie Zeberlein
Telephone Number	(803)896-0381
Current E-Mail Address	<a href="mailto:Charlie.zeberlein@admin.sc.gov">Charlie.zeberlein@admin.sc.gov</a>
Technical Contact Name	Charlie Zeberlein
Technical Contact Telephone Number	(803)896-0381
Technical Contact E-Mail Address	<a href="mailto:Charlie.zeberlein@admin.sc.gov">Charlie.zeberlein@admin.sc.gov</a>
Brief Summary of Project	Awarded as the single Hosted IP Contracted Service Provider from 2008 through 2015. In 2015, the State awarded the Hosted IP Contract to 3 vendors, one being Lumos Networks. Currently, Lumos Networks provides over 23,000 Hosted IP Seats to State of South Carolina Government entities in over 588 service locations throughout 114 cities

Date of Implementation	2010 through present
Client Name	South Carolina Department of Mental Health
Client Address	7901 Farrow Road, Columbia, SC
Contact Name	Bryan Yarbrough
Telephone Number	(803)935-5443
Current E-Mail Address	<a href="mailto:bwy96@scdmh.org">bwy96@scdmh.org</a>
Technical Contact Name	Bryan Yarbrough
Technical Contact Telephone Number	(803)935-5446
Technical Contact E-Mail Address	<a href="mailto:bwy96@scdmh.org">bwy96@scdmh.org</a>
Brief Summary of Project	Installed over 1900 hosted IP seats, voice mail, unified messaging and auto attendants statewide

Date of Implementation	September 2017
Client Name	College of Charleston

Client Address	81 St Philip Street, Charleston, SC
Contact Name	Stephanie Laffey
Telephone Number	(843)953-3036
Current E-Mail Address	<a href="mailto:laffeysa@cofc.edu">laffeysa@cofc.edu</a>
Technical Contact Name	Stephanie Laffey
Technical Contact Telephone Number	(843)953-3036
Technical Contact E-Mail Address	<a href="mailto:laffeysa@cofc.edu">laffeysa@cofc.edu</a>
Brief Summary of Project	Installed over 2500 hosted IP seats, voice mail, unified messaging and auto attendants statewide in a 6 week time period.

**4.3.1.2** Vendor should provide at least one (1) example demonstrating at least three (3) years of experience in providing single/multiple Hosted Call Center solutions of a similar size and scope - 500 users across 20 sites. Vendor should provide a summarization the project including goals and objectives, total number of agents per site, length of time deployment took, if still in service, and reference for the example.

Date of Implementation	August 2012
Client Name	Department of Social Services
Client Address	1535 Confederate Avenue, Columbia
Contact Name	Charly Reese
Telephone Number	(803)898-7158
Current E-Mail Address	<a href="mailto:charles.reese@dss.sc.gov">charles.reese@dss.sc.gov</a>
Technical Contact Name	Charly Reese
Technical Contact Telephone Number	(803)898-7158
Technical Contact E-Mail Address	<a href="mailto:charles.reese@dss.sc.gov">charles.reese@dss.sc.gov</a>
Brief Summary of Project	Statewide distributed contact center for FAIC application. Over 2,700 basic seats. Agency currently has 426 contact center agents and 66 contact center supervisors

Date of Implementation	February 2011
Client Name	Department of Revenue
Client Address	300 A Outlet Pointe Blvd, Columbia, SC
Contact Name	Karen Hildebrand
Telephone Number	(803) 896-1410
Current E-Mail Address	<a href="mailto:Karen.hildebrand@dor.sc.gov">Karen.hildebrand@dor.sc.gov</a>
Technical Contact Name	Sarath Chelika
Technical Contact Telephone Number	(803) 898-1201
Technical Contact E-Mail Address	<a href="mailto:Sarath.Chelika@dor.sc.gov">Sarath.Chelika@dor.sc.gov</a>

Brief Summary of Project	Installed over 1,000 basic seats statewide. Agency currently has 316 contact center agents and 46 contact center supervisors.
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Date of Implementation	June 2009
Client Name	Department of Labor, Licensing and Regulation
Client Address	110 Centerview Drive, Columbia, SC
Contact Name	Diane Parker
Telephone Number	(803)896-4333
Current E-Mail Address	<a href="mailto:Diane.parker@llr.sc.gov">Diane.parker@llr.sc.gov</a>
Technical Contact Name	Diane Parker
Technical Contact Telephone Number	(803)896-4333
Technical Contact E-Mail Address	<a href="mailto:Diane.parker@llr.sc.gov">Diane.parker@llr.sc.gov</a>
Brief Summary of Project	Installed over 300 basic seats with multiple contact centers throughout the agency that are used for the different licensing divisions within the agency. Agency currently has 92 contact center agents and 3 contact center supervisors.

WV STATE GOVERNMENT

HIPAA BUSINESS ASSOCIATE ADDENDUM

This Health Insurance Portability and Accountability Act of 1996 (hereafter, HIPAA) Business Associate Addendum ("Addendum") is made a part of the Agreement ("Agreement") by and between the State of West Virginia ("Agency"), and Business Associate ("Associate"), and is effective as of the date of execution of the Addendum.

The Associate performs certain services on behalf of or for the Agency pursuant to the underlying Agreement that requires the exchange of information including protected health information protected by the Health Insurance Portability and Accountability Act of 1996 ("HIPAA"), as amended by the American Recovery and Reinvestment Act of 2009 (Pub. L. No. 111-5) (the "HITECH Act"), any associated regulations and the federal regulations published at 45 CFR parts 160 and 164 (sometimes collectively referred to as "HIPAA"). The Agency is a "Covered Entity" as that term is defined in HIPAA, and the parties to the underlying Agreement are entering into this Addendum to establish the responsibilities of both parties regarding HIPAA-covered information and to bring the underlying Agreement into compliance with HIPAA.

Whereas it is desirable, in order to further the continued efficient operations of Agency to disclose to its Associate certain information which may contain confidential individually identifiable health information (hereafter, Protected Health Information or PHI); and

Whereas, it is the desire of both parties that the confidentiality of the PHI disclosed hereunder be maintained and treated in accordance with all applicable laws relating to confidentiality, including the Privacy and Security Rules, the HITECH Act and its associated regulations, and the parties do agree to at all times treat the PHI and interpret this Addendum consistent with that desire.

NOW THEREFORE: the parties agree that in consideration of the mutual promises herein, in the Agreement, and of the exchange of PHI hereunder that:

1. **Definitions.** Terms used, but not otherwise defined, in this Addendum shall have the same meaning as those terms in the Privacy, Security, Breach Notification, and Enforcement Rules at 45 CFR Part 160 and Part 164.
  - a. **Agency Procurement Officer** shall mean the appropriate Agency individual listed at: <http://www.state.wv.us/admin/purchase/vrc/agencyli.html>.
  - b. **Agent** shall mean those person(s) who are agent(s) of the Business Associate, in accordance with the Federal common law of agency, as referenced in 45 CFR § 160.402(c).
  - c. **Breach** shall mean the acquisition, access, use or disclosure of protected health information which compromises the security or privacy of such information, except as excluded in the definition of Breach in 45 CFR § 164.402.
  - d. **Business Associate** shall have the meaning given to such term in 45 CFR § 160.103.
  - e. **HITECH Act** shall mean the Health Information Technology for Economic and Clinical Health Act. Public Law No. 111-05. 111<sup>th</sup> Congress (2009).

- f. **Privacy Rule** means the Standards for Privacy of Individually Identifiable Health Information found at 45 CFR Parts 160 and 164.
- g. **Protected Health Information or PHI** shall have the meaning given to such term in 45 CFR § 160.103, limited to the information created or received by Associate from or on behalf of Agency.
- h. **Security Incident** means any known successful or unsuccessful attempt by an authorized or unauthorized individual to inappropriately use, disclose, modify, access, or destroy any information or interference with system operations in an information system.
- i. **Security Rule** means the Security Standards for the Protection of Electronic Protected Health Information found at 45 CFR Parts 160 and 164.
- j. **Subcontractor** means a person to whom a business associate delegates a function, activity, or service, other than in the capacity of a member of the workforce of such business associate.

## 2. Permitted Uses and Disclosures.

- a. **PHI Described.** This means PHI created, received, maintained or transmitted on behalf of the Agency by the Associate. This PHI is governed by this Addendum and is limited to the minimum necessary, to complete the tasks or to provide the services associated with the terms of the original Agreement, and is described in Appendix A.
- b. **Purposes.** Except as otherwise limited in this Addendum, Associate may use or disclose the PHI on behalf of, or to provide services to, Agency for the purposes necessary to complete the tasks, or provide the services, associated with, and required by the terms of the original Agreement, or as required by law, if such use or disclosure of the PHI would not violate the Privacy or Security Rules or applicable state law if done by Agency or Associate, or violate the minimum necessary and related Privacy and Security policies and procedures of the Agency. The Associate is directly liable under HIPAA for impermissible uses and disclosures of the PHI it handles on behalf of Agency.
- c. **Further Uses and Disclosures.** Except as otherwise limited in this Addendum, the Associate may disclose PHI to third parties for the purpose of its own proper management and administration, or as required by law, provided that (i) the disclosure is required by law, or (ii) the Associate has obtained from the third party reasonable assurances that the PHI will be held confidentially and used or further disclosed only as required by law or for the purpose for which it was disclosed to the third party by the Associate; and, (iii) an agreement to notify the Associate and Agency of any instances of which it (the third party) is aware in which the confidentiality of the information has been breached. To the extent practical, the information should be in a limited data set or the minimum necessary information pursuant to 45 CFR § 164.502, or take other measures as necessary to satisfy the Agency's obligations under 45 CFR § 164.502.



### 3. Obligations of Associate.

- a. **Stated Purposes Only.** The PHI may not be used by the Associate for any purpose other than as stated in this Addendum or as required or permitted by law.
- b. **Limited Disclosure.** The PHI is confidential and will not be disclosed by the Associate other than as stated in this Addendum or as required or permitted by law. Associate is prohibited from directly or indirectly receiving any remuneration in exchange for an individual's PHI unless Agency gives written approval and the individual provides a valid authorization. Associate will refrain from marketing activities that would violate HIPAA, including specifically Section 13406 of the HITECH Act. Associate will report to Agency any use or disclosure of the PHI, including any Security Incident not provided for by this Agreement of which it becomes aware.
- c. **Safeguards.** The Associate will use appropriate safeguards, and comply with Subpart C of 45 CFR Part 164 with respect to electronic protected health information, to prevent use or disclosure of the PHI, except as provided for in this Addendum. This shall include, but not be limited to:
  - i. Limitation of the groups of its workforce and agents, to whom the PHI is disclosed to those reasonably required to accomplish the purposes stated in this Addendum, and the use and disclosure of the minimum PHI necessary or a Limited Data Set;
  - ii. Appropriate notification and training of its workforce and agents in order to protect the PHI from unauthorized use and disclosure;
  - iii. Maintenance of a comprehensive, reasonable and appropriate written PHI privacy and security program that includes administrative, technical and physical safeguards appropriate to the size, nature, scope and complexity of the Associate's operations, in compliance with the Security Rule;
  - iv. In accordance with 45 CFR §§ 164.502(e)(1)(ii) and 164.308(b)(2), if applicable, ensure that any subcontractors that create, receive, maintain, or transmit protected health information on behalf of the business associate agree to the same restrictions, conditions, and requirements that apply to the business associate with respect to such information.
- d. **Compliance With Law.** The Associate will not use or disclose the PHI in a manner in violation of existing law and specifically not in violation of laws relating to confidentiality of PHI, including but not limited to, the Privacy and Security Rules.
- e. **Mitigation.** Associate agrees to mitigate, to the extent practicable, any harmful effect that is known to Associate of a use or disclosure of the PHI by Associate in violation of the requirements of this Addendum, and report its mitigation activity back to the Agency.

f. **Support of Individual Rights.**

- i. **Access to PHI.** Associate shall make the PHI maintained by Associate or its agents or subcontractors in Designated Record Sets available to Agency for inspection and copying, and in electronic format, if requested, within ten (10) days of a request by Agency to enable Agency to fulfill its obligations under the Privacy Rule, including, but not limited to, 45 CFR § 164.524 and consistent with Section 13405 of the HITECH Act.
- ii. **Amendment of PHI.** Within ten (10) days of receipt of a request from Agency for an amendment of the PHI or a record about an individual contained in a Designated Record Set, Associate or its agents or subcontractors shall make such PHI available to Agency for amendment and incorporate any such amendment to enable Agency to fulfill its obligations under the Privacy Rule, including, but not limited to, 45 CFR § 164.526.
- iii. **Accounting Rights.** Within ten (10) days of notice of a request for an accounting of disclosures of the PHI, Associate and its agents or subcontractors shall make available to Agency the documentation required to provide an accounting of disclosures to enable Agency to fulfill its obligations under the Privacy Rule, including, but not limited to, 45 CFR §164.528 and consistent with Section 13405 of the HITECH Act. Associate agrees to document disclosures of the PHI and information related to such disclosures as would be required for Agency to respond to a request by an individual for an accounting of disclosures of PHI in accordance with 45 CFR § 164.528. This should include a process that allows for an accounting to be collected and maintained by Associate and its agents or subcontractors for at least six (6) years from the date of disclosure, or longer if required by state law. At a minimum, such documentation shall include:
  - the date of disclosure;
  - the name of the entity or person who received the PHI, and if known, the address of the entity or person;
  - a brief description of the PHI disclosed; and
  - a brief statement of purposes of the disclosure that reasonably informs the individual of the basis for the disclosure, or a copy of the individual's authorization, or a copy of the written request for disclosure.
- iv. **Request for Restriction.** Under the direction of the Agency, abide by any individual's request to restrict the disclosure of PHI, consistent with the requirements of Section 13405 of the HITECH Act and 45 CFR § 164.522, when the Agency determines to do so (except as required by law) and if the disclosure is to a health plan for payment or health care operations and it pertains to a health care item or service for which the health care provider was paid in full "out-of-pocket."
- v. **Immediate Discontinuance of Use or Disclosure.** The Associate will immediately discontinue use or disclosure of Agency PHI pertaining to any individual when so requested by Agency. This includes, but is not limited to, cases in which an individual has withdrawn or modified an authorization to use or disclose PHI.

- g. **Retention of PHI.** Notwithstanding section 4.a. of this Addendum, Associate and its subcontractors or agents shall retain all PHI pursuant to state and federal law and shall continue to maintain the PHI required under Section 3.f. of this Addendum for a period of six (6) years after termination of the Agreement, or longer if required under state law.
- h. **Agent's, Subcontractor's Compliance.** The Associate shall notify the Agency of all subcontracts and agreements relating to the Agreement, where the subcontractor or agent receives PHI as described in section 2.a. of this Addendum. Such notification shall occur within 30 (thirty) calendar days of the execution of the subcontract and shall be delivered to the Agency Procurement Officer. The Associate will ensure that any of its subcontractors, to whom it provides any of the PHI it receives hereunder, or to whom it provides any PHI which the Associate creates or receives on behalf of the Agency, agree to the restrictions and conditions which apply to the Associate hereunder. The Agency may request copies of downstream subcontracts and agreements to determine whether all restrictions, terms and conditions have been flowed down. Failure to ensure that downstream contracts, subcontracts and agreements contain the required restrictions, terms and conditions may result in termination of the Agreement.
- j. **Federal and Agency Access.** The Associate shall make its internal practices, books, and records relating to the use and disclosure of PHI, as well as the PHI, received from, or created or received by the Associate on behalf of the Agency available to the U.S. Secretary of Health and Human Services consistent with 45 CFR § 164.504. The Associate shall also make these records available to Agency, or Agency's contractor, for periodic audit of Associate's compliance with the Privacy and Security Rules. Upon Agency's request, the Associate shall provide proof of compliance with HIPAA and HITECH data privacy/protection guidelines, certification of a secure network and other assurance relative to compliance with the Privacy and Security Rules. This section shall also apply to Associate's subcontractors, if any.
- k. **Security.** The Associate shall take all steps necessary to ensure the continuous security of all PHI and data systems containing PHI. In addition, compliance with 74 FR 19006 Guidance Specifying the Technologies and Methodologies That Render PHI Unusable, Unreadable, or Indecipherable to Unauthorized Individuals for Purposes of the Breach Notification Requirements under Section 13402 of Title XIII is required, to the extent practicable. If Associate chooses not to adopt such methodologies as defined in 74 FR 19006 to secure the PHI governed by this Addendum, it must submit such written rationale, including its Security Risk Analysis, to the Agency Procurement Officer for review prior to the execution of the Addendum. This review may take up to ten (10) days.
- l. **Notification of Breach.** During the term of this Addendum, the Associate shall notify the Agency and, unless otherwise directed by the Agency in writing, the WV Office of Technology immediately by e-mail or web form upon the discovery of any Breach of unsecured PHI; or within 24 hours by e-mail or web form of any suspected Security Incident, intrusion or unauthorized use or disclosure of PHI in violation of this Agreement and this Addendum, or potential loss of confidential data affecting this Agreement. Notification shall be provided to the Agency Procurement Officer at [www.state.wv.us/admin/purchase/vrc/agencyli.htm](http://www.state.wv.us/admin/purchase/vrc/agencyli.htm) and,

unless otherwise directed by the Agency in writing, the Office of Technology at [incident@wv.gov](mailto:incident@wv.gov) or <https://apps.wv.gov/ot/ir/Default.aspx>.

The Associate shall immediately investigate such Security Incident, Breach, or unauthorized use or disclosure of PHI or confidential data. Within 72 hours of the discovery, the Associate shall notify the Agency Procurement Officer, and, unless otherwise directed by the Agency in writing, the Office of Technology of: (a) Date of discovery; (b) What data elements were involved and the extent of the data involved in the Breach; (c) A description of the unauthorized persons known or reasonably believed to have improperly used or disclosed PHI or confidential data; (d) A description of where the PHI or confidential data is believed to have been improperly transmitted, sent, or utilized; (e) A description of the probable causes of the improper use or disclosure; and (f) Whether any federal or state laws requiring individual notifications of Breaches are triggered.

Agency will coordinate with Associate to determine additional specific actions that will be required of the Associate for mitigation of the Breach, which may include notification to the individual or other authorities.

All associated costs shall be borne by the Associate. This may include, but not be limited to costs associated with notifying affected individuals.

If the Associate enters into a subcontract relating to the Agreement where the subcontractor or agent receives PHI as described in section 2.a. of this Addendum, all such subcontracts or downstream agreements shall contain the same incident notification requirements as contained herein, with reporting directly to the Agency Procurement Officer. Failure to include such requirement in any subcontract or agreement may result in the Agency's termination of the Agreement.

- m. **Assistance in Litigation or Administrative Proceedings.** The Associate shall make itself and any subcontractors, workforce or agents assisting Associate in the performance of its obligations under this Agreement, available to the Agency at no cost to the Agency to testify as witnesses, or otherwise, in the event of litigation or administrative proceedings being commenced against the Agency, its officers or employees based upon claimed violations of HIPAA, the HIPAA regulations or other laws relating to security and privacy, which involves inaction or actions by the Associate, except where Associate or its subcontractor, workforce or agent is a named as an adverse party.

#### 4. Addendum Administration.

- a. **Term.** This Addendum shall terminate on termination of the underlying Agreement or on the date the Agency terminates for cause as authorized in paragraph (c) of this Section, whichever is sooner.
- b. **Duties at Termination.** Upon any termination of the underlying Agreement, the Associate shall return or destroy, at the Agency's option, all PHI received from, or created or received by the Associate on behalf of the Agency that the Associate still maintains in any form and retain no copies of such PHI or, if such return or destruction is not feasible, the Associate shall extend the protections of this Addendum to the PHI and limit further uses and disclosures to the purposes that make the return or destruction of the PHI infeasible. This shall also apply to all agents and subcontractors of Associate. The duty of the Associate and its agents

and subcontractors to assist the Agency with any HIPAA required accounting of disclosures survives the termination of the underlying Agreement.

- c. **Termination for Cause.** Associate authorizes termination of this Agreement by Agency, if Agency determines Associate has violated a material term of the Agreement. Agency may, at its sole discretion, allow Associate a reasonable period of time to cure the material breach before termination.
- d. **Judicial or Administrative Proceedings.** The Agency may terminate this Agreement if the Associate is found guilty of a criminal violation of HIPAA. The Agency may terminate this Agreement if a finding or stipulation that the Associate has violated any standard or requirement of HIPAA/HITECH, or other security or privacy laws is made in any administrative or civil proceeding in which the Associate is a party or has been joined. Associate shall be subject to prosecution by the Department of Justice for violations of HIPAA/HITECH and shall be responsible for any and all costs associated with prosecution.
- e. **Survival.** The respective rights and obligations of Associate under this Addendum shall survive the termination of the underlying Agreement.

#### 5. General Provisions/Ownership of PHI.

- a. **Retention of Ownership.** Ownership of the PHI resides with the Agency and is to be returned on demand or destroyed at the Agency's option, at any time, and subject to the restrictions found within section 4.b. above.
- b. **Secondary PHI.** Any data or PHI generated from the PHI disclosed hereunder which would permit identification of an individual must be held confidential and is also the property of Agency.
- c. **Electronic Transmission.** Except as permitted by law or this Addendum, the PHI or any data generated from the PHI which would permit identification of an individual must not be transmitted to another party by electronic or other means for additional uses or disclosures not authorized by this Addendum or to another contractor, or allied agency, or affiliate without prior written approval of Agency.
- d. **No Sales.** Reports or data containing the PHI may not be sold without Agency's or the affected individual's written consent.
- e. **No Third-Party Beneficiaries.** Nothing express or implied in this Addendum is intended to confer, nor shall anything herein confer, upon any person other than Agency, Associate and their respective successors or assigns, any rights, remedies, obligations or liabilities whatsoever.
- f. **Interpretation.** The provisions of this Addendum shall prevail over any provisions in the Agreement that may conflict or appear inconsistent with any provisions in this Addendum. The interpretation of this Addendum shall be made under the laws of the state of West Virginia.
- g. **Amendment.** The parties agree that to the extent necessary to comply with applicable law they will agree to further amend this Addendum.
- h. **Additional Terms and Conditions.** Additional discretionary terms may be included in the release order or change order process.

AGREED:

Name of Agency: \_\_\_\_\_

Name of Associate: Lumos Networks LLC

Signature: \_\_\_\_\_

Signature: 


Title: \_\_\_\_\_

Title: Director of Regulatory Affairs

Date: \_\_\_\_\_

Date: October 24, 2018

Form - WVBA-012004  
Amended 06.26.2013

APPROVED AS TO FORM THIS 26<sup>th</sup>  
DAY OF Jan 20 17  
  
Patrick Morrissey  
Attorney General  
BY \_\_\_\_\_

Appendix A

(To be completed by the Agency's Procurement Officer prior to the execution of the Addendum, and shall be made a part of the Addendum. PHI not identified prior to execution of the Addendum may only be added by amending Appendix A and the Addendum, via Change Order.)

Name of Associate: \_\_\_\_\_

Name of Agency: \_\_\_\_\_

Describe the PHI (do not include any actual PHI). If not applicable, please indicate the same.

## Appendix A – PHI Description

**Describe the PHI. If not applicable, please indicate the same.**

PHI data elements that could be contained in Vendor's solution:

- Name
- Address
- Dates related to an individual
- Telephone numbers
- Fax number
- Email address
- Social Security number
- Medical record number
- Health plan beneficiary number
- Account number
- Certificate/license number
- Any vehicle or other device serial
- Device identifiers or serial numbers
- Web URL
- Internet Protocol (IP) address
- Finger or voice prints
- Photographic images
- Any other characteristic that would uniquely identify the individual



STATE OF WEST VIRGINIA - VOIP TELECOMMUNICATIONS CHANGE REQUEST (TCR)

**NOTE: FIELDS WITH \*\* ARE COMPLETED BY WVOT**

**AGENCY TCR INFORMATION**

TCR#**		REQUESTED DUE DATE	
AGENCY DEPARTMENT		AGENCY NAME	
DIVISION		DIRECT BILL**	NO
AGENCY PRIMARY CONTACT		AGENCY ON-SITE CONTACT	
AGENCY PRIMARY CONTACT PHONE		AGENCY ON-SITE CONTACT PHONE	
AGENCY PRIMARY CONTACT EMAIL		AGENCY ON-SITE CONTACT EMAIL	
OFFICE HOURS OF OPERATION		OFFICE MOVE	
AGENCY ON-SITE ADDRESS (E911)		OLD ADDRESS (IF APPLICABLE)	
WVOT FIELD TECH(S)**		WVOT FIELD TECH(S) PHONE**	

**REQUESTED VOIP SERVICE(S) Account numbers located on Telecommunications Backup**

<b>VOIP ACCOUNT NUMBER</b>			
Requested Services- Mark Yes for all that apply			
Hosted VOIP-New Implementation		Hosted Virtual Contact Center-New Implementation	
Hosted VOIP- Existing -Add		Hosted Virtual Contact Center-Existing-Add	
Hosted VOIP- Existing -Move		Hosted Virtual Contact Center-Existing-Move	
Hosted VOIP- Existing -Change		Hosted Virtual Contact Center-Existing-Change	
Hosted VOIP- Existing -Delete		Hosted Virtual Contact Center-Existing-Delete	
IP Contact Center Services		WebEx	
Open Video Communications		Audio Conferencing	
Other			
<b>COMMENTS-Details</b>			

**AGENCY AUTHORIZATION- PLEASE PRINT NAMES AND THEN SIGN OR RETURN AUTHORIZATION VIA EMAIL**

AGENCY AUTHORIZATION	x	x
	AGENCY AUTHORIZATION (PRINTED)	AGENCY AUTHORIZATION(SIGNATURE)
COMPLETED BY	x	x
	COMPLETED BY (PRINTED)	COMPLETED BY (SIGNATURE)
PLEASE SIGN ABOVE AND RETURN TO TCR@WV.GOV TCR MAY BE REJECTED IF REQUIRED FIELDS ARE INCOMPLETE		
WVOT AUTHORIZATION	x	x
	WVOT AUTHORIZATION (COMPLETED BY WVOT)	RECEIVED BY/DATE (COMPLETED BY WVOT)

**STATE OF WEST VIRGINIA - VOIP TELECOMMUNICATIONS CHANGE REQUEST (TCR)**

**NOTE: FIELDS WITH \*\* ARE COMPLETED BY WVOT**

AGENCY TCR INFORMATION			
TCR#**		REQUESTED DUE DATE	
AGENCY DEPARTMENT		AGENCY NAME	
DIVISION			
Full Street Address (911)			
Number of Users		Is the location VOIP Ready?	
Number of auto attendants by location		Do you plan to use Device Mobility?	
Do any locations require a phased install?			
Will any users use soft phones only?		If so, how many?	
Do you plan to use Extension Mobility?		If so, how many phones?	
Number of Hunt Groups:			
Are any members of the hunt group off net?		If so, how many?	
Do you plan use SRST at each site in case of loss of connectivity to the UCCaas data centers?		If so, please describe the connectivity for each location:	
		Quantity:	
		Type of Calls Allowed:	
		Any other details:	

**West Virginia Office of Technology**  
**Instructions for Completing a Telecommunications Change Request (TCR)**

Note: Fields with \*\* are Completed by WVOT

These instructions are to be followed when submitting TCRs to add, change, or disconnect voice and/or data services obtained through the statewide contracts. If ordering both voice/IP, and data services, separate TCRs will be needed for each type of service. If ordering service to be billed to more than one billing account, separate TCRs will be needed for each billing account.

All TCRs must be typed in order to ensure accurate service delivery. Only complete TCR forms can be processed. The Telecommunications Ordering and Billing section can assist with the completion of the TCR and any questions regarding required fields by emailing TCR@wv.gov. Please allow time for technical and business consultations and research when necessary.

The date of submission is the date that a complete TCR is provided to the vendor. Timeframes associated with the installation of services requested begin when a complete TCR is submitted to the vendor. Timeframes to be associated with the installation and/or disconnection of services are governed by the particular statewide contract(s) and/or Service Level Agreement(s) for each specific service; however, if the vendor requires special construction, then the contract timelines are not in effect. Please consult WVOT with questions.

Email the completed TCR and any related correspondence to TCR@wv.gov. Do not send a TCR and related correspondence to an individual email address as this could cause delays.

**Information Requested on a TCR:**

AGENCY INFORMATION	DESCRIPTION OF INFORMATION REQUESTED
TCR# **	This is the number that must be referenced when requesting the status of any TCR.
Requested Due Date	"ASAP" cannot be accepted. Due dates are subject to vendor requirements.
Agency Department (REQUIRED)	Use Department [Org Level 1] (i.e. Transportation)
Agency Name (REQUIRED)	Use Agency Name [Org Level 2] (i.e. Division of Highways)
Division	Use Division name [Org Level 3], when applicable (i.e. Highways District 1)
Direct Bill?	This is always "No" unless a waiver to go off the State Wide Contract is provided by DT.
Agency Primary Contact (REQUIRED)	This is the decision maker who should be contacted if there are questions regarding TCR costs and/or due date.
Agency Primary Contact Phone # (REQUIRED)	Agency Primary Contact's phone number including extension, if applicable.
Agency Primary Contact Email (REQUIRED)	Agency Primary Contact's email address.
Office Hours of Operation	The hours the office is open for an on-site visit if it is necessary to review, design and/or install the requested services.
Agency On-site Contact (REQUIRED)	This person should be on-site and available to provide access to location and have knowledge of the work request.
Agency On-site Contact Phone# (REQUIRED)	Agency On-site Contact's phone number including extension, if applicable.
Agency On-site Contact Email (REQUIRED)	Agency On-site Contact's email address
Agency On-site Address (REQUIRED)	The E911 physical address of the location, including the zip code and county, where the requested services are to be performed.
Office Move? (REQUIRED)	If the request is associated with an office move, select "Yes."
Old Address (if applicable)	If Office Move is marked as "Yes", enter the E911 physical address of the location the services are moving from.
WVOT Field Tech **	WVOT Field Technician assigned to assist with installation details.
Phone **	WVOT Field Tech's phone number.
Email **	WVOT Field Tech's email address.
REQUESTED VOIP SERVICES	DESCRIPTION OF INFORMATION REQUESTED
VOIP Account Number	This is the 6 digit account number that is available on the billing backup. It is also the agency's main ID number.
Requested Services: Mark Yes For All That Apply:	
Hosted VOIP-New Implementation	If this request is to add a new hosted VOIP implementation, select "Yes"
Hosted VOIP- Existing -Add	If this request is to add services for an existing Hosted VOIP Implementation, select "Yes"
Hosted VOIP- Existing -Move	If this request is to move services for an existing Hosted VOIP Implementation, select "Yes"
Hosted VOIP- Existing -Change	If this request is to change services for an existing Hosted VOIP Implementation, select "Yes"
Hosted VOIP- Existing -Delete	If this request is to delete services for an existing Hosted VOIP Implementation, select "Yes"
IP Contact Center Services	If this request is to add services for an IP Contact Center Service, select "Yes"
Open Video Communications	If this request is to add services for an Open Video Communications, select "Yes"
Hosted Virtual Contact Center-New Implementation	If this request is to add a new Hosted Virtual Contact Center, select "Yes"
Hosted Virtual Contact Center-Existing-Add	If this request is to add services for an existing Hosted Virtual Contact Center, select "Yes"
Hosted Virtual Contact Center-Existing-Move	If this request is to move services for an existing Hosted Virtual Contact Center, select "Yes"
Hosted Virtual Contact Center-Existing-Change	If this request is to change services for an existing Hosted Virtual Contact Center, select "Yes"
Hosted Virtual Contact Center-Existing-Delete	If this request is to delete services for an existing Hosted Virtual Contact Center, select "Yes"
WebEx	If this request is to add services for an WebEx, select "Yes"
Audio Conferencing	If this request is to add services for an Audio Conferencing, select "Yes"
Comments	Use the comments section to provide requested service summary and additional explanation of the service(s) requested. If this is an emergency, "EXPEDITE" will be written in this section. Additional charges may apply for expedite requests.
AGENCY AUTHORIZATION	DESCRIPTION OF INFORMATION REQUESTED
Agency Authorization	This is the person (name both printed and signed) designated by the agency as having authorization to submit TCRs for voice and/or data related services on behalf of the agency. This person should have financial authorization since a TCR obligates an agency to financial responsibility of the requested services. The WVOT is obligated to accept TCRs for services from any employee within that agency and the agency will be responsible for any charges resulting from the services requested on the TCR. The agency needs to complete a Signature Authority Designation form for all individuals authorized to sign TCRs and submit updated designation forms to the Telecommunications Ordering and Billing section (TCR@wv.gov).
Completed by	This is the individual (name both printed and signed) who completed the TCR form.
WVOT Authorization **	This is the individual within WVOT who authorizes the TCR be submitted to the vendor.
Received by / Date **	This is the individual within WVOT who received the TCR from the agency and the date the TCR was received by WVOT.

## West Virginia Ethics Commission



### Disclosure of Interested Parties to Contracts

Pursuant to *W. Va. Code* § 6D-1-2, a state agency may not enter into a contract, or a series of related contracts, that has/have an actual or estimated value of \$1 million or more until the business entity submits to the contracting state agency a Disclosure of Interested Parties to the applicable contract. In addition, the business entity awarded a contract is obligated to submit a supplemental Disclosure of Interested Parties reflecting any new or differing interested parties to the contract within 30 days following the completion or termination of the applicable contract.

For purposes of complying with these requirements, the following definitions apply:

*"Business entity"* means any entity recognized by law through which business is conducted, including a sole proprietorship, partnership or corporation, but does not include publicly traded companies listed on a national or international stock exchange.

*"Interested party" or "Interested parties"* means:

- (1) A business entity performing work or service pursuant to, or in furtherance of, the applicable contract, including specifically sub-contractors;
- (2) the person(s) who have an ownership interest equal to or greater than 25% in the business entity performing work or service pursuant to, or in furtherance of, the applicable contract. (This subdivision does not apply to a publicly traded company); and
- (3) the person or business entity, if any, that served as a compensated broker or intermediary to actively facilitate the applicable contract or negotiated the terms of the applicable contract with the state agency. (This subdivision does not apply to persons or business entities performing legal services related to the negotiation or drafting of the applicable contract.)

*"State agency"* means a board, commission, office, department or other agency in the executive, judicial or legislative branch of state government, including publicly funded institutions of higher education: Provided, that for purposes of *W. Va. Code* § 6D-1-2, the West Virginia Investment Management Board shall not be deemed a state agency nor subject to the requirements of that provision.

The contracting business entity must complete this form and submit it to the contracting state agency prior to contract award and to complete another form within 30 days of contract completion or termination.

*This form was created by the State of West Virginia Ethics Commission, 210 Brooks Street, Suite 300, Charleston, WV 25301-1804. Telephone: (304)558-0664; fax: (304)558-2169; e-mail: [ethics@wv.gov](mailto:ethics@wv.gov); website: [www.ethics.wv.gov](http://www.ethics.wv.gov).*

West Virginia Ethics Commission  
**Disclosure of Interested Parties to Contracts**

(Required by W. Va. Code § 6D-1-2)

Name of Contracting Business Entity: Lumos Networks LLC Address: 1200 Greenbrier Street  
Charleston, WV 25311

Name of Authorized Agent: Steven Hamula Address: 1200 Greenbrier St., Chas., WV 25311

Contract Number: CRFP 0212 SWC1900000001 Contract Description: RFP for Managed & Hosted Voice Services

Governmental agency awarding contract: State of West Virginia

Check here if this is a Supplemental Disclosure

List the Names of Interested Parties to the contract which are known or reasonably anticipated by the contracting business entity for each category below (attach additional pages if necessary):

**1. Subcontractors or other entities performing work or service under the Contract**

Check here if none, otherwise list entity/individual names below.

- |                             |                                   |
|-----------------------------|-----------------------------------|
| 1. System One Holdings, LLC | 3. Thayer Power and Communication |
| 2. Cyient                   | 4. Nichols Construction           |

**2. Any person or entity who owns 25% or more of contracting entity (not applicable to publicly traded entities)**

Check here if none, otherwise list entity/individual names below.

MTN Infrastructure TopCo, Inc.  
Lumos Networks Corp.

**3. Any person or entity that facilitated, or negotiated the terms of, the applicable contract (excluding legal services related to the negotiation or drafting of the applicable contract)**

Check here if none, otherwise list entity/individual names below.

Signature: 

Date Signed: October 29, 2018

**Notary Verification**

State of West Virginia, County of Kanawha

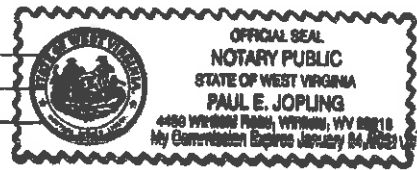
I, Steven Hamula, the authorized agent of the contracting business entity listed above, being duly sworn, acknowledge that the Disclosure herein is being made under oath and under the penalty of perjury.

Taken, sworn to and subscribed before me this 29th day of October, 2018.

  
Notary Public's Signature

**To be completed by State Agency:**

Date Received by State Agency: \_\_\_\_\_  
Date submitted to Ethics Commission: \_\_\_\_\_  
Governmental agency submitting Disclosure: \_\_\_\_\_



Issued June 8, 2018

STATE OF WEST VIRGINIA  
Purchasing Division

# PURCHASING AFFIDAVIT

**CONSTRUCTION CONTRACTS:** Under W. Va. Code § 5-22-1(i), the contracting public entity shall not award a construction contract to any bidder that is known to be in default on any monetary obligation owed to the state or a political subdivision of the state, including, but not limited to, obligations related to payroll taxes, property taxes, sales and use taxes, fire service fees, or other fines or fees.

**ALL CONTRACTS:** Under W. Va. Code §5A-3-10a, no contract or renewal of any contract may be awarded by the state or any of its political subdivisions to any vendor or prospective vendor when the vendor or prospective vendor or a related party to the vendor or prospective vendor is a debtor and: (1) the debt owed is an amount greater than one thousand dollars in the aggregate; or (2) the debtor is in employer default.

**EXCEPTION:** The prohibition listed above does not apply where a vendor has contested any tax administered pursuant to chapter eleven of the W. Va. Code, workers' compensation premium, permit fee or environmental fee or assessment and the matter has not become final or where the vendor has entered into a payment plan or agreement and the vendor is not in default of any of the provisions of such plan or agreement.

**DEFINITIONS:**

"Debt" means any assessment, premium, penalty, fine, tax or other amount of money owed to the state or any of its political subdivisions because of a judgment, fine, permit violation, license assessment, defaulted workers' compensation premium, penalty or other assessment presently delinquent or due and required to be paid to the state or any of its political subdivisions, including any interest or additional penalties accrued thereon.

"Employer default" means having an outstanding balance or liability to the old fund or to the uninsured employers' fund or being in policy default, as defined in W. Va. Code § 23-2c-2, failure to maintain mandatory workers' compensation coverage, or failure to fully meet its obligations as a workers' compensation self-insured employer. An employer is not in employer default if it has entered into a repayment agreement with the Insurance Commissioner and remains in compliance with the obligations under the repayment agreement.

"Related party" means a party, whether an individual, corporation, partnership, association, limited liability company or any other form or business association or other entity whatsoever, related to any vendor by blood, marriage, ownership or contract through which the party has a relationship of ownership or other interest with the vendor so that the party will actually or by effect receive or control a portion of the benefit, profit or other consideration from performance of a vendor contract with the party receiving an amount that meets or exceeds five percent of the total contract amount.

**AFFIRMATION:** By signing this form, the vendor's authorized signer affirms and acknowledges under penalty of law for false swearing (W. Va. Code §61-5-3) that: (1) for construction contracts, the vendor is not in default on any monetary obligation owed to the state or a political subdivision of the state, and (2) for all other contracts, that neither vendor nor any related party owe a debt as defined above and that neither vendor nor any related party are in employer default as defined above, unless the debt or employer default is permitted under the exception above.

**WITNESS THE FOLLOWING SIGNATURE:**

Vendor's Name: Lumos Networks, LLC

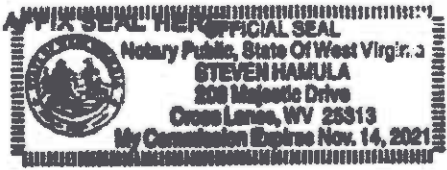
Authorized Signature: [Signature] Date: 10/5/18

State of West Virginia

County of Kanawha to-wit:

Taken, subscribed, and sworn to before me this 24<sup>th</sup> day of OCTOBER, 2018

My Commission expires November 14, 2021.



NOTARY PUBLIC [Signature]  
Purchasing Affidavit (Revised 01/19/2018)

## Appendix

### Section 4.2 Responses

**4.2 Project Goals and Mandatory Requirements:** The State of West Virginia is seeking to establish a contract with a Vendor for the management of the State's current Legacy Environment and to migrate its Legacy Environment to a Hosted VoIP Solution, including Contact Center Services. Vendor should describe its approach and methodology to providing the service or solving the problem described by meeting the goals/objectives identified below. Vendor's response should include any information about how the proposed approach is superior or inferior to other possible approaches as well as identify areas where the proposed solution exceeds the project expectations.

**4.2.1 Goals and Objectives** - The project goals and objectives are listed below.

**4.2.1.1 Voice Services**

**4.2.1.1.1 Managed Voice Services - Support of State's Legacy IP Environment**

**4.2.1.1.1.1** The State's goal is to contract with a single Vendor for all application, hardware, and MACD management, maintenance, and support of its current IP Telephony platforms (as described in **Appendix\_A**), with the goal of the Vendor migrating the State's current IP telephony infrastructure, excluding network infrastructure, to a unified, hosted IP platform within 24 months. The State further desires an economical monthly per phone cost for these support services. As such:

The State is proposing the following division of duties for the support of its Legacy IP Environment:

Vendor Duties:

1. Create an operational plan of the State's Legacy IP Environment for the State's review and approval
2. Daily management, operational support, and ongoing maintenance of the State's current telephony environment, as outlined in **Appendix\_A**.
3. MACD changes to the State's current telephony infrastructure.
4. Replacement of failed parts where feasible, outdated telephony equipment, or other telephony components. If the Vendor is unable to furnish parts or replace equipment, the State expects the Vendor to migrate that site to the Vendor's Hosted VoIP platform.
5. Set-up mutually agreed upon standing meetings with the State to address concerns, changes, service interruptions, and project progress.
6. The Vendor should alert the State points of contact after being notified of any service interruptions, in writing, that exceed sixty (60) minutes. The Vendor should provide updates to the State every sixty (60) minutes thereafter until the issue is resolved.
7. The Vendor should have a 24x7x365 operations center that includes Tier 1 support to receive trouble tickets and onsite operational support for critical failures.

State Duties:

1. Management of State's LAN/WAN Network Infrastructure
2. Ordering, disconnecting, and billing services

#### **VoIP platform to Customer's Network:**

Lumos Networks has read, understands and will comply. As described in the following sections, Lumos Networks has extensive experience in managing legacy IP environments for State government. More specifically, Lumos Networks has a successful track record of providing the exact vendor duties listed above to other State government entities and will use proven methods to deliver them to the State of West Virginia.

**4.2.1.1.1.2** The State desires the Vendor provide the State with its proposed Operations Plan within 30 calendar days of contract effective date, outlining its plan for managing, supporting, and maintaining the State's current IP telephony infrastructure. The Vendor's Operations Plan should include a strategy for assuming its duties, as outlined above. Please describe your company's experience and strategy in developing operations plans for supporting legacy environments.

#### **Previous Experience:**

Lumos Networks is uniquely positioned to manage the State of West Virginia's legacy telephone system. Lumos Networks has extensive experience managing legacy telephony environments while simultaneously transitioning them to a hosted VoIP platform. The most relevant example of this experience is with the State of South Carolina, which had an aging Avaya platform serving 78,000 state users. The State wanted to transition to a hosted VoIP platform with minimal disruption to their existing users. Our approach to this effort was to Stabilize-Prioritize-Transition. Given the scale of the project and the desire to have institutional knowledge of a system with limited infrastructure documentation, we worked with the State to hire their key operational staff as Lumos Networks employees. This transition allowed for the immediate transfer of management responsibilities with staff that fully understood the intricacies of the system. Many of these staff are still employed with us today. This initial transfer of staff and system management was known as the Stabilization phase. During this phase, Lumos Networks also assumed responsibility for all billing, reporting, MACD, hardware maintenance, trunking and directory assistance. In parallel, Lumos Networks embarked on an aggressive schedule to document and verify the existing infrastructure to determine any immediate areas of concern. This documentation began the Prioritization phase which allowed us to not only get a better understanding of the environment, but also to create a risk-based approach for migrating to the hosted platform. Essentially, users that were on infrastructure at the highest risk of failure were given priority for migrating to the hosted platform. Finally, we began the Transition phase by providing education sessions with agencies to provide information about the new hosted VoIP platform and created a specific project plan for each agency to meet their needs. Throughout the Transition phase, we continued these education sessions to keep users informed and share information gained from each migration. Lumos Networks currently serves over 90 State and Local Government, University and K12 entities under the State of SC IP Telephony contract. We have successfully transitioned over 640 service locations throughout 87 cities across South Carolina and are the largest hosted VoIP provider for SC State government.

#### **Operations Plan Strategy (30 Days):**



During the first 30 days, Lumos Networks will take a similar approach as described above to supporting the existing telephony system for the State of West Virginia. The most advantageous approach for providing technical support is to hire the existing staff that support the system. If this is not an option, Lumos Networks has internal staff with Cisco Call Manager experience as well as strong relationships with multiple Cisco partners in the area that will be leveraged to provide the initial support. Realizing that employment changes can be difficult, the option to hire the WV staff or use internal Lumos resources will be up to the State. Once the staffing decision is made, Lumos will review the existing documentation of the system and determine if any additional documentation or verification is needed. During the first 30 days, the following items will be fully documented for transition to Lumos Networks.

### **Phase 1 - (Operational Documentation)**

#### **Billing, reporting and collections:**

- Rates billed to end users.
- Administrative fee for the State (if desired).
- Reporting format.

#### **Infrastructure Management:**

- Staffing
- Documentation of existing telephony network infrastructure (fiber, switches, colocation space, trunks, etc.).
- Costs associated with the use and maintenance of this infrastructure.
- Interconnection to other carriers, for local and long distance services.
- Maintenance agreements for hardware.
- Identification of any known, high-risk infrastructure.

#### **Additional operations responsibilities:**

- Portal access for all moves, adds, changes and deletions (MACD).
- SLA creation.
- Notification process for cable locates.

**4.2.1.1.1.3** The State desires that the State and Vendor finalize and agree upon an Operations Plan within 60 calendar days of contract effective date for the management, support, and maintenance of the State's current telephony infrastructure. Please describe your company's ability to deliver the finalized Operations Plan to the State within 60 calendar days of contract effective date with scheduling the appropriate meetings, making changes after State input, and meeting deadlines.

**Finalized Operations Plan (60 days)**

Since Lumos Networks has extensive experience with these types of transitions, we do not believe that an additional 30 days will be needed to deliver the finalized Operations Plan. Assuming that accurate documentation exist for the existing State network, we can complete the requirement for 4.2.1.1.1.2 and 4.2.1.1.1.3 within 45 days. This abbreviated timeline is achievable due to the existing plans developed by Lumos Networks and the lessons learned through previous transitions. While these plans will need to be tailored for the WV infrastructure, the core components of the plan remain the same. As describe in the section above, Lumos Networks has created and executed on these plans for similar sized customers as well as much larger customers. This experience is unique to Lumos Networks and our customers can attest to our dedication to making this as seamless as possible.

Our goal for management of the existing environment is to leave the infrastructure and processes as close to their existing configuration as possible. Lumos Networks' billing system is flexible enough to accommodate many custom features that may be used to provide the same, or even more information, than the existing billing system used by the State. Additionally, our customer portal allows users to order service, request changes to service, or report troubles.

To achieve these tasks in a timely manner, we will assign an experienced VoIP project manager to lead this process and serve as the single point of contact for the State of WV. This project manager will have direct access to every department (billing, reporting, engineering, service delivery, service support, & customer care) needed to make this plan successful. This project manager will tailor a plan, in cooperation with the State of WV, to ensure that all aspects of the transition are addressed. Below is an example of a previously used project plan that will be modified to meet the unique needs of West Virginia.

**Legacy VoIP Transition Project Plan**

Lumos Networks uses the Project Management Institute PMO methodology. The high-level implementation process includes the following steps:

Section	Description	Activity
1	<b>Project Management</b>	
	1	Manage overall implementation process
	2	Track baseline and variation timelines

	3	Track Action Items
	4	Track project deliverables
	5	Implement Communications Plan
	6	Provide consistent updates to all project team members
	7	Ensure consistent compliance with completion of prerequisite tasks
	8	Regularly and consistently monitor the implementation and integration of the solution
	9	PM will act as the primary escalation point for technical and non-technical issues and will obtain the necessary resources to resolve any issues
	10	Designate an implementation coordinator assigned to each area of responsibility to serve as the technical point of contact through the implementation process
	11	Define assigned points of contact and team escalation points for the entirety of the solution implementation.
<b>2.</b>	<b>Planning and Preparation of Transition</b>	
<b>2.1</b>	<b>Infrastructure Assessment and Documentation</b>	
	1.	Detailed assessment of all network devices at each agency and each site. Information to be obtained through a combination of interviews with appropriate personnel and network assessment tools
	2.	Place network analysis devices on appropriate network segments to collect and gather data.
	3.	Review and analyze the data collected in order to determine the suitability of the network elements and links to support VoIP. Identify areas that require improvements and provide recommendations in order for the affected network to be rectified to handle VoIP calls.
<b>2.2</b>	<b>Planning and Design</b>	
	1.	Identify network transport facilities and any required upgrades.

	2.	Identify and provide data network topology to appropriate teams.
	3.	Provide LAN routing, switching, and security design requirements and constraints such as VLAN, QoS, and COS.
	4.	Provide detailed LAN network assessment design to include all elements necessary for LAN to comply with minimum VoIP requirements.
	5.	Completed approval of LAN assessment and provide to agency.
	6.	Provide IP addressing review and analysis.
	7.	Identify and provide VoIP scalability requirements.
	8.	Match network COS settings to VoIP site requirements and identify future growth potentials and impacts.
	9.	Identify any agency required site protection requirements.
	10.	Identify current and future subscriber traffic forecasts.
	11.	Identify the number of users and potential users at each site.
	12.	Identify all current telephony and future telephony device types.
	13.	Create VoIP solution diagrams to cover physical infrastructure, call flows, and other documentation needed.
	14.	Create diagrams and spreadsheets outlining IP sub netting definitions, IP addressing schemes, host names, domain names, default gateways, and session matrices.
	15.	Create network circuit diagrams for signaling terminations, signaling links, and PRI termination as appropriate.
<b>2.3</b>	<b>Operations Planning</b>	
	1.	Assess current operational and maintenance processes and methods of procedures.

	2.	Develop or redefine operational and maintenance processes as needed.
	3.	Define interface and flow requirements between state and Lumos NOC or other organizations as appropriate.
	4.	Identify appropriate personnel necessary to develop interface agreements.
	5.	Define escalation procedures.
<b>3.</b>	<b>Training</b>	
	1.	Define training requirements.
	2.	Develop training delivery schedules
	3.	Identify and reserve training locations.
	4.	Train administrations on provision, adds, moves, changes, and deletes.
	5.	Develop customer document containing service information, processes, escalation and contact information.
<b>4.</b>	<b>Performance Management</b>	
	1.	Perform Operational Readiness Test.
	2.	Establish performance standards
	3.	Identify standard report requirements.
	4.	Define required reports.
	5.	Collect and analyze data
	6.	Generate reports.
	7.	Perform trend analysis.
	8.	Distribute reports.
	9.	Review VoIP Solution utilization periodically.

<b>5.</b>	<b>Configuration Management</b>	
	1.	Coordinate any necessary changes to the solution through the established Method of Procedure (MOP).
	2.	Approve changes through MOP.
	3.	Specification changes or performing services connected with installation or relocation of the maintained products.
	4.	Maintain and test backup and restore procedures
	5.	Maintain, store, and label physical backup media as per established procedures.
	6.	Initiate hardware upgrades if required for new system releases.
	7.	Apply software upgrades and patches, including those appropriate for IP telephones, to systems.
<b>6.</b>	<b>Project Close-out</b>	
	1.	Develop project findings with state.
	2.	Produce reports of surveys and performance information as necessary.
	3.	Review project documentation with State

**4.2.1.1.1.4** The State desires the Vendor to be fully managing its Legacy Environment within 90 calendar days of contract effective date and until all sites wishing to adopt these services have been migrated to a Hosted VoIP solution. Please describe your company's experience in providing support of a Legacy Environment, its experience in taking over existing infrastructure, and provide a plan showing how this goal can be met.

As Stated in 4.2.1.1.1.2, Lumos Networks has extensive experience in taking over and managing existing telephony infrastructure. More importantly, our experience includes large State government projects, which provides us with valuable insight into the unique nature of State government and how various agencies operate. We understand the uniqueness of State government and we are dedicated to going above and beyond in supporting them.

As an example, the State of SC had difficulty encouraging some agencies to transition from their legacy system, even though they were financially incentivized to do so. When the contract term ended for Lumos Networks to manage the legacy system, we agreed to continue managing the system to provide additional time for these agencies to transition. Financially, it would have been better for us to

terminate the contract but we chose to support the State under the previous terms and conditions. This is just one example of the type of customer support and dedication that you can expect from Lumos Networks. Additional insight into why we are perfectly aligned to provide this service to the State of West Virginia can be gained with a better understanding of our history, provided below:

**90 Day Plan:**

Lumos Networks' government account team will be responsible for ensuring the overall satisfaction of the State of WV and its customers under this Request for Proposal. This is a tenured team and the members bring a wealth of experience to support West Virginia's telecommunications needs. In addition to the dedicated Government Account Team, Lumos Networks offers a Customer Care division that is available to assist with any billing questions and an exceptionally skilled group of engineers available to work with the State across a full range of technologies.

As stated in 4.2.1.1.1.2, we will begin by documenting the people, processes and technology that come together to support the existing system. This initial step is crucial to the success of the project and will require extensive cooperation from the State. Phase 2 of the plan is to identify any critical services or infrastructure that is at high risk of failure or presents any other types of risk to the State. Once these risk areas are identified, we will work with the state to mitigate these risks or accelerate the migration of these users to the hosted platform. Finally, we will provide sessions for users to learn about the hosted solution and meet with individual agencies to determine the best time for migration. During these migrations, we will continue our focus on the legacy platform until every user has transitioned. Daily operations and maintenance can be performed by the existing State staff that we transition to our team or we will use a combination of existing Lumos staff and local Cisco partners. Once the staffing has been determined and operational control has been transitioned to Lumos, our Customer Network Operation Center (CNOC) will serve as the single point of contact for any service issues. Our primary CNOC is a state-of-the-art facility that will provide the State with centralized trouble reporting and system administration to minimize the impact of service affecting issues. The CNOC works in conjunction with our Network Operations Center (NOC) which monitors all Lumos supported systems. Monitoring of the West Virginia legacy system will be performed 24x7 by the NOC. This monitoring allows us to proactively address any issues and communicate any service effecting issues to the CNOC, and subsequently to the State as desired through the contract terms.

This approach provides enterprise-wide visibility into West Virginia's telephony system, regardless of whether they are on the legacy or the hosted environment. This visibility allows for clear SLA reporting, migration status and seamless customer service. As users migrate, they will continue to call the same number for customer support and service related issues. We will hold regular meetings with the State to provide the required reporting information and project status updates. Please reference the proposed project plan provided in section 4.2.1.1.1.3 as an example of how Lumos plans to meet the 90 day goal.

**4.2.1.1.1.5** It is the State's desire that the awarded Vendor of this contract will establish a local support system to continue support and maintenance of the State's Legacy IP systems. Please describe your company's ability to provide maintenance and support of the State's Legacy Environment.

Lumos Networks has local support teams in the State of WV. If the State is agreeable, we would also like to hire the current State staff that are supporting the system. Hiring the staff that currently support the

system will be a tremendous benefit to both the State and Lumos Networks. Additionally, Lumos has strong relationships with Cisco partners in WV. If hiring these staff is not feasible, Lumos will use a combination of internal staff as well as contracted staff from a Cisco partner that are tightly aligned with Lumos and have extensive experience supporting similar systems. In preparation for the response to this RFP, Lumos Networks has already engaged with potential Cisco partners so that appropriate resources can be assigned at award.

**4.2.1.1.1.6** The State desires all application, hardware, and MACD support for the State's current telephony infrastructure will be entered via the Vendor's self-service web portal and/or a Vendor-provided toll-free number within 90 calendar days from contract effective date. If the Vendor determines that an issue or problem falls within the State's purview, the Vendor should notify the State's points of contact in writing within one hour of reaching this determination. Please describe your company's support offerings or its ability/plan to accomplish this.

**Account Access and Billing:**

Lumos Networks will utilize the eSpirit Web Portal for **account access and billing** information. The State will notify Lumos with the names and permissions of their employees who will need access to the eSpirit system. Once the user names and passwords have been created, users can view account information, services and place orders based on their permissions. The State can provision specific users with administrative permissions to see all accounts.

The eSpirit Billing and Accounting platform is very flexible to meet customer's needs. Each agency determines how they would like to see their billing. Some of the options are:

- Bill by location
- Bill by department
- Single account
- Single account with multiple subaccounts (produces 1 invoice)
- Multiple accounts linked together (producing multiple invoices)



Billing Point: DTO Hosted IP Telephony (81480)

ID	Name	Status	Eff. Date	Plan	Key Features
5145003.100.0.0	DR Business Continuity	Active	03/29/2017	Sub Account	
5145003.14.41.1.0	DTO BRR Building Operations - 25	Active	06/05/2017	Sub Account	
5145003.17.0.0.0	DTO Network - 17	Active	03/31/2016	Sub Account	
5145003.17.15.0.0	Wireless-15	Active	04/20/2017	Sub Account	
5145003.17.2.0.0	Cola Cable Management and Projects	Active	03/29/2017	Sub Account	
5145003.17.3.0.0	Technicians	Active	03/29/2017	Sub Account	
5145003.17.5.0.0	DTO Network Security Firewall - 5	Active	03/31/2016	Sub Account	
5145003.17.7.0.0	DTO Network Design - 7	Active	03/31/2016	Sub Account	
5145003.17.8.0.0	DTO Network Operations - 8	Active	03/31/2016	Sub Account	
5145003.18.0.0.0	DTO Service Desk - 18	Active	03/31/2016	Sub Account	
5145003.18.11.0.0	DTO Service Center Employees - 11	Active	03/31/2016	Sub Account	
(803)100-0453	Skill 10	Active	06/15/2017	Soft Number - Hosted IP	
(803)100-0456	Skill 31	Active	06/15/2017	Soft Number - Hosted IP	
(803)190-9462	Skill 36	Active	06/15/2017	Soft Number - Hosted IP	
(803)100-0463	Skill 160	Active	06/15/2017	Soft Number - Hosted IP	
(803)190-0464	Soft number for message	Active	06/15/2017	Soft Number - Hosted IP	
(803)734-4521	Charles Erwin	Active	06/15/2017	Agent w/Phone-Broadsoft Special Rate	

Shows sub accounts and the services associate with them.

Billing Point: 2300 GREENVILLE - #507030 (5101910)

ID	Name	Status	Eff. Date	Plan	Key Features
(803)100-0190	SCDEW Midlands Workforce Virtual Opt 1	Active			
(803)100-0192	SCDEW Midlands Workforce Virtual Opt 3	Active			
(803)100-0224	SCDEW COLUMBIA WRKFRM CTR (4040) - #50703	Active			
(803)100-0225	SCDEW Midlands Workforce Opt 1 VDN	Active			
(803)100-0260	SC Department of Employment Workforce	Active			
(803)100-0300	MIDLANDS WORKFORCE BOARD (8500) - #507030	Active	5/16/2013	VDN SC Voip	

Multiple billpoints link together

2300 GREENVILLE - #507030 (5101910)  
 2320 GREENVILLE UI Hub - #507030 (5101912)  
 4600 Kingstree SC Works Center. (5105481)  
 7100 UI Division - #507030 (5101908)  
 7100 UI Assurance and Measures Dept (5176823)  
 7162 Research and Resolution DEW (5174863)  
 Account Management (7161) (5101882)  
 Account Management (7161) (5101881)  
 Admin Support & OPS (5500)- #507030 (5101946)  
 Admin Support & OPS (5500)- #507030 (5101947)  
 Aiken - Richland(200)- #507030 (5101873)  
 Appeals Division (5220) - #507030 (5101955)  
 Appellate Panel/AED (5220) - #507030 (5101968)  
 Beaufort (700) - #507030 (5101941)  
 Beaufort 700 #507030 (5101943)  
 Bennettsville SC Works (5107040)  
 Cashiering (7139)- #507030 (5101858)  
 Centrax LD- #507030 (5101891)  
 Charleston District Office (7143) (5101926)  
 Chester (1200)- #507030 (5101930)  
 CLAIMS CONTROL CENTER (7122)- #507030 (5101901)  
 Client Services(7160) - #507030 (5101980)  
 Columbia District Office (7144)- #507030 (5101896)  
 Conway DEW WFC(2800)- #507030 (5101923)  
 Conway Long Distance- #507030 (5101924)  
 Data Center Operation (5587)- #507030 (5101938)  
 Data Center Warehouse (5589) (5104880)  
 Dept of Finance (5310)- #507030 (5101925)  
 Dept of Integrity 7114- #507030 (5101894)

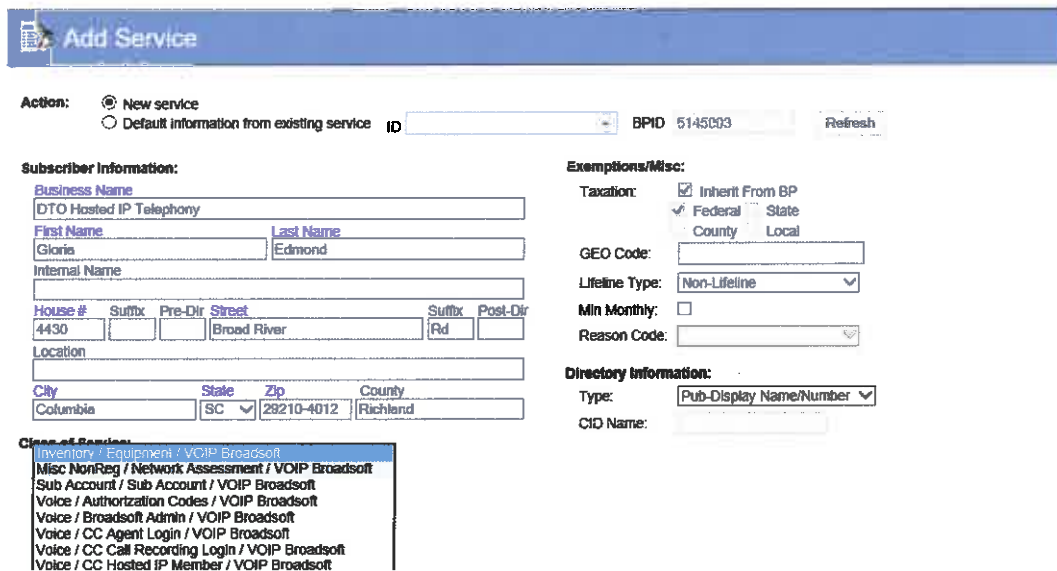
Show Extended Data Total Services: 92 Total Rows: 33 Export to CSV Charge Totals Status Counts Hierarchy

### Service Order (MACD):

Lumos Networks will also utilize the eSpirit Web Portal for all service order activity. Based on permissions, users can order, cancel, modify and obtain status on specific service orders. Agencies will notify Lumos with the names and permissions of their employees who will need access to the eSpirit

system. Once the user names and passwords have been created, users can view account information, services and place orders based on their permissions. The State can provision specific users with administrative permissions to see all accounts.

Once the correct account has been selected, orders are placed by clicking on the add service icon and filling out requested information.



**Action:**  New service  
 Default information from existing service ID:  BPID: 5145003 Refresh

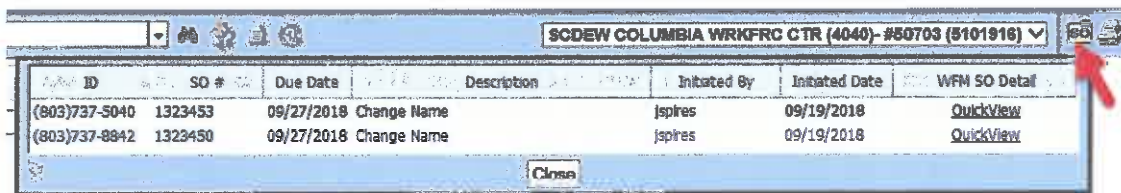
**Subscriber Information:**  
 Business Name:   
 DTO Hosted IP Telephony:   
 First Name:  Last Name:   
 Gloria Edmond  
 Internal Name:   
 House #:  Suffix:  Pre-Dir:  Street:  Suffix:  Post-Dir:   
 4430 Broad River Rd  
 Location:   
 City:  State:  Zip:  County:   
 Columbia SC 29210-4012 Richland

**Exemptions/Misc:**  
 Taxation:  Inherit From BP  
 Federal  State  
 County  Local  
 GEO Code:   
 Lifeline Type:  Non-Lifeline  
 Min Monthly:   
 Reason Code:

**Directory Information:**  
 Type:  Pub-Display Name/Number  
 CID Name:

**Class of Service:**  
 Inventory / Equipment / VOIP Broadsoft  
 Misc NonReg / Network Assessment / VOIP Broadsoft  
 Sub Account / Sub Account / VOIP Broadsoft  
 Voice / Authorization Codes / VOIP Broadsoft  
 Voice / Broadsoft Admin / VOIP Broadsoft  
 Voice / CC Agent Login / VOIP Broadsoft  
 Voice / CC Call Recording Login / VOIP Broadsoft  
 Voice / CC Hosted IP Member / VOIP Broadsoft

All open orders for that account can be viewed by selecting the yellow service order (SO) folder in the upper right hand corner of the screen.



ID	SO #	Due Date	Description	Initiated By	Initiated Date	WFM SO Detail
(803)737-5040	1323453	09/27/2018	Change Name	jspires	09/19/2018	<a href="#">QuickView</a>
(803)737-8842	1323450	09/27/2018	Change Name	jspires	09/19/2018	<a href="#">QuickView</a>

To view the order details and to track the status of the order, simply select "Quick View" to display the following information.

#### 4.2.1.1.2 Transition from the State's Legacy IP Environment to the Vendor's Hosted Solution

**4.2.1.1.2.1** The State desires all sites listed in Appendix\_A be migrated to a Hosted VoIP solution within 730 calendar days from contract effective date. The State reserves the right to reprioritize this list as necessary. Please describe your company's plan to accomplish these migrations. A dedicated, certified Lumos Networks' Project Management Professional (PMP) will

be assigned to oversee the implementation of the service requests. The goal of our project management team is to provide a superior, seamless experience to our customers by establishing a Single Point of Accountability within Lumos Networks for service implementation projects.

**4.2.1.1.2.2** The Vendor should include site preparation and coordination services to implement a turn-key solution at various State locations, including simultaneous deployments to the Vendor's hosted solution. These services should be provided by Vendor personnel knowledgeable in both the Vendor's solution and legacy public switched telephone services. The State desires the Vendor perform site assessment and readiness work for the implementation of its hosted solution, at no additional cost, including a proposed division of duties (Vendor, State), which results in a Statement of Work for each site, as follows:

VENDOR duties:

- Gather site's end-user data in order to get site ready for Vendor's hosted solution;
- Provide list of equipment/specifications needed for site readiness, including cabling infrastructure requirements;
- Conduct review to move, at a minimum, existing telephony system to new environment;
- Provide the State with necessary ordering information for TCRs;
- The State owns all data gathered under the scope of the contract and is able to obtain copies of all configuration files gathered as part of this contract. The Vendor should update, maintain the data repository in a manner negotiated with the State upon award, and provide information upon request in an Excel or csv format;
- Configure, tag, label, and drop-ship phones to site;

STATE duties:

- Confirm site readiness;
- Coordinate between the Agency, Vendor, and other applicable parties;
- Purchase, configure, update and refresh network hardware;
- Prepare, process, and submit TCR to Vendor based on information provided;
- Place physical phones.

The Vendor should describe its solution's capability to meet or exceed each of these objectives. Lumos Networks has read, understands and will comply.

#### **4.2.1.1.3 Hosted Voice Services**

The State's goal is to obtain a reliable, customizable, and scalable UCaaS solution providing hosted voice-over-IP (VOIP) services for an estimated 10,000 state employees located at various sites throughout the State. The State desires these services be provided at no additional cost, except where noted in this section. To that end:

**4.2.1.1.3.1** The Vendor's solution should offer four voice packages. These packages should include: A Basic Package with at least Ad Hoc Conferencing, Call Forwarding, Call History, Call Hold, Call Waiting, Caller ID, and Do Not Disturb; an Enhanced Package including at least all features in the Basic package plus Voice Mail (including Immediate Divert to Voicemail and Message Waiting Indicator); a Premium Package including at least all of the features in the

Enhanced Package plus Extension Mobility; and an Analog line option. All packages should be available with high and standard security options. Equipment for the analog line package will not be required for this contract.

Please describe your Company's offerings.

Lumos Networks is proud to submit flat-rate, Statewide pricing for three Hosted VoIP packages for your review:

- Basic Subscription: A SIP-based service as outlined in Section III, numbers 1 and 2, “Basic Telephony” and “Basic Messaging”
- Enhanced Subscription: A SIP-based service including all elements of the Basic Telephony package with the following additional features: Voice Mail (including Immediate Divert to Voicemail and Message Waiting Indicator, and the following optional services: Lumos Networks Mobile Voice, Unlimited Virtual Faxing (Inbound)
- Premium Subscription: A SIP-based IP Telephony service including all Basic and Enhanced user capabilities plus expanded telephone feature set options including Enhanced Voicemail (Speech to Text) and Lumos Unify (Desktop and Mobile Application for: Team Instant Message & Presence, Group Chat & Conferencing (MyRoom), and Collaboration/Desktop Share)

At the State’s request, each package (Basic, Enhanced and Premium) contains one subscription price that is inclusive of services and features required for each seat package. All SIP endpoints that devices Lumos is offering will accommodate any of the three seat packages.

--- Basic Package –Business Seat

- The Business seat combines HD voice and access to over 25 features along with dedicated number, inbound and outbound calling, and unlimited Domestic Long Distance calling included.

--- Enhanced Package –Enterprise Seat

- The Enterprise seat builds on the Business package and includes additional unified communications features, along with access to our premium mobile application called Lumos Networks Mobile Voice.

– Premium Package –Unify Seat

- Lumos Unify offers HD video, voice, messaging, screen sharing, file sharing and conferencing in a single easy-to-use cloud application that integrates with a customer's common business apps. This leading edge suite of communication tools and collaboration application lets a user call, message, and meet with anyone from any device.
- Analog Line Option –Converged and/or ATA
  - Converged Analog Line with ATA
  - Lumos can build a seat required for analog device and use a locally deployed ATA to enable that device to connect and participate with the active user on the Hosted Voice platform. Local Number Portability is supported allowing a customer to keep their existing numbers.
- Copper Line/ 1FB (Flat Rate Business Line)
  - Delivered over the Local Exchange Carrier's copper infrastructure and provides a designated number with both inbound and outbound calling. Based on the Agency's requirement, this line can be utilized as a secondary connection for either fax, elevator or fire alarm lines. This is possible due to the line itself being powered from the Central Office, which meets the standard requirements for both elevator and alarm lines.

**4.2.1.1.3.2** The State desires six handset options for use under this contract: a 2-line phone, a 6-line phone with sidecar capabilities, a conference phone, a softphone, a wireless phone, and an ADA-compliant hardware option. The State further desires a leasing option for all handsets on this contract, by which the State will pay a monthly lease price to be added to the price of the monthly voice package. In the event that a phone is broken or stops functioning, the State desires the Vendor replace that phone, at no additional cost. Additionally, the State desires that the Vendor refresh equipment in-line with the Original Equipment Manufacturer's refresh program, at no additional cost. At the end of the contract, the State will own all of the phones. Please describe your company's leasing options, refresh programs, and ability to meet this goal. Lumos Networks is offering 9 device endpoints that meet the requirements for the State of West Virginia, and those devices can purchased, leased and rented. Please see the matrix below providing some more details of each device being offered. Lumos Networks may add additional device with approval from the State as new devices are launched and made available to the State of West Virginia.

Model	Device Type	Max # of Lines	# of Programmable Buttons/Keys	Network Pass-through Port Speed
Cisco 6851	Desk Phone	4	4	10/100/1000
Cisco 8861	Desk Phone	5	10	10/100/1000
Yealink T46S	Desk Phone	10	27	10/100/1000
Yealink T48S	Desk Phone	16	29	10/100/1000
Polycom VVX411	Desk Phone	12	12	10/100/1000
Polycom VVX501	Desk Phone	12	12	10/100/1000
Yealink CP960	Conference Phone	1	N/A	N/A
Polycom IP7000	Conference Phone	1	N/A	N/A
Yealink W56	Cordless Phone	4	N/A	N/A

ALL devices are PoE capable and can be purchased on a Purchase (One Time), Lease, or Rent cost model.

**Purchase** – The agency will pay a onetime cost and will fully own the devices at time of purchase. An optional monthly maintenance package can be added for service and replacement options.

**Lease** – The agency will pay a monthly fee (that includes maintenance) and will own the devices at the end of the term.

**Rent** – The agency will pay a monthly fee (that includes maintenance) and will have device upgrade options when eligible.

The Cisco 6851 & 8851 handsets are Hearing-Aid-Compatible (HAC) and meet Federal Communications Commission (FCC) loudness requirements for the Americans with Disabilities Act (ADA). You can meet Section 508 loudness requirements by using industry-standard inline handset amplifiers such as Walker Equipment W-10 or CE-100 amplifiers. The dial pad on all 6800 series models is also ADA-compliant. The Yealink T46S also meets all requirements to be considered ADA compliant per the vendor.

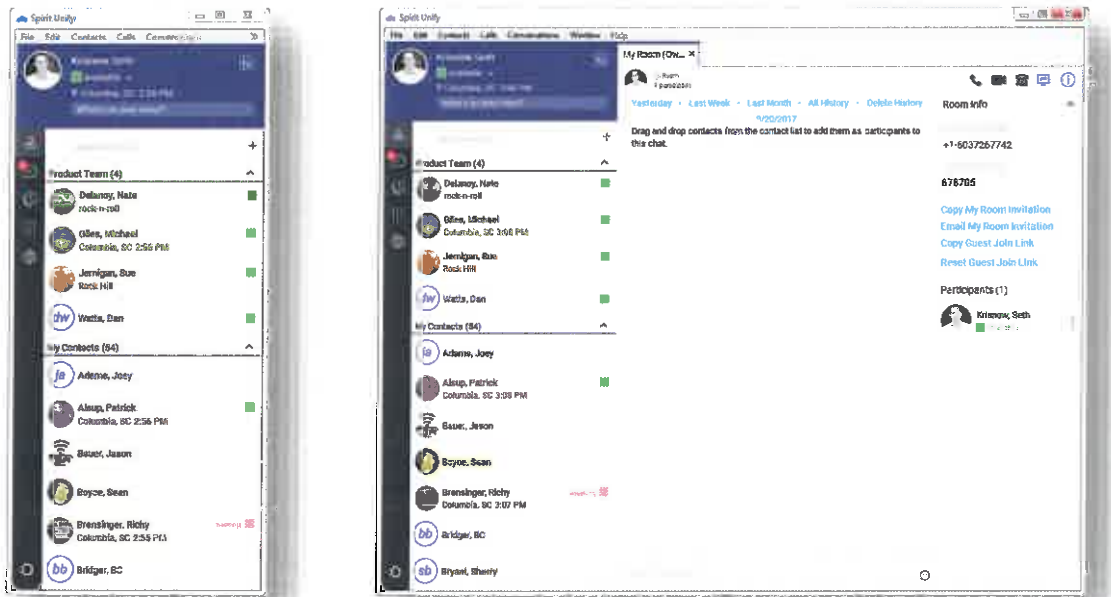
Any other devices added by Lumos after the contract awarded will be communicated to the State of West Virginia as appropriate.

### Softphone Details:

Lumos Unify is a suite of fully integrated multimedia services that meet many needs of the modern workforce. This single application provides a unified communications experience across Mobile Phones (iOS and Android) and PC's (Mac & Windows) by offering Audio & Video Collaboration, Instant Messaging & Presence, Desktop & File Sharing, and Group Collaboration (Multi Party Call-In Options)

Lumos Mobile Voice is a SIP based softphone that allows users to stay connected and manage availability with application based access to HD voice features. Lumos Mobile Voice is in both the Apple App Store and the Google Play Store, and can be installed on all eligible iOS and Android devices.

### Unify Desktop



### Unify Mobile



7042626434bon

.....

Sign in

Show password

Remember password

Sign in automatically

1 2 3 4 5

- / : ; (

sp

ABC

7 8 9

\* 0 #

Spirit Unify

At

Search Contacts

## Mobile Voice Application





**4.2.1.1.3.3** The State utilizes Cisco SRST and local voice services in case of data network failure. At the initial deployment of the site to the Vendor's hosted solution, if requested, the

Vendor should work with an Agency to implement call control and PSTN connectivity, in case the data network fails at a State location. This should include the provisioning of at least one local phone line for 911 calling. The Vendor should include the provisioning of one failover line in the cost of its monthly package. If the site requests more than one failover line, the State understands there may be additional charges for that work.

Please describe your solution's ability to meet this goal and any additional costs. Lumos Networks can also offer the agency a local copper line (POTS) that can be used for a diverse connection to the PSTN. The rate for this line is included in the Attachment A Cost Sheet. In addition, Lumos offers several ways to provide calling if there were a network failure on the local data connection.

#### Softphone

Lumos offers both a Desktop based and mobile application for both inbound and outbound calling if the local VoIP phone was disconnected. Through this application changes to location for 911 purposes can be made and greater ensure that user is still routed to the correct 911 PSAP.

#### Call Forward Unreachable Feature

Lumos Networks has the ability to offer a feature, which is used to assist if the device for that number is not registered due to a power or network outage. This feature will allow the Agency administrator to assign a number for call to forward to if the number required to have a failover route should connectivity be impacted. "Call Forward Unreachable" feature that we advertise to assist if the data connectivity were interrupted.

**4.2.1.1.3.4** The Vendor's solution should support station-to-station calling that remains "on-net" (on the State's private data network) at no additional cost. Please describe your solution's ability to meet this goal. Lumos Networks Hosted Voice solution supports station to station calling that remains on net at no additional cost to the Agency. Lumos Network solution includes unlimited inbound and outbound local calling as well as unlimited domestic Long Distance calling over our high quality, and scalable Hosted Voice Platform.

**4.2.1.1.3.5** The Vendor's solution should provide at least two PSTN connections via SIP Trunks over secure private connections engineered for voice quality of service. These PSTN connections should adhere to the industry standard of 150 *ms* latency or better, and jitter of 40 *ms* or better. Please describe your network engineering architecture and your practices to continuously achieve these standards.

#### **VoIP platform to Customer's Network:**

The Lumos Networks' Hosted VoIP platform resides in diverse geographic locations in the South East United States. Each diverse site is a mirror image of the other with the ability to stand alone should a

catastrophic issue happen at either location. Each Hosted VoIP platform has dual connections to the MPLS Core Router within that same Central Office as well as diverse “ringed” dual connections to an MPLS Core Router at a geographical diverse Central Office. This critical needs design ensures IP connectivity should a port fail on the edge or core router as well as a full router failure. The internal connections as well as the external transport is all carried on Lumos Networks fiber to ensure best in class voice quality and complete control of QoS.

#### **VoIP Platform to PSTN:**

Each Lumos Networks’ Hosted VoIP platform has dedicated SIP trunking directly connected to Lumos Networks’ PSTN switch which resides in the same Central Office. These connections are dual LAG connections to ensure connectivity. They span from High Availability IP routers on the Hosted Solution to 1:1 protected SIP Gateway cards within the PSTN switch. Also, each of the Lumos Networks’ VoIP platforms have dual-dedicated 10GB ringed IP trunks between the redundant sites to ensure connectivity and database sync.

#### **Measuring and Ensuring Quality of Service:**

- Lumos’ Networks ownership and control of the PSTN and IP segments give us the unique ability to exceed SIP standards while ensuring QoS and resiliency across the platform.
- Lumos’ Networks’ monitors the VoIP and PSTN networks 24/7 365 via two geographically diverse Network Operation Centers. This monitoring includes hardware/software anomalies generated from the physical Network Elements as well as Call Quality standards using a third party application which has test points throughout the call paths to ensure above average MOS scores and call quality is maintained. This extensive build and monitoring allows us to provide 99.999 reliability while addressing and resolving network anomalies before they turn into service affecting events.

**4.2.1.1.3.6** The Vendor's solution should provide a MPLS network connection to Verizon's MPLS core to reduce and/or eliminate the backhaul of traffic to the State's core network. The State has provided a column on the **Attachment A Cost Sheet** for both one-time installation costs and for monthly recurring costs for these connections. Please describe your ability to meet this goal. Lumos Networks has extensive experience utilizing a meshed MPLS network for government agencies to

deliver Hosted Voice services. Our experience extends further with partnering with other carrier to provide a fully meshed MPLS network, which is important when deliver a high level of service for Hosted Voice.

**4.2.1.1.3.7** As an option for small sites with non-private network handoffs, the State desires a solution utilizing public networking with the ability to securely transmit sensitive data. Please describe any offerings to support this goal. Lumos' Hosted Voice Solution can encrypt both the signaling and voice bearer channels of IP communications between endpoints. Lumos' Hosted Voice Solution uses Transport Layer Security (TLS) for SIP signaling and Secure Real-time Transport Protocol (SRTP) for media encryption. Administration links can use HTTPS.

**4.2.1.1.3.8** The Vendor's solution should include Caller ID services (inbound traffic) and custom number and naming (outbound traffic) that State Agencies may utilize to customize their displayed information. The Vendor should provide this capability at no additional cost. Please describe your solution's ability to provide these services. Lumos Networks Hosted Voice solution includes the caller ID displayed on outbound calls can be either the actual user's phone number or can be masked with another number such as a main number for the location.

**4.2.1.1.3.9** The Vendor's solution should include unlimited local and nationwide calling at no additional charge. Please describe your no cost offerings. Lumos Networks Hosted IP Voice services includes local calling within the LATA, and unlimited Domestic Outbound Long Distance calling in all of our seat packages.

We also provide on-net calling for all users that are on Lumos Networks Hosted Voice platform. This will include all State of West Virginia agencies that are on the Lumos Network Voice platform, and other businesses or entities within the State of West Virginia.

**4.2.1.1.3.10** The Vendor's solution should provide international calling. The State understands fees may be associated with international calling. The Vendor should provide its per minute international calling rates for Mexico, Canada, and Jamaica in the **Attachment\_A Cost Sheet**. These will be used as part of the cost evaluation. The Vendor should also attach an appendix of its international calling rates for all countries. This appendix will be used to establish the international calling rates per country in the awarded contract and will be required prior to award. Please describe your solution's international calling offerings. Lumos Networks has read, understands, and complies with the requirement. Please see the International Long Distance Rate Sheet located in the Appendix section of the Cost Proposal.

**4.2.1.1.3.11** The Vendor's solution should provide comprehensive site coverage to meet the State's local and long-distance IP-based calling requirements. Please describe your coverage, as well as how you plan to meet the State's coverage needs.

Lumos' proposed Hosted Voice services includes local calling within the LATA, and unlimited Domestic Outbound Long Distance calling in all of our seat packages.

We also provide on-net calling for all users that are on Lumos Networks Hosted Voice platform. This will include all State of West Virginia agencies that are on the Lumos Network Voice platform, and other businesses or entities within the State of West Virginia.

**4.2.1.1.3.12** The Vendor's solution should provide load balancing for all traffic in-bound from the PSTN. Please describe your solution's ability to meet this goal.

Lumos Networks Hosted Voice Platform will determine the best method for passing the call on to the public network. Lumos has multiple methods to ensure reliable routing of local, long distance, international and emergency telephone calls. All traffic is monitored daily as a proactive measure to ensure call completion rates, trunking capacities and interconnections with other Carriers are performing as expected. Lumos Networks has multiple Switches to route calls to the Public Telephone Switched Network (PSTN). The delivery methods for access are mostly traditional DS3/DS1 utilizing SS7 Signaling. We also support and integrate with some Carriers via VoIP utilizing SIP signaling. Calling Number Delivery and Caller ID is available for all incoming / outgoing calls.

**4.2.1.1.3.13** The Vendor's solution should ensure 911 call delivery to the appropriate local PSAPS. Additionally, the State desires support for Private Switch/Automatic Location Identification (PS/ALI) services for 911 calls. Please describe your process for ensuring the accuracy of 911 call delivery, as well as the process to support PS/ALL.

Lumos Networks is fully FCC/CRTC compliant and has the ability to provide 911 services nationwide and enhanced 911 (E911) to more than 98% of the addresses nationwide. Lumos Networks has geographic diverse redundant circuits connecting Lumos Networks' customers to the country's 911 infrastructure. Our updating process has been fully automated through our order management system Lumos Networks.

Once an order is placed for telephone services Lumos Networks automatically connects via an Application Programming Interface (API) to Bandwidth's Automatic Location Identification (ALI) database. From that point the address is geo-coded to be sure the address is aligned with the correct Public Safety Answering Point (PSAP). If an error occurs on the geo-coding a response is sent back through the API to Lumos Networks and the service order and workflow will indicate that the address validation needs additional screening and corrections.

Call flows for emergency services are defined in the bullet points below.

- WV Agency places an emergency 911 call

- Lumos Networks collects the digits dialed and immediately recognizes the call to be an emergency
- Lumos Networks sends the call to Bandwidth's VoIP Positioning Center (VPC) on one of the diverse dedicated connections.
- Based on the location information Bandwidth's VPC decides which of the nation's more than 600 Selective Routers must receive the call to be delivered to the PSAP serving the callers jurisdiction.
- The determined Selective Router uses the Automatic Number Identification (ANI) to lookup the Emergency Services Number (ESN) to identify the precise PSAP responsible for the caller's location.
- The ESN is then sent back to the Selective Router which routes the call to the correct PSAP.
- The PSAP's Customer Premise Equipment (CPE) queries the local ALI database to pull the callers address and phone number from Bandwidth's ALI database. This address is sent back to the PSAP and displayed on the agents CPE screen.

This entire process takes place almost instantaneously from the time the call is placed to when it is answered by the PSAP.

Lumos Networks Hosted VoIP Platform is fully redundant. In the unlikely event of a VoIP platform failure resulting from a loss server cluster, the IP endpoints will re-register to the secondary, geographically separate, server cluster with the ability to process and terminate normal user traffic and E911/911 calls.

The FCC requires VoIP carriers to allow end-user's to make changes to their E911 address as they deem necessary. Lumos Networks has been FCC compliant since 2006, and allows mobile VoIP users to either relocate their traditional IP phone or utilize SIP based clients on mobile phones, tablets or PC's. Our service specialist are ready to make the necessary address changes via a web portal directly linked to Bandwidth's ALI database. Once we authorize the end-user via CPNI verification we will update the database based on the address given to us. At that time, if an emergency call is placed from that user's device, emergency response personnel will be sent to the new address.

**4.2.1.1.3.14** The Vendor's solution should support the following industry standard protocols: G.711 (uncompressed), G.729 (compression), and T.38 (fax). Please describe the protocols supported by your solution. Lumos Networks supports all standard protocols including G.711, G.722, G.729 and allows T.38 to pass through but it is unsupported.

**4.2.1.1.3.15** The Vendor's solution should have the ability to scale the number of simultaneous concurrent calls on a monthly and/or seasonal basis at the State's request. Please describe your solution's ability and your process to accomplish this, including division of duties. Lumos Networks does not limit the number of concurrent calls to a specific value for the Agency. This is determined by the size and speed of the network connectivity being used to connect the user's device to the Hosted IP Voice Platform.

Network Connectivity Options	Maximum Number of Concurrent Calls G.711	Maximum Number of Concurrent Calls G.729	Maximum Number of Concurrent Calls G.722
1.5 Mbps (T-1)	14.00	37.00	14.00
3.0 Mbps (2xT1)	26.00	73.00	26.00
4.5 Mbps (3xT1)	40.00	110.00	40.00
6.0 Mbps (4xT1)	53.00	147.00	53.00
10.0 Mbps (7xT1)	88.00	246.00	88.00
2.0 Mbps	17.00	47.00	17.00
3.0 Mbps	26.00	71.00	26.00
4.5 Mbps	39.00	107.00	39.00
5.0 Mbps	43.00	119.00	43.00
6.0 Mbps	52.00	143.00	52.00
8.0 Mbps	69.00	191.00	69.00
10.0 Mbps	86.00	239.00	86.00
15.0 Mbps	129.00	360.00	129.00

20.0 Mbps	172.00	480.00	172.00
30.0 Mbps	258.00	720.00	258.00
40.0 Mbps	344.00	961.00	344.00
50.0 Mbps	430.00	1,201.00	430.00
60.0 Mbps	516.00	1,441.00	516.00
70.0 Mbps	602.00	1,682.00	602.00
80.0 Mbps	688.00	1,922.00	688.00
90.0 Mbps	774.00	2,162.00	774.00
100 Mbps	860.00	2,403.00	860.00
150 Mbps	1,290.00	3,000.00	1,290.00
200 Mbps	1,720.00	4,000.00	1,720.00
250 Mbps	2,150.00	5,000.00	2,150.00
300 Mbps	2,580.00	6,000.00	2,580.00
400 Mbps	3,440.00	8,000.00	3,440.00
500 Mbps	4,300.00	10,000.00	4,300.00
600 Mbps	5,161.00	12,000.00	5,161.00
700 Mbps	6,021.00	14,000.00	6,021.00
800 Mbps	6,881.00	16,000.00	6,881.00
900 Mbps	7,741.00	18,000.00	7,741.00
1000 Mbps	8,601.00	20,000.00	8,601.00

**4.2.1.1.3.16** The Vendor's solution should include interoperability with the following: IPv4 addressing (RFC 791), RFC 1918 for private IP addressing, and support SIP over TCP or UDP. Carrier grade NAT (RFC 6598), link-local IP addresses (RFC 3927), and Multicast addresses (RFC 3171) will not be accepted. Please describe your solution's interoperability to accomplish this goal. The Hosted Voice Platform that Lumos is proposing to the state of West Virginia will include interoperability with IPv4 addressing (RFC791), RFC 1918, supports TCP or UDP.

**4.2.1.1.3.17** The Vendor's solution should provide the following quality and reliability standards: QoS tagging IEEE 802.1Q 2011; not rewriting, marking, or remarking any VLAN tags affixed to packets by the State, without the State's expressed consent; at a minimum, one Class of Service (COS) marking per Ethernet service. Please describe your solution's ability to meet this goal. Lumos is proud to offer a Hosted Voice solution that delivers HD quality voice to all devices on the platform. Lumos requires specific Quality of Service markings to ensure optimal voice quality. It is critical that these QoS markings are honored and passed across all network segments. The proposed solution by default will assign the correct values to the RTP and Signaling packets at each SIP endpoint.

Required Network and Voice Path Connectivity Parameters for QoS:

- ≤ 150 ms of one-way latency from mouth to ear (per the ITU G.114 standard)
- ≤ 30 ms jitter
- ≤ 1 percent packet loss
- 17 to 106 kbps of guaranteed priority bandwidth per call (depending on the sampling rate, codec, and Layer 2 overhead)

**4.2.1.1.3.18** The State desires a Unified Messaging solution; therefore, the Vendor's solution should fully integrate with Microsoft 0365, allowing users to listen, forward, and delete voicemails from both 0365 and the hosted environment. Voicemails should be retained in the solution for 15 days or longer. In addition, the Vendor's solution should be provisioned to fully integrate with the State's Active Directory and Active Directory Federated Services. Please describe your abilities to meet these goals. Lumos Networks is proposing a robust unified messaging solution that includes voicemail to email, voicemail to SMS text, and predefined voicemail retention.

Lumos Networks will work directly with the State of West Virginia, Office of Technology on an integration solution with Microsoft 365 and active directory. Due to the complexity associated with integrating premised based applications to a Hosted Voice platform, a customized project will be required to ensure proper security protocols and procedures are met.

**4.2.1.1.3.19** Some State Agencies utilize paging and notification to the PC desktop, over-head paging, or through-the-phone- speaker paging. The Vendor's solution should include an option for providing, maintaining, and supporting a paging solution, including any associated hardware, software, and licenses, and if requested by Agency, or integrate with an existing or Agency-owned paging solution. The State understands there may be fees associated with this offering. Please describe your offerings with respect to these deployments.

Lumos Networks proposed Hosted Voice solution offers three options for paging.



#### Push to Talk

Direct paging within the Voice platform through a feature called push to talk. This feature allows either one way or two way audio using a feature code and an extension. If required a design to include more than one user to page at one time can be designed. Groups are limited to 20 users, but can be connected together to increase the total number of individuals paged at one time.

#### SIP Paging Adapter (External System)

##### Algo 8301

Paging Adapter integrates legacy analog voice paging systems into our IP Hosted Voice environment as a SIP endpoint. The

Adapter eliminates the need for an ATA or FXS port. Features include HD audio quality with isolated and balanced line output for optimum clarity and intelligibility without hum or noise.

To the network side, Lumos Networks' device is a SIP endpoint for easy integration with Lumos Networks' IP Hosted Voice. It is configured using the intuitive web interface or provisioning capabilities.

On the paging side, Lumos Networks' device provides balanced audio output using both an XLR connector and terminal block for easy connection to an amplifier, along with a dry contact closure if required by the amplifier.

#### FXS or FXO Analog Line

This solution uses a basic seat with an assigned number along with a configured ATA that connect to any legacy paging system. This device will handle either FXO or FXS.

**4.2.1.1.3.20** The State desires an option for Agencies with high call volume and receptionist personnel that will utilize an Operator Console for fast and efficient call control. The State understands there may be fees associated with this offering. Please describe your solution's Operator Console offerings. Lumos Receptionist is a Telephony Attendant Console that is specifically developed for hosted environments. It is used by "front-of-house" receptionists or telephone attendants, who screen inbound calls for enterprises. Calls can be quickly transferred through intuitive drag and drop actions within the client. The specific charge for this receptionist console has been added to the Cost Sheet, Amendment A.

**4.2.1.1.3.21** If requested by an Agency, the State desires the ability to integrate a third-party call recording solution with the Vendor's hosted solution. Please describe your solution's ability to meet this goal. The proposed solution complies with any third party call recoding system via predefined port mirror locations capable of capturing both SIP and RTP traffic.

**4.2.1.1.3.22** The State desires that the Vendor use currently-owned State IP telephony handsets where the handset is still supported on the Vendor's solution. Please describe your company's ability to use the State's current handsets and its ability to meet this objective.

Lumos Networks currently supports the Cisco phones models below as required by the State of West Virginia. This requires the devices to be updated to a firmware version that is currently supported by Lumos Networks.

- Cisco 8811
- Cisco 8831
- Cisco 8851
- Cisco 8861

It is the recommendation of Lumos Networks for the State of West Virginia to replace all other existing phone models to a model included in our proposed solution. This recommendation is based on the capability and ability for each user to take full advantage of the features on the proposed platform.

#### **4.2.1.1.4 Hosted Contact Center Services**

**4.2.1.1.4.1** The State's goal is to obtain a reliable, customizable, and scalable solution to provide hosted contact center services for an estimated twenty-five (25) individual contact center sites that works in conjunction with the Vendor's proposed Hosted VoIP solution. Certain sites require the capability to transmit and/or store call recordings that may contain sensitive data (such as **PHI** or **PII**). For ease of deployment and maintenance, the State prefers the contact center solution be web-based. The solution should provide the following capabilities:

- Ability for a simple, drag-and-drop, easy-to-understand interface to create customized call routing and role-based queues that can be deployed to sites with non-technical administration
- Should provide chat capabilities
- Should provide live data reporting
- If requested by an Agency, the solution should have the ability to interface with an Agency's database to populate information based on data provided by the caller
- If requested by an Agency, the solution should provide the flexibility for agents to use a public-switched-telephone-network (PSTN) phone to utilize the solution
- Should provide scalability for up to 800 agents and the ability to expand in the future

Please describe your solution and identify any areas in your solution that exceed the items requested above.

Lumos Networks' Statewide Hosted Contact Center solution is a highly flexible, feature-rich, fully integrated Automatic Call Distribution (ACD) and Contact Center service that will support the requirements of each Agency. This includes simple hunting and queuing for individuals and work groups to sophisticated call distribution and routing, conditional announcements, agent availability status, Interactive Voice Response (IVR), desktop clients, and monitoring and reporting for more complex contact center environments.

#### Contact Center Agents

Contact center agents in a formal contact center are focused on handling calls as quickly and efficiently as possible. This requires a combination of efficient call routing to ensure callers do not wait too long to reach an agent, and efficient call handling by agents, which means answering calls quickly and ensuring the caller's needs are met during the conversation.

In most cases, the agent uses the Lumos Networks' Contact Center Agent client to manage their calls. The client provides a rich set of features designed to support the needs of a contact center agent.

#### Contact Center Supervisors

Contact Center supervisors in a formal contact center are focused on managing and directing the daily activities of contact center agents and functions of the Contact Center. The Contact Center supervisor also monitors daily Contact Center activity such as calls waiting in queue, agent log in status, number of unanswered calls, etc...and makes routing and staffing adjustments to improve service to their customer.

#### Automatic Call Distribution (ACD)

Automatic Call Distribution (ACD) is a communication server software feature that processes high-volume incoming, outgoing, and internal calls and distributes them to groups of extensions called hunt groups or splits. Hunt groups or splits are referred to as skills. Calls to a specific skill are automatically distributed among the agents that possess the desired skill. Calls queue to the skill until an agent is available. ACD allows a system administrator to create an efficient call management environment. This administrator can add or remove skills from the system, add or remove announcements, add or remove agents, add trunk groups and route calls to the appropriate skills. The administrator can also specify ACD measurement criteria to provide reports on ACD efficiency.

When a call arrives for a skill, the ACD software checks to see if an agent with the desired skill is available to handle the call. If an agent is not available, or busy, the call enters the skill's queue. Calls queue only if no agents are available, a queue is assigned to the skill, and the queue is not full. A skill queue is a holding area for calls waiting to be answered. When a call is put into queue, the caller may hear one or more delay announcements, music, and/or silence, depending on the treatment assigned for the skill. Calls enter the queue at the bottom and move toward the top or head of the queue. After a call reaches the head of the queue, it connects to the next available agent.

#### Key features and benefits:

- Virtual contact centers – Since the platform is hosted from the Lumos Networks's cloud, a contact center group can include any user, regardless of their location. Inbound calls can efficiently reach a broader set of agents, including agents at different branch locations, home-based workers, and agents working from temporary locations.
- Automated Attendant - Callers can use an Automated Attendant to get routed to the most appropriate set of agents, with different routing options for business hours and non-business hours.
- Automatic Call Distribution (ACD) – Intelligent call distribution selects an available agent using a combination of the agent's line state, availability setting, and skill level, or a combination of the agent's line state, availability setting, and a call distribution algorithm (direct agent hunt, most idle hunt, simultaneous ringing, weighted distribution).
- Queuing – Calls are queued when all the agents are busy, with the associated entrance announcement, music, and periodic comfort messages played to the caller while they wait.
- Queued Call Prioritization – Calls in queue can be prioritized based on their time in the queue and the dialed number (DNIS).
- Customized Audio and Announcements – Callers can receive custom greetings and announcements based on the dialed number (DNIS) when they reach a contact center, when they are waiting in a queue, or when they are rerouted to alternate locations.

- Customized Whisper Announcements – Agents answering ACD calls can hear a custom whisper announcement before being connected to the caller. This allows customers to provide specific call instructions prior to the call based on the dialed number (DNIS).
- Time and Schedule-based Routing – Inbound calls are routed to alternate destinations during non-business hours and holidays.
- Conditional Routing – Calls are rerouted based on various conditions, such as bounced calls, stranded calls, calls that have waited too long, and calls that reach a contact center with an excessive number of queued calls.
- Temporary Forced Routing – Calls can be automatically rerouted to alternate locations due to a temporary condition in the contact center.
- Outbound Calling – Outbound calls from agents can be associated with a contact center, to support outbound dialing campaigns.
- Agent and Supervisor Clients – Intuitive interface provides greater agent productivity and management oversight.
- Dashboard – Real-time monitoring of agents and queues tracks current state and current performance of agents and queues. The Supervisor Dashboard’s statistics are designed to allow a supervisor to quickly understand how the contact center and agents are performing so that quick decisions can be made to increase or reduce staff. The Dashboard may also be displayed on a large flat screen monitor and may be used as a wallboard for the contact center.
- Reporting – Real-time and historical reports track key performance indicators (KPIs). Users have capability to schedule reports and system providers have the ability to customize reports.
- Extension Mobility using Lumos Networks’ Remote Office or Lumos Networks Anywhere – Agents can receive or make calls from remote locations (home, alternate location) or their mobile device.
- Shared Workstations using Hoteling – Agents can easily log in at a shared workstation and/or phone while maintaining their user settings.

- Unified Messaging for Voice, and Fax – Unified Messaging can be used with a contact center supporting voice messages, video messages, and fax messages, with the message forwarding to an e-mail address or alias.
- Conferencing – Agents can quickly escalate calls to a supervisor or engage other subject matter experts within the organization using the integrated Conferencing services.

Lumos Networks is offering Contact Center Agent Seats and Contact Center Supervisor Seats as part of the Lumos Networks Statewide Hosted Contact Center offering. The Lumos Networks Statewide Hosted Contact Center has a robust set of features that are included and can be enhanced by a la carte features.

**4.2.1.1.4.2** Some of the State's call centers operate on a 24x7x365 basis, delivering critical services to the communities. As such, the State prefers the Vendor's solution have inherent redundancy and survivability characteristics that will ensure minimal service disruptions, such as data centers in geographically diverse regions allowing for failover, equipment and power redundancies in those data centers, etc. Please describe your solution's redundancy and its ability to meet and/or exceed this goal.

Lumos has two geographically diverse data centers that include redundant critical infrastructure (generators, CRAH units, UPS), and are staffed 24x7x365. Both data centers have quarterly preventive maintenance schedules.

In addition, Lumos utilizes MPLS as core networking topology for Hosted VoIP services to ensure maximum uptime and security. This self-healing MPLS backbone consists of a core 10 Gbps backbone network constructed from Lumos Networks owned physical infrastructure.

All backbone routers (P/PE devices) are deployed in highly redundant configurations; each IP/MPLS core node contains a minimum of two backbone (P core) routers connected to a minimum of two different other core nodes.

To ensure business continuity in the event of disaster, Lumos Networks has an alternate Data Center site located to house redundant VoIP call processing servers, PSTN access and feature delivery. This alternate Data Center site has been fully integrated into the Lumos solution and allows us a hot recovery site available at all times. Connectivity between all Core primary MPLS Router nodes has been upgraded to redundant & diverse 10 Gbps links over Lumos owned facilities.

Core Gateway Failure

Lumos Networks utilizes multiple, distributed, VoIP Gateways that are

interconnected via our self-healing MPLS network. These devices designed from the outset for 99.999% (“five nines”) system reliability. We achieve this goal through a fully redundant, hot-swappable hardware design, with a combination of 1:1 redundancy for processor blades and power supplies, as well as all TDM and IP interfaces.

Even the internal packet bus is powered by two redundant switches. In addition, a sophisticated application-aware software fault tolerance scheme ensures that, in the event of a program logic error, the backup processor takes over control of the chassis ensuring uninterrupted service. In the event of a core Gateway Failure the remaining Lumos VoIP Gateways would simply handle the increase traffic requirement. While existing calls in progress traversing that specific Gateway would be interrupted.

**4.2.1.1.4.3** The Vendor's solution should include enhanced features for Administrators, Supervisors, and Agents to effectively meet the needs of their customers. As such, the solution should provide the following capabilities:

- Agent and Supervisor client that provides Blended agents: Inbound and outbound capability
- Ability to monitor critical performance metrics allowing managers to coach, train, and encourage agent behavior
- Ability for Supervisors to change an agent's status
- Ability for Supervisors to silently monitor inbound and outbound calls
- Ability to interrupt an agent's call to interact with both the caller and the agent
- Ability for Supervisors to remove an agent from a call
- Ability to change an agent's skill profile in real time Please describe your solution and identify any areas in your solution that exceed the items requested above.

Lumos Networks offers a state of the art dynamic and robust features set with our Hosted Contact Center solution. See the many features and value added capabilities in the table below:

Feature	Description	Included/Optional
<b>Caller Greetings/Announcements</b>	<b>All announcements are customizable by the customer.</b>	
Entrance Announcement	<p>The queue entrance message is played to the caller when they initially enter the queue. Example: 'You have reached the Sales Department'</p> <p>If an agent is available, the entrance message will not be played, unless it is configured to be mandatory (see below)</p>	Included
Mandatory Entrance Announcement	The entrance message can be flagged as mandatory, which forces the entrance message to be played to completion, even if an agent is available to receive the call.	Included
Additional Announcements	Used to route through menus beyond the first announcement	Optional
Play Estimated Wait Time/Location in Queue	<p>After the entrance announcement is played, an optional message announces to callers their position in the queue or an estimated waiting time.</p> <p>Option to periodically repeat the announcement with an updated calculation of wait time/location when the call is in queue.</p>	Optional
Music on Hold	<p>Configure music or video hold media to be played to the caller while they are in the queue.</p> <p>MoH can be configured to run from a file, which always starts at the beginning and loops, or from an external source, where the media source plays a continuous stream of music.</p>	Optional
Comfort Greeting	Configure a periodic comfort message to be played to the caller while they are in the queue.	Optional



	Option: An alternate comfort greeting policy (Comfort Message Bypass) can be configured that permits callers with a short estimated wait time to hear an alternate comfort messages or ringing instead of the standard comfort/Music-On-Hold treatments.	
Reuse "common" messages	Ability for multiple Contact Centers to share announcements. Commonly used shared announcements are the State Holiday Greeting, Weather announcement and "It's a great day in South Carolina."	Included
Retrieve media files via URL/server	All announcement and greetings associated with the Contact Center can be retrieved and uploaded using a web	Included
Chaining of up to 4 media files	Each announcement and greeting associated with the Contact Center can be configured to use up to 4 chained messages/files. This is typically used in two scenarios: <ul style="list-style-type: none"> <li>Reuse 'common' message fragments to create a message. For example, combine 'Thank you for calling ABC Corporation' with 'You have reached the Sales Department' and 'Your call may be recorded'. The first and last fragment can be reused in other announcements.</li> <li>Add temporary messages to the existing message without having to alter the 'standard' message. For example, add 'We are currently experiencing a network outage in the Smith County area. For the latest update, please go to our website at ...'</li> </ul>	Included
<b>General</b>		
Play Ringing when offering call	Configure whether to play ringing to the caller when a call is being offered to an agent.	Included

	When disabled, the caller hears MoH until the agent is connected with the caller.	
Escape from Queue	<p>Enable the 'Escape from Queue' option, and configure the digit that callers can use to escape from the queue.</p> <p>When triggered, the escape function routes the caller to the Busy destination configured for the Contact Center, which may be a configured destination or Voice Messaging.</p>	Included
Skill	Identification used to assign incoming calls to the most suitable agent. A Skill set is pre-defined by Agency.	Optional

Routing Features		
Contact Center DNIS Addressing	<p>Contact Centers can be assigned full directory numbers allowing them to be accessed directly by customers; or extensions, where they are accessed via an IVR/AA.</p> <p>Multiple DNIS numbers (up to 64) can be associated with a single Contact Center, allowing a single pool of agents to handle calls to all of the assigned DNIS numbers. The DNIS numbers can be assigned to priority buckets (4 levels) such that calls to higher priority DNIS numbers are distributed before calls to lower priority DNIS numbers. Calls can be promoted into higher priority buckets when they exceed configured wait times to ensure they are not left unanswered.</p>	Included
'Group' Policy – Call Distribution	<p>Policy to select and distribute calls to the agents assigned to the Contact Center. There are 5 distribution options available that can be applied to each Contact Center.</p> <ul style="list-style-type: none"> <li>• Circular - Sends calls to agents using the order listed for the Contact Center. Incoming calls go to</li> </ul>	Included

	<p>the first available agent on the list, beginning where the last call left off</p> <ul style="list-style-type: none"> <li>• Regular - Sends calls to agents in the order listed for the Contact Center. Incoming calls go to the first available person on the list, always starting with the first person on the list</li> <li>• Simultaneous - Rings all of the agents in the Contact Center simultaneously; the first user to pick up the ringing phone is connected</li> <li>• Uniform or Most Idle – Sends calls to the agent that has been idle the longest.</li> <li>• Weighted Call Distribution – Calls are distributed to agents according to a pre-defined weighting. Each agent is assigned a weight corresponding to the percentage of incoming calls they should receive. When selected, a Weighted Call Distribution option is enabled on the main Contact Center Profile screen.</li> </ul>	
<p>Priority-based Routing</p>	<p>Each Contact Center/Queue can be configured so that calls are delivered based on either Priority or Skill Level</p> <p>With Priority-based routing, when an agent becomes idle, the call from the highest priority queue will be delivered to the agent.</p> <p>The Priority Routing policy offers two settings:</p> <p>Longest Wait – When this setting is selected, the wait times of the next call in line from each queue where the agent is staffing are compared. The longest waiting call is considered the highest priority and delivered to the agent.</p> <p>Priority Order – When this setting is selected, a list of precedence is configured among the queues in the group/enterprise. The call from the highest precedence queue that the agent is staffing is selected and delivered to the agent.</p> <p>Example: An agent is assigned to 5 queues, and each has a call in queue. When the agent becomes idle, the call is delivered using the Routing Priority Setting, so either the longest waiting call or the call in the highest priority queue is delivered to the agent.</p>	<p>Included</p>

	<p>For either setting, bounced calls always have priority over non-bounced calls. If there is more than one candidate-bounced call, then they are prioritized based on the original time at which the call was offered to an agent. This policy is configured at the group/enterprise level.</p>	
Skill-based Routing	<p>As an alternative to Priority-based routing, a Contact Center/Queue can be set to deliver calls based on the agent's skill level.</p> <p>With Skills-based routing, when an agent becomes idle, they will receive the call from the queue for which they have the highest skill level.</p> <p>Agents can be assigned a skill level of 1 (highest) to 20 (lowest) for each Contact Center (skill group). If the agent has the same skill level for multiple contact centers, the Priority-based routing logic will be used to select which call to deliver to the agent.</p>	Included
Queued Call Prioritization	<p>In general, calls within a queue are prioritized based on their wait time in the queue. A bounced call (one that has been delivered to an agent but was returned to the queue because it was not answered) will be placed at the top of the queue.</p> <p>Calls entering a queue can either start with 00:00 wait time (go to bottom of queue), or can retain their accumulated wait time from previous queues and get prioritized based on their total wait time. This option is configured by the Administrator for each Contact Center.</p>	Optional
'Overflow' routing policy	<p>An Overflow call is defined as a call that will exceeds the Queue Length setting on the Contact Center Profile settings (Overflow-Size) or has exceeded the wait time configured in the Overflow settings (Overflow-Time).</p> <p>Overflow actions include the following options:</p> <ul style="list-style-type: none"> <li>• Perform busy treatment – CFB or Voice Messaging</li> <li>• Transfer call</li> <li>• Play ringing until caller hangs up</li> </ul>	Included

	In addition, an announcement can be played before the overflow processing	
'Bounced Calls' routing policy/Redirect No Answer (RONA)	<p>A bounced call is defined as a call that is routed to the agent but is not answered within the specified number of rings.</p> <p>Bounced call actions include the following options:</p> <ul style="list-style-type: none"> <li>• Default action - Move to next agent based on 'Group' policy</li> <li>• Transfer call</li> </ul>	Optional
'Stranded Calls' routing policy	<p>A stranded call is defined as a call that is in the queue when there are no longer any agents 'Signed-In' to the queue.</p> <p>Stranded call actions include the following options:</p> <ul style="list-style-type: none"> <li>• Leave in queue</li> <li>• Perform busy treatment – CFB or Voice Messaging</li> <li>• Transfer call</li> <li>• Follow Night Service policy (Premium)</li> <li>• Play ringing until caller hangs up (Premium)</li> <li>• Play announcement until caller hangs up (Premium)</li> </ul>	Included
'Stranded Calls – Unavailable' routing policy	<p>A stranded call policy that is applied when all agents are unavailable, AND a specified number of agents have a specific configured unavailable code.</p> <p>This policy can be applied to any situation where all agents that are joined to a contact center are currently in an 'unavailable' ACD state, but is primarily targeted at situations where a pool of assigned agents are 'not reachable'. An agent can be automatically moved to a custom unavailable code when they are 'not reachable' (e.g. 'Unav-NotReachable').</p> <p>Stranded Unavailable actions include the following options:</p> <ul style="list-style-type: none"> <li>• Leave in queue</li> <li>• Perform busy treatment – CFB or Voice Messaging</li> <li>• Transfer call</li> <li>• Follow Night Service policy (Premium)</li> <li>• Play ringing until caller hangs up (Premium)</li> </ul>	Included

	<ul style="list-style-type: none"> <li>• Play announcement until caller hangs up (Premium)</li> </ul>	
Night Service	<p>Night Service provides a policy to perform different routing during hours that the queue is not in service (generally after business hours). The service is invoked via a schedule that defines the business hours of the queue.</p> <p>Basic and Standard Contact Centers can use Selective Call Forwarding for this service.</p>	Included
Holiday Service	<p>Holiday Service provides a policy that permits calls to be processed differently during holiday periods. The holiday schedule is defined at the group level. The Queue policy allows the configuration of a specific routing action when a call is received during a holiday period. If no holiday schedule is defined for the queue, then all incoming calls to the queue are processed as if they were received during a non-holiday period.</p> <p>Basic and Standard Contact Centers can use Selective Call Forwarding for this service</p>	Included
Forced Forwarding	<p>Forced Forwarding provides a policy to temporarily divert new incoming calls to a new destination.</p> <p>Forced forwarding of calls does not affect calls already in the queue. These calls are routed to and presented to the agents in the usual way.</p> <p>This feature is typically invoked when a change in business conditions dictates calls be redirected to another queue other than Night service or overflow destinations.</p> <p>Basic and Standard Contact Centers can use Call Forwarding Always for this service</p>	Included
Time of Day Routing	<p>Ability to route to different vectors based on the time of day. Times and routing associated with the time of day are pre-determined by Agency.</p>	Included
Conditional Routing	<p>Vectoring is used to more closely match the caller to the agent. Call routing can be based on pre-defined criteria such as incoming origination number.</p>	Included

Expected Wait Time Routing	Allows supervisors to intervene and redirect calls before actual wait times exceed pre-established thresholds.	Included
Best Service Routing	Algorithms used for routing for a single site or multiple sites based on estimated wait time.	Included
<b>Agent Features</b>		
Agent Available	Button on phone that notifies the system that the Agent is in rotation and ready to receive calls.	Included
Agent Unavailable	Button on phone that notifies the system that the Agent is removed from rotation of calls.	Included
Forced Agent Logout	Automatically logs Agent out of system based on pre-defined thresholds	Included
Direct Agent Calling	Allows agent to receive any type of incoming or transferred call.	Included
Guard Timer	An Agent Default Setting that, when enabled, delays the delivery of a new ACD call until the timer expires. Designed to prevent a new ACD call from being presented to the agent immediately after they end the previous call.  Note: This is not designed to support 'post call work' (see Wrap-up timer)	Included
Set ACD states	Agents can configure the following ACD states <ul style="list-style-type: none"> <li>• Sign-In</li> <li>• Available</li> <li>• Unavailable</li> <li>• Wrap-up</li> <li>• Sign-Out</li> </ul> An Agent is considered 'idle' and available to receive an ACD call if they are in the 'Available' state and their line state is 'on-hook' (assuming they do not have Call Waiting enabled and have not enabled calls during 'Wrap-up' state.  Their ACD state applies to all Contact Centers to which they are 'Joined'	Included

<p>Unavailable Codes/Reason Codes</p>	<p>Allows agent to enter a numeric code that describes their reason for entering AUX mode. The 'Unavailable' ACD state can be extended to include codes showing the reason the Agent is Unavailable. For example:  'Unavailable-Lunch'</p> <p>Unavailable codes are completely customizable. Administrators create or enable a set of Unavailable codes for use within an Enterprise or a Contact Center. Up to 1000 Unavailable Codes can be defined in an Enterprise.</p> <p>Note: Agents can be forced to select an unavailable code, with a default Unavailable code applied when one is not selected.</p>	<p>Included</p>
<p>Forced Unavailability Codes</p>	<p>An Agent Default Setting policy that, when enabled, forces transition of a Contact Center agent from Available/Wrap-up to Unavailable status.</p> <p>The following 4 conditions can be individually enabled to force the Agent to change ACD state to 'Unavailable':</p> <ul style="list-style-type: none"> <li>The agent is making or receiving a personal call</li> <li>The agent is enabling the Do Not Disturb (DND) service</li> <li>The agent has not answered a specified number of incoming ACD calls (bounced calls)</li> <li>The agent is 'not reachable'</li> </ul> <p>Note: Unique Unavailable Codes can be created and applied to each condition when this feature is triggered.  Example: Unavailable-DND</p>	<p>Included</p>
<p>Wrap-up ACD state</p>	<p>Agents use the 'Wrap-Up' ACD state for post ACD call work.</p> <p>They may transition to this state automatically at the completion of an ACD call, or manually via the Contact Center client.</p> <p>Configurable options exist for the following:</p> <ul style="list-style-type: none"> <li>Allow agents to receive a new ACD call when they are in wrap-up state. Note: This is generally disabled in formal contact centers.</li> <li>Set automatic wrap-up duration time (Agent setting)</li> </ul>	<p>Included</p>



	<p>Set a maximum Wrap-Up duration time for agents in a Contact Center (Administrator setting)</p> <p>Set automatic transition to Wrap-up after ACD call completion (Administrator and Agent setting; Admin setting has precedence)</p>	
Disposition Codes/Call Type Identification Codes	<p>Disposition codes can be applied to contact center calls during the call and at wrap-up. This allows calls to be tagged in reports to track the result of promotions, the result of calls, the purpose of calls, or other items.</p> <p>Disposition Codes are completely customizable. Administrators create or enable a set of Disposition codes for use within an Enterprise or a Contact Center. Up to 1000 Disposition Codes can be defined for a Contact Center</p>	Included
Automatically answer calls	<p>A Queue policy configuration option that, when enabled, allows ACD calls to agents to be automatically answered and rendered over the device's speaker and microphone.</p>	Included
Agent Whisper Message	<p>When enabled, allows a custom message to be played to the agent when a call comes from a contact center.</p> <p>Example: 'Call from Sales Queue'</p> <p>A separate customized message can be loaded for each Contact Center, and for each configured DNIS within a Contact Center.</p>	Included
Distinctive Ringing	<p>When enabled, a distinctive ring pattern is played to the phone device when an ACD call is delivered or when an ACD call is 'force delivered' (Auto Answer enabled) to the agent. There are 4 different ring patterns that can be assigned.</p> <p>Note: This feature is generally used in an informal contact center environment and allows the agent to distinguish between direct inbound calls and ACD calls from a few different queues.</p>	Included
Call Escalation to Supervisor	<p>Agents can quickly escalate calls to their assigned Supervisors via a button in the Contact Center client.</p>	Included

	<p>The following call escalation types are supported:</p> <ul style="list-style-type: none"> <li>• 'Normal' Escalation – this is a consultative escalation in which the calling party is placed on hold, the agent connects with a Supervisor, and the parties are joined together</li> <li>• Emergency Escalation – this is an escalation in which the calling party is NOT placed on hold, the agent alerts a Supervisor and they are immediately joined into the call.</li> </ul> <p>Using the Contact Center client, agents can see the line state of their assigned Supervisor(s) and select a Supervisor based on their line state, or a Supervisor can be automatically selected based on the Supervisor's availability.</p> <p>Any user can be assigned as a Supervisor for a contact center, including Team Leads. They need not have a Contact Center Supervisor client.</p>	
Customer Originated Trace	Agents can trigger a COT action on any active call or the last call they received, using either the Contact Center client or a FAC	
Call Hold/Retrieval Handling	Configure to prevent agents from putting a Contact Center call on hold indefinitely. Includes configurable timers that alert the agent of the held call, or returns the call to the queue.	
<b>Phone/Device Features*</b>	<b>*Features are dependent on device implementation</b>	
PC Based	Desktop application to meet the needs of the Contact Center Agent	Optional
Display Inbound call information	<p>The phone will display the following information when a call is presented</p> <ul style="list-style-type: none"> <li>• Contact Center or DNIS name and number</li> <li>• Number of calls still in queue</li> <li>• Wait time of current call</li> <li>• Wait time of longest waiting call</li> </ul>	Included
Set ACD state	Set ACD state using softkeys on phone, including Unavailable Codes	Included

Assign Disposition Code	Assign a Disposition code using softkeys on the phone	Included
View Queue Threshold	View current status of Contact Centers. The phone will display the following queue status: [CC]:empty = no calls in queue [CC]:normal = calls in queue [CC]:exceeds threshold = number of calls or longest wait time exceeds specified threshold	Included
Hoteling	Enable hoteling in a shared workstation environment. A phone button is available to enter a username and password to enable hoteling on the device. When enabled, all inbound calls to the user are directed to the device, and outbound calls are associated with the user.	Included
Services enabled via FAC/Button Activation	The following services can be enabled using FACs <ul style="list-style-type: none"> <li>• Silent Monitor Agent (Supervisor)</li> <li>• Silent Monitor next call (Supervisor)</li> <li>• Night Service activation/deactivation (Supervisor)</li> <li>• Forced Forwarding activation/deactivation (Supervisor)</li> <li>• Place Outbound ACD call</li> <li>• Place Outbound Personal call</li> <li>• Escalate call to Supervisor (Standard and Premium)</li> <li>• Initiate COT (Standard and Premium)</li> </ul>	Included
<b>Supervisor Features</b>		
All Agent features	Supervisors can also be assigned as Agents in any Contact Center, and can utilize all supported agent features.	Included
Monitor/manage agents	Supervisors can monitor the real time activity of agents, including viewing and changing agent ACD states, viewing active call information, and barging in on active calls	Included

Silent Monitoring/Service Observing	Supervisors can silently monitor the following calls Active call with agent Next call to agent Next call to Contact Center	Included
Monitor/manage queued calls	Supervisors can monitor the real time activity of queues using the Contact Center Supervisor client, including viewing queued calls and transferring calls out of the queue.	Included
Agent Call Handling Preference	Supervisor has the ability to specify skill(s) for Agent(s)	Included
Expert Agent Selection	Allows Supervisor to specify a skill level 1 – 16 within a skill.	Included
Real time Dashboard	Supervisors can monitor a real time dashboard of key performance indicators for queues and agents using the Contact Center Supervisor client	Included
Remote Logout of Agent	Ability to log out an idle Agent without being present at the Agent’s station.	Included
<b>Reporting Features</b>		
Agent Reports	Call Detail Report, Call Report, Duration Report, Activity Report, Summary Report, Unavailability Report, Disposition Code Report, Sign-In/Out Report, Agent Activity Detail Report, Agent Call by Skill, Agent Duration by Skill	Included
Queue Reports	Call Detail Report, Incoming Calls Report, Contact Center Report, Abandoned Calls Report, Summary Report, Service Level Report, Disposition Code Report, Overflow Report	Included
Scheduled Reports	Reports can be scheduled such that they are automatically run and delivered to specified users based on a configured schedule	Included
Custom Reports	Custom reports can be created using existing data templates for agents or queues.	Optional
Report Filters	Filters can be applied to reports to screen out undesired data	Optional

Export Reports as XLS and PDF	Reports can be delivered in HTML, or exported in XLS or PDF format	Included
Report Branding	Reports can be branded by the Service Provider or Company	Optional
<b>Assignable Services</b>	<b>These services can be assigned to a Contact Center and affect all calls that are received by the queue.</b>	
Alternate Numbers	Enables Contact Centers to have up to ten additional phone numbers and/or extensions assigned to them. 'Normal' ringing is provided for incoming calls to the primary phone number and optional distinctive ring tones can be configured for calls to the alternate phone numbers.	Included
Call Forwarding Always	Enables a Contact Center to redirect all incoming calls to another phone number.  Alternative to Forced Forwarding	Included
Call Forward Selective	Enables a Contact Center to define criteria that causes certain incoming calls to be redirected to another destination. If an incoming call meets user-specified criteria, the call is redirected to the specified destination.  A criteria set is based on incoming calling line identity, time of day, and day of week. Multiple criteria sets can be defined.  Alternative to Night Service or Holiday Service	Included
Call Waiting	Allows an Agent to receive new inbound calls when they are on an active call.  For Contact Center agents, this setting is controlled in the Contact Center configuration settings. An option exists to 'Allow call waiting on agents'.  This setting is typically DISABLED in a formal contact center environment.	Included

Call Notify	<p>Enables a Contact Center to define criteria that cause certain incoming calls to trigger an e-mail notification. If an incoming call meets user-specified criteria, an e-mail (or short message to a cell phone) is sent to the notify address informing the recipient of the details of the incoming call attempt.</p> <p>A criteria set is based on incoming calling line identity, time of day, and day of week. Multiple criteria sets can be defined.</p>	Included
Do Not Disturb	<p>Allows Contact Center to be set as 'unavailable' so that incoming calls are given a busy treatment.</p> <p>Can be used for After Hours service in an informal contact center.</p>	Included
Pre-Alerting Announcement	<p>A Pre-Alerting Announcement allows users to provide a customizable announcement to be played to the calling party before alerting the user's device. The announcement can be configured to be interruptible by the calling party via a configurable dual-tone multi-frequency (DTMF) sequence.</p>	Included
Voice Messaging	<p>When callers escape from the queue, they can be directed to a voice mailbox assigned to the Contact Center and leave a message.</p>	Optional
Message Waiting Indicator	<p>Message waiting notification for a new message left in a Contact Center voice mailbox is sent to the Contact Center Supervisor client.</p>	Included

**4.2.1.1.4.4** Some State agencies require the ability to utilize call recording, both on-demand and session-initiated. Certain call recordings will contain sensitive data (PHI, PII, etc.) and will require proper security protocols when transmitting or storing this information, with role-based access as defined by the State. Please describe your solution's call recording capabilities, and any additional requirements for the State in order to utilize these features.

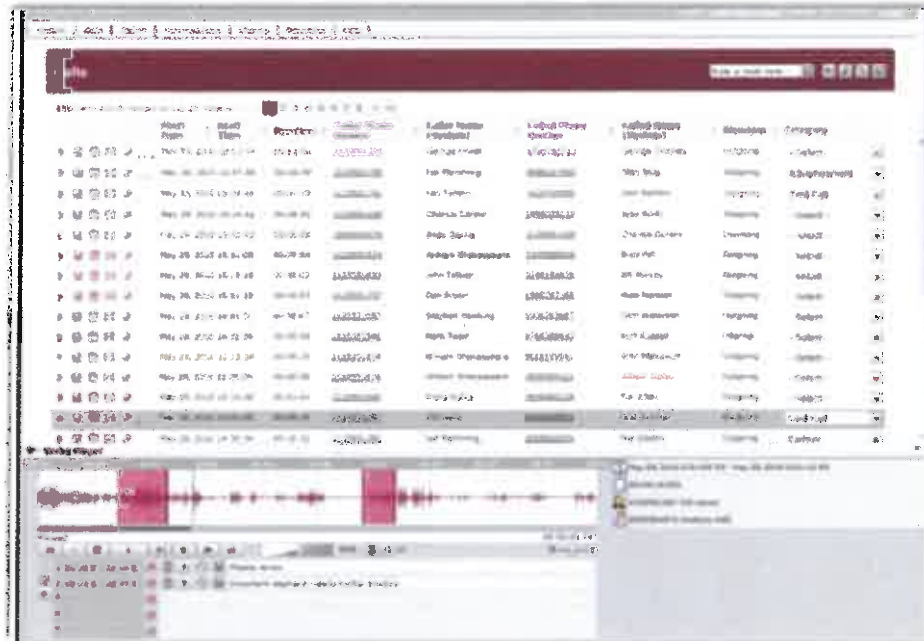
Our statewide hosted solution leverages a robust central call recording platform. Users can be added or removed at the customer's request. Once added all of a user's calls are recorded, and available for playback via an administrator portal.

The Recording System offers a versatile set of functionalities in order to support requirements by every agency. The capabilities that Lumos Networks' Call Recording service includes are all listed below.

Full always On Recording –This inherent feature ensures all calls are recorded automatically.

On Demand Recording- is a client based option that

- Centralized Web-based Portal –Lumos Networks’ feature-rich web based user interface for Call Recording provides quick and easy tools that available at anytime from anywhere. The Features of the web based portal are listed below.



**Search recordings using meta-data information**

Easily define search queries including any meta data fields: call start date and time, duration, calling and called party information including phone numbers and names, comments, etc. Additionally, customers can configure custom fields to capture any relevant information about the calls.

Powerful search result lists with sophisticated features like ordering, paging, one click action for playback, download, delete, etc., additional filtering options to focus on certain calls, export options to XLS, PDF or RTF.

The timeline viewer provides a unique and user friendly data visualization method with enhanced controls like scrolling, zooming, filtering and highlighting.

- Playback Experience - Lumos Networks' Call Recording Service provides an unmatched playback experience for the Agency's administrator. The features included in the playback experience are listed below.



Web based: playback functionality is available right in the browser window, no need for installing client applications (any client computer equipped with Microsoft Windows Media Player can use Lumos Networks' Call Recording Player)

Enhanced player controls: in order to fine-control the playback Lumos Networks' Call Recording Player provides sophisticated playback controls like: play, pause, stop, play selected, begin, end, fast forward, fast reverse, playback speed control, volume control and stereo channel control.

Markers: markers allow users to highlight and annotate certain parts of the recorded conversations, and share this information with other users in the system. Markers can be placed manually using the intuitive Lumos Networks' Call Recording Player during the call (if you reached an important part of the ongoing conversation, just hit a button on the phone and you will be able to get back to that section of the call quickly and easily later and add additional comments or let a supervisor review that portion). Markers can be also placed by any 3rd party application using a standard API, so important events like placing an order, etc. can also be marked during the phone conversation. Another useful feature of the markers enables users to export and download the marked segment of the call to standard WAV files. The effective utilization of the Lumos Networks' Call Recording Player marker functionality allows organizations to increase productivity by reducing time required to find important and relevant parts of the recorded interactions.

Waveform display: call visualization provides a unique view of the recorded voice conversations and allows users to easily position to those parts of the calls where actual speech is happened.

**4.2.1.1.4.5** The State may utilize an outbound predictive dialing campaign, at an Agency's request. Please describe your solution's capabilities in providing predictive dialing campaigns.

Lumos will work with the Agency's on a case by case basis in conjunctions with implemented solution and campaign requirements.

**4.2.1.2 Security for Vendor's Hosted Solution**



The State's goal is to ensure the Vendor's solution adheres to industry standard security practices and provides for sensitive data protection (where required) as it relates to cloud-based services. As such, the Vendor should:

**4.2.1.2.1** Describe how its solution leverages high security standards associated with regulated data and/or high availability requirements, but also offers a cost-effective, standard-security solution option to the state.

Lumos Networks' security program is based on the NIST Cyber Security Framework (CSF), using ISO 27001, 27002, 27005 and the NIST 800-53 as references for control and risk management implementation. These widely recognized national and international standards describes security management best practices. The Lumos Networks security program requires us to:

- Routinely evaluate our information security risks with audit, security and risk assessment activities.

Manage identified risks by mitigating, eliminating, sharing or retaining risks based on the dollar cost value of the mitigation compared to the risk scoring (likelihood\*impact) or annualized loss expectancy of the risk.

Implement technical and operational security controls to control risk based on guidance from ISO 27002 and NIST 800-53.

Reflect the above mentioned processes and controls in our company policies and procedures. Evaluate the performance and completeness of the security program with ongoing and routine security evaluations of varying sorts.

**4.2.1.2.2** Describe its policies and procedures for conducting sub-contractor assurance, validating both the capability of the vendor to fulfill contracted responsibilities and adhere to all applicable to security & privacy policies and controls of all parties.

Subcontractors and vendors are subject to a supplier relations policy based on ISO 27002 section 15, NIST 800-53 PS-7, SA-9 and SA-12.

Individual contractors hired as contingent workers are subject to HR vetting, including criminal background checks, prior to hiring.

Vendors must undergo a risk assessment including company background, reputation, financial condition and their security controls. Much like how WV is evaluating us. A list of Lumos Networks information assets or physical access being made available to the new vendor must be identified in the risk assessment. Any technology supplied must undergo a technical evaluation by the Lumos Networks security team prior to purchase.

New vendors must be reviewed and approved by the Lumos Networks CTO and General Counsel.

Contractors with access to Lumos Networks confidential information or facilities must acknowledge their responsibility regarding Lumos Networks confidentiality and sign an NDA.

Availability and performance requirements are specified in contract.

In some cases the risk assessment may indicate that additional controls are required. Said controls are implemented in contract.

**4.2.1.2.3** Describe its company's cyber security and privacy management program including an overview of the governance structure, cyber security strategy, and the experience of personnel in key security and privacy roles.

Lumos Networks' security program is based on the NIST Cyber Security Framework (CSF), using ISO 27001, 27002, 27005 and the NIST 800-53 as references for control and risk management implementation.

The program is governed by a series of written policies and standards issued by senior management. Risk assessments performed by the security team or third party engagements identify areas where new controls should be implemented into policy. The security team audits against the published policy and standards. Risk assessment, audit findings, and correction and mitigation activity are discussed with senior management monthly.

The overall Lumos Networks security program strategy is to continuously collect information about risks via research, technical evaluations, incident evaluation, external threat catalogs, interviews with key personnel (such as regulatory), vulnerability scanning, penetration testing, comparisons against recognized security best practices, physical inspection and audit against Lumos Networks policy. These activities are primarily done internally, with a minimum of an annual engagement from a third-party assessor. Risks are scored using input from technical and business subject area experts using the OWASP methodology or similar. Specific vulnerabilities or policy violations are then assigned to the appropriate operational teams to correct.

#### **4.2.1.3 Service and Support for Vendor's Hosted Solution**

The State's goal is to partner with a Vendor whose service and support structures allow the State to focus on its core services, while ensuring telephony and contact center systems are available to State Agencies, with certain Agency sites (hospitals, jails, etc.) operating critical services 24x7x365. The State desires a Vendor to provide all levels of tiered support, including Tier 1 support for end-users. To this end, the Vendor's service and support structure for the Vendor's hosted solution should provide for the following:

**4.2.1.3.1** Performance monitoring, capacity planning, and real-time surveillance of the Vendor's network to ensure 99.9% availability of services and provide network utilization reports upon request. Please describe your company's process and ability for providing this information upon request, including any lead times needed and how the State submits these requests.

Lumos Networks' primary Network Operations Center (NOC) is located in southeastern US at 1500 Hampton Street in Columbia, South Carolina and will serve as the single point of contact for State of West Virginia for all trouble reporting. Lumos also has a secondary NOC located near Charlotte, North Carolina. The NOC is available toll free 24 hours a day, 7 days a week, 365 days a year at 888-864-7226.

The Lumos NOC is divided into two distinct groups, defined as Customer Network Operations Center (CNOC) and Surveillance. The Lumos Networks CNOC is the single point of contact (SPOC) responsible for engaging the necessary resources and organizations to resolve customer issues. The CNOC consists of direct customer facing analysts while the Surveillance team actively monitors the network for anomalies. The NOC, as a whole, will maintain ownership of all customer issues and continually update the trouble ticket as well as the State user with updates including a resolution reason when corrective measures are confirmed.

The CNOC was established so Lumos could have a direct focus on our end user customers. This support organization operates in a contact center environment whose sole responsibilities are working customer driven issues. This team owns the issue, isolation, repair and communications back to the customer. The CNOC is staffed with both Tier 1 and Tier 2 skills for each customer technology that Lumos offers. If a Tier 1 technician working an issue cannot resolve the issue he will escalate to a Tier 2 team member for next level escalations. Once the Tier 2 team receives the trouble ticket, correlation of all troubleshooting steps by the Tier 1 group immediately initiates second level processes. If the Tier 2 technician cannot resolve the trouble in a timely manner the ticket is escalated to the NOC Tier 1 technician. At this point NOC troubleshooting and escalations processes are followed.

Lumos's state of the art NOC is responsible for ensuring Lumos's core and access networks are performing as designed. The NOC is also key in working alarms and troubles across all networks and all technologies. The NOC is comprised of Transport, IP/Security, Voice and Web services technicians. Within each technology Lumos has trained Tier 1 and Tier 2 skill levels. In the event a Tier 1 technician cannot resolve a trouble, they escalate internally to a Tier 2 team member. The Tier 2 will immediately take ownership of the ticket and begin troubleshooting. If the Tier 2 technician cannot resolve the trouble in a timely manner the next escalation path is one of Lumos's Engineering teams.

CNOC Analysts receive all incoming calls and create trouble tickets in our ticketing systems called IVY for the reported issues. Updates for trouble tickets created will be provided by the CNOC to the customer via phone and/or email. The analyst will work the issue to resolution, and escalate tickets to the respective support groups or vendors as necessary. All trouble tickets are updated with detailed actions taken, relevant times, applicable names, business associations, and end with a detailed resolution.

**4.2.1.3.2 The State desires regularly scheduled meetings and/or calls to discuss the following areas:**

- Architecture and Design
- Implementation
- Ordering and Billing

- Service and Support
- Project Management

Please describe your company's ability to hold regular meetings on each of these topics, as well as your company's implementation plans for starting these discussions.

Lumos Networks will have a series of personnel who will be dedicated to ensuring the State's desires are not only met but exceeded.

Upon award, Lumos Networks will work with the State to create an implementation plan that matches the full development method, ensures that the resources understand the full commitment, and sets an expectation for the deliverables and dates.

### **Account Team**

Lumos Networks has maintained and will continue to have a designated account team who would be responsible for ensuring the overall satisfaction of the State and our mutual customers served under this Hosted IP Telephony contract. This team will be available anytime to support the State as it relates to new orders, stewardship meetings, or non-service related items.

The Lumos Networks account team is extremely knowledgeable with a tremendous amount of experience working with many government contracted services, including numerous State of WV agencies currently. This team is led by Greg Florence, Major Account Manager and is supported by Regional Sales Director, Chip VanAlsburg, Randy Jones, Sales Engineer as well as Sales Vice President, Glenn Lytle.

These employees currently work closely each day on ordering, provisioning and cross-functional teams to ensure the timely and successful delivery of services to meet the customer's needs. In working with these customers daily, each has developed strong, positive relationships with these users.

Lumos Networks Account Team members will initiate the project and schedule the project Kick-off meeting with the agency and appropriate Lumos Networks personnel. The purpose of this meeting will be to establish the roles and responsibilities and reach a mutual agreement with the agency and the Lumos Networks Project Team on strategic objectives, plan of approach, priorities and timelines. The information obtained during this meeting will allow Lumos Networks to create an integrated project plan that will serve as the "roadmap" for the implementation. The results of this planning will be:

1. The Project Scope and Charter, including a plan to ensure appropriate project governance is in place to efficiently resolve issues and make decisions, as well as meaningful project performance metrics by which success will be measured;

2. A Project Plan including a detailed Work Breakdown Structure (WBS) outlining all tasks, task ownership, and task dependencies associated with the project;
3. A documented Risk Assessment based on an analysis performed with the customer's assistance;
4. A mutually acceptable Risk Mitigation Plan; and
5. A clearly defined Communication Plan.

After this initial meeting, the Government Account Team representative will distribute documentation to the team and formally confirm the scope and schedule requirements. All intervals will be clearly communicated to the team.

### **Architecture and Design**

A function of the Lumos Networks Sales Engineering Team, this resource will be fully engaged in the State's network as well as the services offered. Randy Jones, Sales Engineer for WV, will serve as the primary contact for the State with Darald Boothe, Manager of Sales Engineering, serving as the backup.

### **Implementation & Project Management**

Lumos Networks has a robust Project Management Team that consists of multiple Project Managers/Project Coordinators with most having ten (10) plus years of managing projects. The goal of our project management team is to provide a superior, seamless experience to our customers by establishing a Single Point of Accountability within Lumos Networks for service implementation projects.

Lumos Networks will provide a dedicated project manager to oversee the implementation of the VoIP solution and platforms. The Project Manager will ensure that expedites, escalations, and jeopardies are handled appropriately and that all critical project dates are met. The Project Manager will coordinate the activities of individual project team members across all Lumos Networks departments (as well as the customer's vendors if the customer concurs) and will ensure that all field personnel are assigned as needed based on the location and scope of the project.

The Project Manager will also meet with the customer at regularly scheduled intervals, as mutually agreed upon. The purpose of the meetings will be to provide status reports to the customer; to identify, assign, and track to closure all project issues and action items; and to reach agreement on all changes to project scope. The timing and location of these meetings will be established with the customer during the project-planning phase, and the meetings may be in person or via conference call as deemed necessary by both parties.

After installation is complete and service has been activated and tested, signed customer acceptance will be obtained, scanned and saved to the appropriate customer project file. In closing the project, the

Project Manager will lead the team in a Project Phase Review which will include a First Bill Review, a Quality Review, and Financial Audit will be scheduled to ensure that the contract and billing matches the original customer requirements as adjusted based on changes recorded in the Change Control Log. Project Closeout activities will also include knowledge transfer and the release of project resources.

### **Support Services**

Lumos Networks offers a Customer Solution Center (CSC) located in Columbia, South Carolina. Lumos Networks prides itself in Customer Service, the personal way. When you call Lumos Networks Customer Care you speak directly with our representatives located in Columbia, South Carolina and Waynesboro, Virginia – not to another country and not to automated prompts or recordings.

The CSC is Lumos Networks Tier One customer support group responsible for handling and triaging all incoming requests. Our highly trained professionals provide outstanding customer support and do their utmost to deliver first-call resolution and assistance with product information, service ordering and billing inquiries. Lumos Networks CSC can be reached at 1-800-686-7671 or [customer-care@spiritcom.com](mailto:customer-care@spiritcom.com).

Lumos Networks will also provide a direct contact to a dedicated support manager who can triage any service related item. Furthermore Lumos Networks will have trained support technicians in our Elite Customer Network Operations Center that will be specifically trained on the State's network to reduce the MTTR on tickets. This will also alleviate the need in having to explain your trouble to different departments as the trouble is triaged.

**4.2.1.3.3 Vendor should contact the State's engineering points of contact by phone within 30 minutes of a Vendor network outage that affects multiple sites on the State's network. This verbal notification should be followed with a written report that provides an explanation of the problem, the cause of the problem, the solution to the problem, the estimated time for recovery, and the steps taken or to be taken to prevent a reoccurrence. To that end, please describe your company's notification procedures in the case of an outage.**

Lumos' Network Operations Center is responsible for all network related alarms. Once an alarm is presented and correlated to an outage event, a Proactive Monitoring (PM) ticket is created and sent to the CNOC for notification and triage. The CNOC process is to contact the Agency if it's an isolated incident. In the event of a major or catastrophic event, Lumos contacts the DTO Helpdesk immediately via telephone and lets them know of the event.

The NOC analyst receives an automatically generated ticket in Ivy Ticketing based on an alarm being generated by NetCool. The alarm can represent either a service outage or service degradation condition. When a NOC analyst receives an alarm indication via the network management system, the steps toward resolution are as follows:

1. Analyze the ticket and populate it with as much additional relevant data as possible in an effort to understand the trouble. Relevant data might include any additional customer information and any available problem information that is not already populated.
2. DTO will automatically be emailed that a ticket has been opened. DTO will be notified via direct phone contact on service affecting conditions.
3. If the problem has been dispatched to a third party such as an ILEC, the ticket gets placed in “Dispatch” status to include the responsible party’s ticket number, call back number, contact name, etc. If there is no third party involved the NOC resolves the problem. The NOC owns all primary tickets through trouble resolution. Tickets will be presented for viewing through the DTO Web Portal.

Lumos will provide a post-mortem report for all emergency and major outages to include analysis and determination of the root cause, resolution of the outage and preventative measures instituted.

**4.2.1.3.4 Vendor should provide written notification often (10) businessdays or more in advance of any planned upgrades, modifications, etc. that may affect the State's customers to the State's engineering points of contact. Please describe your company's notification process for planned maintenance.**

Lumos Networks will perform routine and preventive maintenance activities in the following manner.

1. Advance notifications of 14 days will be sent via E-mail to Agencies and the State of West Virginia Department of Administration Information Technology, if so desired
2. A detailed Method of Procedure (MOP) can be provided to the Agency prior to any such activity being performed
3. All maintenance activity and MOP activity will be under the direction and management of Lumos Network Control Center (NOC).

**4.2.1.3.5 Vendor should provide notification of three (3) business days or more in advance of emergency maintenance. While the State understands emergency outages and/or unplanned maintenance windows occur, it is expected that these situations are kept to a minimum. Please describe your company's notification process for emergency maintenance and outages.** Maintenance notifications for regularly scheduled or for emergency maintenance work are key in ensuring our customers are prepared for any service interruptions that may occur as result of preventative maintenance or network equipment failures.

Joint round-table discussions will be held during the monthly Status Meetings and during a scheduled Change Control Board Meetings in order to maximize input from the state of West Virginia, and allow customer input for improved efficiencies. These monthly meetings will also be a forum to discuss proactive and preventative maintenance programs.

**4.2.1.3.6** If the Vendor's work requires them to be at a State site, the Vendor should provide Agency at least 72 hours' notice before arriving at the site and comply with State law and all Agency policies, including but not limited to background checks for contractors, vendors, and visitors. Please describe your approach and methodology in your solution/response.

Lumos Networks has read, understands, and will comply. Lumos Network's will notify the Agency 72 hours prior to arriving on site.

Lumos Networks requires all employees and contractors to complete comprehensive drug screenings and background checks for all personnel working for or on behalf of our company.

To ensure that individuals who join Lumos Networks are well qualified and have a strong potential to be productive and successful, and to further ensure that we maintain a safe and productive work environment that is free of any form of violence, harassment, fraud or misconduct, it is our policy to perform pre-employment screening on all applicants who are offered and accept an offer of employment. A comprehensive background check may consist of prior employment verification, professional reference checks and educational verification as well as credit, criminal and driving records checks. Lumos Networks also reserves the right to conduct a background screening any time after an individual has been employed to determine eligibility for promotion, reassignment or retention.

Lumos Networks agrees that any person who is an employee or agent of Lumos Networks or Subcontractor and who enters the premises of a facility under the jurisdiction of an agency may be searched, fingerprinted, photographed and required to wear an identification card issued by the agency.

**4.2.1.3.7** The Vendor's network operation support center should provide: all tiers of support, including end-user support, advanced technical expertise, be staffed with resources that are proficient in spoken and written English, maintain and take responsibility for trouble tickets reported by the State until resolved, and provide a tiered support escalation process. Please describe your network operation support center's structure, processes, and procedures for handling trouble tickets, resolving those tickets, and reporting back to the State's point of contacts.

Lumos Networks has redundant Network Operations Centers (NOC) located in Waynesboro, Virginia, Columbia, South Carolina and Charlotte, North Carolina. Lumos uses a rotating schedule to ensure 24x7x365 staffing. Each organization staffs Tier 1 and Tier 2 trained technicians.



The Lumos NOC is divided into three distinct groups, defined as Customer Network Operations Center (CNOC), Network Operations Center Surveillance (NOC) and Security Operations Center (SOC). The Lumos Networks CNOC is the single point of contact (SPOC) responsible for engaging the necessary resources and organizations to resolve customer issues. The CNOC consists of direct customer facing analysts while the Surveillance team actively monitors the network for anomalies. The NOC, as a whole, will maintain ownership of all customer issues and continually update the trouble ticket as well as the State user with updates including a resolution reason when corrective measures are confirmed.

The Lumos Customer Network Operations Center (CNOC) will serve as the single point of contact for all trouble reporting. The CNOC is available toll free 24 hours a day, 7 days a week, and 365 days a year at 888-864-7226. Lumos also offers a web-based trouble reporting tool for opening trouble tickets, service inquiries and status reports accessed via our dedicated website.

The CNOC was established so Lumos could have a direct focus on our end user customers. This support organization operates in a contact center environment whose sole responsibilities are working customer driven issues. This team owns the issue, isolation, repair and communications back to the customer. CNOC technician responsibilities are:

- Receive all customer incoming trouble calls
- Create tickets in Lumos' Ivy Trouble Ticketing System
- Provide timely updates to customers
- Work tickets and escalate when necessary

The Lumos Network Operations Center (NOC) is responsible for ensuring that Lumos' core and access networks are performing as designed. The NOC is comprised of Transport, IP/Security, Voice and Web services technicians and responsible for the following:

- Network surveillance
- Environmental alarms
- Maintenance notifications
- Work tickets and escalate when necessary

The Lumos Security Operations Center (SOC) brings together the people, technology and process to identify threats in real-time and take immediate action. In partnership with our Network Operations Center, our network is monitored 24x7x365. This team is responsible for the following:

- Identifying real-time threats
- Triaging and mitigating through automation and manual investigation and remediation

- Ensuring that all traffic is scrubbed against the latest threat intelligence
- Provides access to real-time security analytics, access to qualified cyber-security professionals and automated management of threats that can be addressed in line to ensure that they never reach a customer's facility

CNOC Analysts receive all incoming calls and create trouble tickets in our ticketing system for the reported issues. The analyst will work the issue to resolution and escalate tickets to the respective support groups or vendors as necessary. All trouble tickets are updated with detailed actions taken, relevant times, applicable names, business associations, and end with a detailed resolution. Updates for trouble tickets created will be provided by the CNOC to the customer via phone and/or email. Lumos' on-line trouble ticketing system also allows the end user to view the status of service troubles 24 hours per day, 7 days per week.

The severity/priority levels and escalation procedures are identical for all traffic types. The management escalation procedures for each severity/priority level are as follows:

- Critical - A Critical ticket is defined as a service outage, which has a severe impact to customer business operations with no work-around available. This condition includes a critical work stoppage during the customer's normal working hours that affects multiple customer sites and/or affects a critical component or function of the customer's business. Lumos Networks and its vendor/partners will commit substantial resources around the clock to resolve the situation. Examples of critical outages include an agency host major outage or 10% or greater of the current agency node count in production status.
- Critical – Escalation Interval
  - Immediate: CNOC Manager & Director
  - 2 Hours: Vice President
- Major - A Major ticket describes a condition where a partial service outage occurs or the service is severely degraded, which has a significant impact to customer business operations, with no adequate work-around available. This condition includes a partial work stoppage or severe performance degradation during the customer's normal working hours, which affects a customer site. Lumos Networks and vendor-partners will commit full time resources during business hours or around the clock as necessary to resolve the situation.

- Major – Escalation Interval
  - Immediate: Tier 3 CNOC Analyst
  - 1 Hour: Floor Manager
  - 2 Hours: CNOC Manager
  - 3 Hours: Director
  - 5 Hours: Vice President
  - Escalations can be made at DTO’s request.
- Minor - A Minor ticket describes conditions where difficulties are experienced with a transport service but do not cause a work stoppage; there is a workaround but performance and/or system functionality may be degraded or limited. This condition includes degraded service performance, impaired service functionality, but most business operations continue. Workarounds are established, implemented, and documented for problems with this priority level. Lumos Networks will commit resources during business hours as required to resolve problems with this severity level.
- Informational - An Informational ticket describes conditions which are not urgent and/or are not problems and/or that do not impact customer business operations. Informational tickets are for the CNOC. This Priority Level is most appropriate for:
- Minor Alarms and Informational alarm
  - Escalations can be made at customer’s request.

The management team makes the decision for technical resource escalations as necessary as there is no formal timeline for the need for the appropriate technical resource. The following is the technical escalation path and the corresponding skill set of each organization:

- Tier II Support Analyst (CCNA)
- Tier III Support Analyst (CCNA through written CCIE)
- Network Technical Assistance Center (CCNA through CCIE)
- Engineering – Architectural and Sustaining Engineers as required.

If at any time you feel the normal trouble repair process does not meet your needs, please use the following escalation procedures:

1. Call the CNOC Manager and identify yourself and the trouble about which you are inquiring (trouble ticket number).
2. Explain the steps that have been taken. The manager will be able to discuss the status of your trouble report and provide you with additional information regarding completion of the repair.
3. At any time you are not satisfied with the progress, escalate to the next level.

**4.2.1.3.8** The Vendor's solution should include a documented support and escalation structure to address outages. The State prefers the severity of the issue/support problem to determine the average problem resolution response time, as outlined below:

- Severity Level 1 is defined as an urgent situation, where the customer's services are unavailable and the customer is unable to use/access the network. The Vendor should resolve Severity Level 1 problems as quickly as possible, which on average should not exceed two (2) business hours. If repair inside the 2-hour window is not feasible, then regular 1-hour updates are desired.
- Severity Level 2 is defined as significant outages and/or repeated failures resulting in limited effective use by the customer. The service may operate but is severely restricted (i.e. slow response, intermittent but repeated inaccessibility, etc.). The Vendor should resolve Severity Level 2 problems as quickly as possible, which on average should not exceed four (4) business hours. If repair inside the 4-hour window is not feasible, then regular 2-hour updates are desired.
- Severity Level 3 is defined as a minor problem that exists with the service, but most of the functions are still usable, and some circumvention may be required to provide service. The Vendor should resolve Severity Level 3 problems as quickly as possible, which on average should not exceed ten (10) business hours. If repair inside the 10-hour window is not feasible, then updates are desired at the start of the next business day and every day thereafter until repairs are complete.

Please describe your company's severity level structure, as well as your documented procedures for handling outages, including escalation processes, notification methods, and resolution times.

The ticketing system allows real time updates via email as major milestones are accomplished in the ticket triage process. This will allow the Agency to be abreast of the ticket activity. Furthermore, it will be available to all support personnel needed to update the Agency via telephone.

Lumos Networks' primary Network Operations Center (NOC) is located at 1500 Hampton Street in Columbia, South Carolina and will serve as the single point of contact for DTO and the State of South Carolina for all trouble reporting. Lumos also has a secondary NOC located near Charlotte, North Carolina. The NOC is available toll free 24 hours a day, 7 days a week, and 365 days a year at 888-864-7226.

The Lumos NOC is divided into two distinct groups, defined as Customer Network Operations Center (CNOC) and Surveillance. The Lumos Communications CNOC is the single point of contact (SPOC) responsible for engaging the necessary resources and organizations to resolve customer issues. The CNOC consists of direct customer facing analysts while the Surveillance team actively monitors the network for anomalies. The NOC, as a whole, will maintain ownership of all customer issues and continually update the trouble ticket as well as the State user with updates including a resolution reason when corrective measures are confirmed.

The CNOC was established so Lumos could have a direct focus on our end user customers. This support organization operates in a contact center environment whose sole responsibilities are working customer driven issues. This team owns the issue, isolation, repair and communications back to the customer. The CNOC is staffed with both Tier 1 and Tier 2 skills for each customer technology that Lumos offers. If a Tier 1 technician working an issue cannot resolve the issue he will escalate to a Tier 2 team member for next level escalations. Once the Tier 2 team receives the trouble ticket, correlation of all troubleshooting steps by the Tier 1 group immediately initiates second level processes. If the Tier 2 technician cannot resolve the trouble in a timely manner the ticket is escalated to the NOC Tier 1 technician. At this point NOC troubleshooting and escalations processes are followed. Lumos's state of the art NOC is responsible for ensuring Lumos's core and access networks are performing as designed. The NOC is also key in working alarms and troubles across all networks and all technologies. The NOC is comprised of Transport, IP/Security, Voice and Web services technicians. Within each technology Lumos has trained Tier 1 and Tier 2 skill levels. In the event a Tier 1 technician cannot resolve a trouble, they escalate internally to a Tier 2 team member. The Tier 2 will immediately take ownership of the ticket and begin troubleshooting. If the Tier 2 technician cannot resolve the trouble in a timely manner the next escalation path is one of Lumos's Engineering teams. CNOC Analysts receive all incoming calls and create trouble tickets in our ticketing system called IVY for the reported issues. Updates for trouble tickets created will be provided by the CNOC to the customer via phone and/or email. The analyst will work the issue to resolution, and escalate tickets to the respective support groups or vendors as necessary. All trouble tickets are updated with detailed actions taken, relevant times, applicable names, business associations, and end with a detailed resolution.

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- Critical – Escalation Interval
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- Major – Escalation Interval
  - Immediate: Tier 3 CNO Analyst
  - 1 Hour: Floor Manager
  - 2 Hours: CNO Manager
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  - 5 Hours: Vice President
  - Escalations can be made at DTO's request.

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- Network Technical Assistance Center (CCNA through CCIE)
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If at any time you feel the normal trouble repair process does not meet your needs, please use the following escalation procedures:

1. Call the CNOC Manager and identify yourself and the trouble about which you are inquiring (trouble ticket number).
2. Explain the steps that have been taken. The manager will be able to discuss the status of your trouble report and provide you with additional information regarding completion of the repair.
3. At any time you are not satisfied with the progress, escalate to the next level.

**4.2.1.3.9** The State desires the ability to place initial service orders, any changes with an associated charge, or to disconnect services, electronically and receive confirmation of receipt and subsequent order detail. The State desires details including the following data elements:

- Telecommunications Change Request (TCR) Form Number
- Date order was received
- Customer Name

- Customer on-site address
- Projected due date
- Rate element identifier (circuit ID or other)
- Additional order details

Additionally, the State prefers the Vendor's solution has a web portal for Agencies to enter moves, add, and changes that do not contain billing elements. MACD changes should be resolved by the same or next business day. Please describe your company's ability to accept, process, and report on electronic order submissions, as well as any requirements from the State needed to implement such a program.

Lumos Networks' Statewide Hosted VoIP Platform provides an Administrative Web Portal for all required administrative functions. Service administration covers, at a minimum, the following: MACD orders, billing views, reporting tools, access to change simple routing and features on a single set, and trouble incident reporting. The platform offers various levels of access via the web portal including:

**System Level Admin:** The deepest security level, this is reserved for base platform management and would be Lumos Networks' domain

**Service Provider / Enterprise Admin:** The State of South Carolina would be configured as an Enterprise and an Enterprise Admin person would have the ability to add in new locations, create, delete, change accounts and all applicable functions.

**Group Admin:** A Group is typically defined as a single location or office, an Enterprise would contain multiple Groups, typically a Group Administrator would be responsible for Moves, Adds, and Changes to accounts at that location.

**User / Account:** The end user would also have access to the web portal, the security would be configured so that the end user can only see and configure features that are assigned to that subscriber. This access is for normal day to day functions.

Agencies will access a web based landing page with security roles. Upon accessing the landing page, a Agency will enter their user name and password. The user name and password will be automatically associated with specific pre-defined security rolls. Based on the security roll assigned to the user, the Agency will receive a menu showing only the Lumos Networks systems that have been approved for that security access. The Agency will then log into the specific system needed to perform the tasks necessary.

Lumos Networks ePortal access will be governed by role-based security only to authorized Agency users and will follow authentication and authorization process for information access. These security roles will dictate read-only or read-write permissions to all agent types. User roles will be configurable, but at the



minimum will be defined for: DoT State Administrator, DoT State Contracts Manager, DoT Help Desk User, Agency Administrator, Agency Billing Function User, and Agency Help Desk User.

Lumos Networks' ePortal will provide current and historical billing, service administration, and incident reporting information, which will be accessible based on role-based security assigned to the Agency user. Based on user's role Web Portal will provide access to solution supporting sub-systems, which include: BroadSoft CommPilot, Avaya Control Manager, Avaya CMS, eLumos Networks, Remedy Incident Management System (Remedy IMS), and ePay.

**4.2.1.3.10** The State maintains a Learning Management System (LMS) for training purposes. The State desires web-based training and training materials for all services offered under this contract. The State desires the Vendor to provide materials that can be uploaded into its LMS, initial Train the Trainer session(s), and documentation/reference materials that can be distributed to and used by end-users. The State intends to incorporate these materials into its LMS, as well. Additionally, the State desires training sessions, if requested by the Agency, and the Vendor should include a professional services rate for training that would be above and beyond the initial training included in the site deployment. The expects the Vendor's training materials to be updated as necessary. The training services for the hosted voice services should be included in the monthly per package cost. Please provide information regarding your training program.

Lumos Networks has a dedicated training team that will provide onsite training and additional formats to include videos, documents, and content, made to be uploaded into the state's LMS platform.

- End User
  - Videos: Device/Application overview (2-4 minute video to demonstrate a simple walkthrough of usage)
  - Videos: Feature Overviews (30-90 second videos to demonstrate and explain the individual features of the device)
  - Document: Device/Application Quick Reference Guide (Small postcard to be used as a quick reference guide for common features)
  - Document: Voicemail Quick Reference Guide (Small postcard to be used as a quick reference guide for setup and use of voicemail)
  - Document: Quick Start Guide (2-5 Page Guide to be used as an initial use guide)
  - Call Center Agent and Supervisor Guides: User Guide (2-5 Page Guide to be used as an initial use guide for call center device and application use)
- Administrator

- Videos: Admin Portal Guides (2-5 minute videos to explain features and changes in the administrative portal)
- Document Feature Guides: (Documents to explain features and changes in the administrative portal)

Initial training will be conducted at the request of the agency via the vendor providing an on-site resource, if an install is single site and greater than 10 users, or if install is multi-site install where a centralized training location can be designated.

If an install is multi-site and a centralized training location cannot be designated, or an install is a single site with less than 10 users, initial training will be offered via webinar format to allow for Q&A and specific feature review if necessary.

Initial training will include a walk-through of the documentation and content provided for the purpose of the upload to the state's LMS platform. Additional webinar training will be conducted at the professional services rates as noted within the Cost Proposal, and additional on-site training will be conducted at the professional services rates as noted within the Cost Proposal.

**4.2.1.3.11** The State desires an hourly rate for Hosted Contact Center Training Services in the instance the State desires training sessions beyond the training provided at initial implementation. The training at initial implementation should be built into the one-time costs for the Contact Center. These training services should include training for all contact center roles and should be provided at the State's request. Please describe your Contact Center training offerings and your solution's ability to meet this goal.

Hosted Contact Center Documentation will be included in the content provided for upload to the state's LMS system. Initial training will be conducted via the vendor providing an on-site resource, and will include a review of all roles, general use, dashboard overview, and reporting review. Additional Hosted Contact Center Training will be offered in two options as noted within the Cost Proposal.

**4.2.2 Mandatory Project Requirements** - The following mandatory requirements relate to the goals and objectives and must be met by the Vendor as a part of its submitted proposal. Vendor should describe how it will comply with the mandatory requirements and include any areas where its proposed solution exceeds the mandatory requirement. Failure to comply with mandatory requirements will lead to disqualification, but the approach/methodology that the vendor uses to comply, and areas where the mandatory requirements are exceeded, will be included in technical scores where appropriate. The mandatory project requirements are listed below.

Lumos Networks has read, understands and will comply.

#### **4.2.2.1 Managed Voice Services**

**4.2.2.1.1** The Vendor must provide a turnkey technical support solution that ensures the continued operations and MACD needs of the State's existing telephony infrastructure, as

defined in **Appendix\_A**, through the migration period to a Hosted VoIP solution. Additionally, the Vendor must, at the State's discretion, migrate any site to the hosted solution.

Lumos Networks has read, understands and will comply.

#### **4.2.2.2 Hosted Voice Services**

**4.2.2.2.1** The Vendor must agree the State owns all data gathered under the scope of this contract and the Vendor must produce and/or return the data upon the State's request in an editable format.

Lumos Networks has read, understands and will comply.

**4.2.2.2.2** Vendor's solution must provide support for local failover and/or survivability services, if requested by Agency, in the event the hosted service becomes inaccessible.

Lumos Networks has read, understands and will comply.

Lumos provides several option for local survivability.

- 4G LTE –Cradle point
- T-1 with IAD (Battery Backup) for Analog Lines
- Call Forward Unreachable- to Cell phone or other designate number
- Simultaneous Ring
- Mobile Voice App
- Unify Mobile App

**4.2.2.2.3** Vendor's solution must provide local telephone numbers in West Virginia.

Lumos Networks has read, understands and will comply.

**4.2.2.2.4** Vendor's solution must support inbound Automatic Number Identification (ANI).

Lumos Networks has read, understands and will comply.

**4.2.2.2.5** Vendor's solution must include inbound Caller ID, outbound custom telephone number, and outbound custom name display.

Lumos Networks has read, understands and will comply. The caller ID displayed on outbound calls can be either the actual user's phone number or can be masked with another number such as a main number for the location.

Calls destined for 911 can show either the end users phone number, the locations main number or the locations "911" number depending on the Agency requirements. The "911" number is the number that is displayed to the 911 center for all phones at a location and is

based on the IP address of the calling party and emergency number routing capabilities of the system.

**4.2.2.2.6** Vendor's solution must support Dialed Number Information Services (DNIS) on 800 # toll-free telephone services.

Lumos Networks has read, understands and will comply. For long distance and toll free calls, the caller will dial 1 plus the number. If the number being dialed is on the system, the 1 will be deleted and the call will route to the appropriate user.

**4.2.2.2.7** Vendor's solution must support rerouting of calls to an alternate site at the State's directive.

Lumos Networks has read, understands and will comply.

**4.2.2.2.8** Vendor's solution must support 900/976 blocking.

Lumos Networks has read, understands and will comply.

**4.2.2.2.9** Vendor's solution must support xl 1 services (currently 211,411,511, 611, 811, 911).

Lumos Networks has read, understands and will comply.

For calls to emergency and service codes such as N11 (211, 411, 511, 611, 811, 911), the caller will dial the actual service code number.

**4.2.2.2.10** Vendor's solution must include Direct Inward Dial (DID) feature and service.

Lumos Networks has read, understands and will comply.

**4.2.2.2.11** Vendor's solution must support Operator services.

Lumos Networks has read, understands and will comply.

**4.2.2.2.12** Vendor's solution must support local number portability.

Lumos, doing business in South Carolina as Spirit Communications, currently serves over 90 State and Local Government, University and K12 entities and has successfully transitioned more than 30,774 hosted voice seats in over 640 service locations throughout 87 cities across the state.

**4.2.2.2.13** Vendor's solution must provide unlimited free local and long-distance calling.

Lumos Networks has read, understands and will comply.

**4.2.2.2.14** Vendor's hosting center(s) must be located within the continental United States.

Lumos Networks has read, understands and will comply. Lumos Networks has all data centers hardware component, and connections located within the continental United States. Our extensive fiber based network and full suite of Voice services are offered through the region

extending from West Virginia into Maryland, Pennsylvania, Virginia and extending south into both North and South Carolina and Georgia.

**4.2.2.2.15 Vendor must provide Train the Trainer sessions for Hosted Voice Services implementations.**

Lumos Networks has read, understands and will comply.

#### **4.2.2.3 Hosted Contact Center Services**

Vendor's Contact Center solution must support:

##### **4.2.2.3.1 Automatic Call Distributor (ACD)**

Lumos Networks has read, understands and will comply. Our Hosted Contact Center solution is a highly flexible, feature-rich, fully integrated Automatic Call Distribution (ACD) and Contact Center service that will support the requirements of each Agency. This includes simple hunting and queuing for individuals and work groups to sophisticated call distribution and routing, conditional announcements, agent availability status, Interactive Voice Response (IVR), desktop clients, and monitoring and reporting for more complex contact center environments.

##### Automatic Call Distribution (ACD)

Automatic Call Distribution (ACD) is a communication server software feature that processes high-volume incoming, outgoing, and internal calls and distributes them to groups of extensions called hunt groups or splits. Hunt groups or splits are referred to as skills. Calls to a specific skill are automatically distributed among the agents that possess the desired skill. Calls queue to the skill until an agent is available. ACD allows a system administrator to create an efficient call management environment. This administrator can add or remove skills from the system, add or remove announcements, add or remove agents, add trunk groups and route calls to the appropriate skills. The administrator can also specify ACD measurement criteria to provide reports on ACD efficiency.

When a call arrives for a skill, the ACD software checks to see if an agent with the desired skill is available to handle the call. If an agent is not available, or busy, the call enters the skill's queue. Calls queue only if no agents are available, a queue is assigned to the skill, and the queue is not full. A skill queue is a holding area for calls waiting to be answered. When a call is put into queue, the caller may hear one or more delay announcements, music, and/or silence, depending on the treatment assigned for the skill. Calls enter the queue at the bottom and move toward the top or head of the queue. After a call reaches the head of the queue, it connects to the next available agent.

##### **4.2.2.3.2 Computer telephony integration (CTI)**

Lumos Networks has read, understands and will comply.

##### **4.2.2.3.3 Call control**

Lumos Networks has read, understands and will comply.

**4.2.2.3.4 E.164**

Lumos Networks has read, understands and will comply.

**4.2.2.3.5 Interactive voice response (IVR)**

Lumos Networks has read, understands and will comply.

**4.2.2.3.6 Voice Recording**

Lumos Networks has read, understands and will comply.

**4.2.2.3.7 High Availability with load balancing and built-in redundancy**

Lumos Networks has read, understands and will comply.

**4.2.2.3.8 Vendor must provide Train the Trainer sessions, encompassing all Hosted Contact Center roles - Administrator, Supervisor, and Agents.**

Lumos Networks has read, understands and will comply.

**4.2.2.4 Security**

**4.2.2.4.1** The proposed solution must adhere to the security and privacy baseline standards in accordance to the high-security and standard-security use-case requirements.

Lumos Networks will work with the State of WV in order to best adhere to their requirements.

**4.2.2.4.2** Must adhere to the State of West Virginia's Cyber Security & Privacy policies, procedures, and standards; these can be viewed at the following link: <https://technology.wv.gov/security/Pages/policies-issued-by-the-cto.aspx>

Lumos Networks agrees to comply with the State of West Virginia's Cyber Security and Privacy policies, procedures and standards during any interaction with State of West Virginia data, systems or facilities.

**4.2.2.4.3** Must adhere to all applicable security and privacy standards and provide compliance for components and network segments that are subject to the following:

- Health Insurance Portability and Accountability Act (HIPAA) requirements as outlined in the attached Business Associate Addendum
- (BAA) (see **Attachment\_B**)
- Federal Information Security Management Act (FISMA), National Institute of Standards Technology's Special Publication (NIST SP) 800-53, NIST SP 800-17 which serve as the baseline;
- Family Education Rights and Privacy Act (FERPA) requirements;

- Criminal Justice Information System (CHS) requirements;
- Payment Card Industry Data Security Standards (PCI-DSS) requirements;
- Federal tax Information (FTI) and Internal Revenue Service publication 1075 (IRS 1075) requirements;
- Centers for Medicare & Medicaid (CMS) Services Information Security Policy requirements.
- Ensure network boundary and access control protection such as dual session boundary controllers and firewalls.
- Data-at-rest and data-in-transit encryption.
- Role-based access control for all applications which process and/or store sensitive data, to ensure need-to-know policies are enforceable.

The only information stored over the Lumos Hosted Voice platform is voice mails and call recordings, which are only located on the internal servers on the private side of the Hosted Voice platform. Voice mails and call recordings are stored in our geo redundant locations, and the data is protected behind our private voice network firewalls.

To ensure network boundary and access control protection, we use Carrier Grade firewalls, web application firewalls, and SBCs to protect our VoIP network. Customers can also host their own premise-based firewalls as long as all Lumos VoIP IP's, protocols, and ports are enabled. In addition, all hosted firewalls must have SIP ALG disabled.

For Data in transit: Voice mails, call recordings, voice mails to email and voice mail to speech-to-text are encrypted.

For Data at Rest: Voice mails are not encrypted at this time but are on our private servers and not accessible via the web. Call Recordings are stored using encryption to ensure data integrity.

For an encrypted SIP Device, traffic is sent using industry standard TLS for signaling and SRTP for the voice payload. For an unencrypted device SIP traffic is sent using TCP and voice over RTP.

All web traffic destined for the VoIP servers such as Call Center Clients, Receptionist Clients, IM&P clients or Collaborate application use HTTP port 443 for encryption to ensure privacy.

Lumos has pre-defined role-based access control to the Hosted Voice platform voice that limits end user access and protects sensitive data. All individual users have their own end user account in the Voce platform portal. A user account only has access to their given account information. Every group can have an administrator account which only has access to the given

group or enterprise when applicable. A group admin can only administer the group they are assigned and an enterprise admin can only administer groups within the enterprise. A limited set of Lumos personnel have access to make cross-customer changes. Only Lumos Voice Engineers have system access. Any access above group/enterprise must be granted by Lumos Voice engineers. System access is only available over the Lumos LAN.

**4.2.2.4.4** Vendor must draft a cyber risk management plan outlining the process, by which, cyber risk management activities are conducted to identify, assess, communicate, and manage shared cyber risk. The Vendor must provide this prior to the first implementation on the Vendor's hosted solution.

Lumos Networks has read, understands, and will comply.

**4.2.2.4.5** Vendor must draft an incident management plan aligned with NIST SP 800-61rev2, whereas both the State and Vendor must mutually approve. The plan must include the outlined scope, responsibility matrix, communications plan, procedures, and deliverables associated with cyber security incident response. In addition, the plan must outline incident reporting requirements, semiannual security reports, and cyber threat intelligence sharing. The Vendor must provide this prior to the first implementation on the Vendor's hosted solution.

Lumos Networks has read, understands, and will comply with drafting the requested document.

**4.2.2.4.6** The Vendor must adhere to personnel security requirements for background checks in accordance with state law. The vendor is liable for all costs associated with ensuring staff meets all requirements.

Lumos Networks personnel screening process includes background investigations, criminal record checks and financial background checks when applicable.

**4.2.2.4.7** Vendor must agree to drafting an audit management plan designed to assist the state with conducting internal and external compliance audits when the vendor-supplied solution is within the audit scope. At minimum, the plan must include:

- How the vendor will provide a NIST 800-53 security controls report, outlining organizational responsibilities (State, Vendor, or Shared), per each applicable control for each major application/information system within the audit scope.
- Plan of Action & Milestone documentation for non-compliant security & privacy controls when the vendor holds primary or shared control responsibility.

The Vendor must provide this prior to the first implementation on the Vendor's hosted solution.

Lumos Networks agrees to work with the State of WV to develop an audit management plan.

#### **4.2.2.5 Service and Support**

**4.2.2.5.1** Vendor must provide a network operation support center(s) for all tiers of support, including end-user support that is available 24x7x365 and is accessible via a toll-free number.



Lumos Networks' primary Network Operations Center (NOC) is located in southeastern US. at 1500 Hampton Street in Columbia, South Carolina and will serve as the single point of contact for State of West Virginia for all trouble reporting. Lumos also has a secondary NOC located near Charlotte, North Carolina. The NOC is available toll free 24 hours a day, 7 days a week, and 365 days a year at 888-864-7226.

The Lumos NOC is divided into two distinct groups, defined as Customer Network Operations Center (CNOC) and Surveillance. The Lumos Networks CNOC is the single point of contact (SPOC) responsible for engaging the necessary resources and organizations to resolve customer issues. The CNOC consists of direct customer facing analysts while the Surveillance team actively monitors the network for anomalies. The NOC, as a whole, will maintain ownership of all customer issues and continually update the trouble ticket as well as the State user with updates including a resolution reason when corrective measures are confirmed.

The CNOC was established so Lumos could have a direct focus on our end user customers. This support organization operates in a contact center environment whose sole responsibilities are working customer driven issues. This team owns the issue, isolation, repair and communications back to the customer. The CNOC is staffed with both Tier 1 and Tier 2 skills for each customer technology that Lumos offers. If a Tier 1 technician working an issue cannot resolve the issue he will escalate to a Tier 2 team member for next level escalations. Once the Tier 2 team receives the trouble ticket, correlation of all troubleshooting steps by the Tier 1 group immediately initiates second level processes. If the Tier 2 technician cannot resolve the trouble in a timely manner the ticket is escalated to the NOC Tier 1 technician. At this point NOC troubleshooting and escalations processes are followed.

Lumos's state of the art NOC is responsible for ensuring Lumos's core and access networks are performing as designed. The NOC is also key in working alarms and troubles across all networks and all technologies. The NOC is comprised of Transport, IP/Security, Voice and Web services technicians. Within each technology Lumos has trained Tier 1 and Tier 2 skill levels. In the event a Tier 1 technician cannot resolve a trouble, they escalate internally to a Tier 2 team member. The Tier 2 will immediately take ownership of the ticket and begin troubleshooting. If the Tier 2 technician cannot resolve the trouble in a timely manner the next escalation path is one of Lumos's Engineering teams.

CNOC Analysts receive all incoming calls and create trouble tickets in our ticketing systems called IVY for the reported issues. Updates for trouble tickets created will be provided by the CNOC to the customer via phone and/or email. The analyst will work the issue to resolution, and escalate tickets to the respective support groups or vendors as necessary. All trouble tickets are updated with detailed actions taken, relevant times, applicable names, business associations, and end with a detailed resolution.

**4.2.2.5.2** The successful Vendor must assign an experienced and skilled Project Manager who will provide a high-level project management plan including key components such as a project charter, issue tracking, statements of work (SOW), work breakdown structures (WBS), implementation schedules, etc. in accordance with the Project Management Body of Knowledge (PMBOK) or other

industry standard project management methodology stated in West Virginia State Code (§5A-6-4b). The link can be found at: <http://www.legis.state.wv.us/WVCODE/Code.cfm?chap=05a&art=6#06>. The project management plan must be submitted to and approved by the WVOT Project Management Office (PMO) prior to engaging the first agency for VoIP services implementation. Lumos Networks will work with the State of WV in order to best adhere to their requirements.

**4.2.2.5.3** The successful Vendor's Project Manager must track and report (via written status reports) the following: schedule, scope, budget, issues, risks, specified performance indicators, and other metrics determined appropriate throughout the project and each site implementation. Lumos Networks has read, understands and will comply.

**4.2.2.5.4** Vendor must work with the WVOT using the established Telecommunications Change Request (TCR) (**Attachment\_C**) procedures for ordering and implementing these telecommunications services. Lumos Networks has read, understands and will comply.

**4.2.2.5.5** Vendor billing errors must be credited back to the State from the effective date of the error. The State reserves the right to withhold payment until credit is received. Lumos Networks will credit back to the effective date of the billing error once there has been validation by both parties that an error in billing occurred. Lumos assumes any withholding of payment would apply only to the item in dispute and not to the entire invoice.

**4.2.2.5.6** For auditing, billing, and support purposes, the State requires any service with an associated rate to be identified on its monthly bill. As such, the State must be provided, at a minimum, the following:

- Billing Month
- Billed Entity Name
- Customer Name/Account (if different from billed entity)
- Service Location
- Service Period
- Itemized Cost for Individual Billing Components
- Itemized Call Detail
- Itemized Cost for Any One-Time or Non-Recurring Charges
- Itemized Cost for Any Surcharges and Total Cost

The cost identified in the bill must match the contract rates for the specified services. The Vendor must provide the State's monthly bill in an editable format such as Excel and/or csv. Lumos Networks has read, understands, and will comply with the requirements.

**4.2.2.5.7** The Vendor must invoice on a consistent monthly billing cycle across all services. Services installed or disconnected for a partial month must be prorated based on the date the service is activated/accepted or disconnected. The Vendor must not bill the State of services until the services have been activated and accepted as functional. The Vendor shall not bill the State for services after the disconnect due date listed on the submitted TCR.

Lumos Networks will invoice each month for the same service period and any proration therein. Service changes, disconnects, and/or additions will be prorated to the effective date of the change. Services will not be invoiced until they have been delivered.

**4.2.2.5.8** The Vendor must provide and update a weekly status report and/or order log for submitted TCRs.

Lumos Networks has read, understands and will comply. We will work with the State of West Virginia to provide this information in a usable format on a weekly schedule as requested.

**4.2.2.5.9** If, as part of its proposal, the Vendor submits appendices or other supplemental materials, the Vendor must denote specifically in those materials where the relevant information is located.

Lumos Networks has read, understands and will comply.

**4.2.2.5.10** The State expects full, complete, and timely cooperation in disentangling the relationship in the event that the Agreement expires or terminates for any reason. In the event of expiration or termination, the State expects that the Vendor shall, among other things: return all State data and documentation to the State, including but not limited to configuration information; transfer ownership of all leased equipment at no cost to the State (other than the payments already received by the Vendor under the Agreement); and, allow the State or the replacement provider(s) continued access to all billing, ordering, and trouble ticketing systems, and processes that have been employed in servicing the State, in accordance with methods and procedures to be agreed upon and established in the Agreement. Please acknowledge your acceptance of this.

Lumos Networks has read, understands and will comply.

**4.3 Qualifications and Experience:** Vendor should provide information and documentation regarding its qualifications and experience in providing services or solving problems similar to those requested in this RFP. Information and documentation should include, but is not limited to, copies of any staff certifications or degrees applicable to this project, proposed staffing plans, descriptions of past projects completed (descriptions should include the location of the project, project manager name and contact information, type of project, and what the project goals and objectives

where and how they were met.), references for prior projects, and any other information that vendor deems relevant to the items identified as desirable or mandatory below.

**4.3.1 Qualification and Experience Information:** Vendor should describe in its proposal how it meets the desirable qualification and experience requirements listed below.

**4.3.1.1** Vendor should provide three (3) examples demonstrating at least three (3) years of experience in providing a Hosted VoIP solution of a similar size and scope - 15,000 users across 200 sites with one example being a public entity. Vendor should provide a summarization of each project including goals and objectives, total number of phones deployed per site, length of time deployment took, if still in service, and reference for each example.

Please see References section of RFP response.

**4.3.1.2** Vendor should provide at least one (1) example demonstrating at least three (3) years of experience in providing single/multiple Hosted Call Center solutions of a similar size and scope - 500 users across 20 sites. Vendor should provide a summarization the project including goals and objectives, total number of agents per site, length of time deployment took, if still in service, and reference for the example.

Please see References section of RFP response.

**4.3.1.3** The State desires an Account Team (including Account Support Representative, Technical Support Representative, Solution Implementation Support Representative, Contract Manager, Billing Support Representative, Security/Compliance Specialist, and Project Manager) for the winning solution and life of the contract. Vendor should describe in detail the responsibilities of key roles and staffs experience in working in these roles.

Please see Account Team section of RFP response.

**4.3.1.4** Vendor should describe its experience and process in conducting cyber risk management ensuring shared risk is identified, assessed, communicated and managed.

Shared risks are treated similarly to internal risks. Risk scoring for shared risks considers factors such as availability, confidentiality or integrity impact to the other party sharing the risk, potential loss of a major account, reputation damages, and regulatory or civil damages.

**4.3.1.5** Vendor should describe its experience and process for conducting NIST SP 800-53 security assessment and authorization control families' activities designed to ensure each vendor-provided solution implementation adheres to security and privacy requirements before being placed into production.

Lumos Networks requires a security team evaluation of new vendor provided solutions before putting them into production. There is a standard, documented test plan that tests for vulnerabilities, tests access control, logging and encryption capabilities. The vendor goes through a risk assessment. The vendor and the technology are evaluated against our internal security policies and standards, which are based on the NIST CSF, 800-53 and ISO 27K standards.

**4.3.1.6** Vendor should list all government or standards organization security certifications it currently holds that apply specifically to the vendor’s proposal, as well as those in process at time of response. Specifically include HIPAA, CMS, FERPA, CJIS Security Policy, PCI Data Security Standards (DSS), IRS Publication 1075, FISMA, NIST 800-53, NIST SP 800-171, and FIPS 200 if they apply.

Lumos Networks’ security program is based on the NIST CSF (Cyber Security Framework), using the ISO27000 series and NIST 800-53 as control and implementation references. Lumos Networks is in the process of completing a SOC2 Type I and II for the data transport products that may be used as part of this solution.

**4.3.1.7** Vendor should provide a detailed list of the third-party attestations, reports, security credentials (e.g., FedRamp), and certifications relating to cyber security and privacy controls.

Lumos Networks has read and understands.

**4.3.1.8** Vendor should describe its experience and capabilities in supporting their customers concerning compliance audits when the vendor-supplied solution is within the scope of audit.

Customer security concerns are routed internally to the information security team who provide the information required for customer audit activities.

**4.3.1.9** Vendor should describe its experience and provide an overview of their incident management process and cyber threat intelligence sharing process for incidents associated with the vendor provided solution.

Incidents are managed by a 24/7 NOC as per documented incident response process or disaster recovery plans, depending on the severity of the incident. Incident response plans include communication trees, timing for call outs and escalations, and internal and third party notification requirements. Non-routine cyber security incidents are escalated to the information security team for further evaluation.

Lumos Networks receives threat intelligence from a variety of sources such as US CERT, ISC CERT, SANS Institute, DHS information sharing and the National Counsel of ISACS.



Purchasing Division  
 2019 Washington Street East  
 Post Office Box 50130  
 Charleston, WV 25305-0130

State of West Virginia  
 Request for Proposal  
 35 — Telecomm

Proc Folder: 462803

Doc Description: ADDENDUM\_1: RFP for Managed and Hosted Voice Services

Proc Type: Statewide MA (Open End)

Date Issued	Solicitation Closes	Solicitation No	Version
2018-10-19	2018-11-21 13:30:00	CRFP 0212 SWC1900000001	2

**BID RECEIVING LOCATION**

BID CLERK  
 DEPARTMENT OF ADMINISTRATION  
 PURCHASING DIVISION  
 2019 WASHINGTON ST E  
 CHARLESTON WV 25305  
 US

**VENDOR**

Vendor Name, Address and Telephone Number: Lumos Networks, LLC  
 1200 Greenbrier St.  
 Charleston, WV 25311

**FOR INFORMATION CONTACT THE BUYER**

Mark A Atkins  
 (304) 558-2307  
 mark.a.atkins@wv.gov

Signature X *Mark A Atkins*

FEIN # 84-1452950

DATE 11/21/18

All offers subject to all terms and conditions contained in this solicitation



SWC1900000001	<b>Document Phase</b> Final	<b>Document Description</b> ADDENDUM_1: RFP for Managed and Hosted Voice Services	<b>Page 3</b> of 3
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**ADDITIONAL TERMS AND CONDITIONS**

See attached document(s) for additional Terms and Conditions





Purchasing Division  
 2019 Washington Street East  
 Post Office Box 50130  
 Charleston, WV 25305-0130

**State of West Virginia**  
**Request for Proposal**  
**35 – Telecomm**

**Proc Folder:** 462803

**Doc Description:** ADDENDUM\_2: RFP for Managed and Hosted Voice Services

**Proc Type:** Statewide MA (Open End)

Date Issued	Solicitation Closes	Solicitation No	Version
2018-10-25	2018-11-21 13:30:00	CRFP 0212 SWC1900000001	3

**BID RECEIVING LOCATION**

BID CLERK  
 DEPARTMENT OF ADMINISTRATION  
 PURCHASING DIVISION  
 2019 WASHINGTON ST E  
 CHARLESTON WV 25305  
 US

**VENDOR**

Vendor Name, Address and Telephone Number: Lumos Networks, LLC  
 1200 Greenbrier St.  
 Charleston, WV 25311

**FOR INFORMATION CONTACT THE BUYER**

Mark A Atkins  
 (304) 558-2307  
 mark.a.atkins@wv.gov

Signature X

FEIN # 84-1452950

DATE 11/21/18

All offers subject to all terms and conditions contained in this solicitation

**ADDITIONAL INFORMATION:**

ADDENDUM 2 is issued for the following:

1. To Publish revised specifications (rev. 10-24-2018).
2. To Publish revised Attachment\_A Cost Sheet. (rev. 10-24-2018 Excel formatted).
  - o Publish revised Appendix\_A document (rev. 10-24-2018).
  - o publish the Agency's response to the questions submitted by Vendors during the Technical Questioning period.
5. To open a second Technical Question period until 11/01/2018 due by 2:00pm EDT.

No other changes made.

The West Virginia Department of Administration, Purchasing Division (hereinafter referred to as the "Purchasing Division") is issuing this solicitation as a request for proposal ("RFP"), as authorized by W. Va. Code 5A-3-10b, for the West Virginia Office of Technology (hereinafter referred to as the "Agency") to provide Managed Voice Services for the State's Legacy VoIP Environment, while working to migrate those Legacy Environments to a Hosted VoIP Platform, included Hosted Contact Center Services per attached documents.

**MANDATORY PRE-BID MEETING:**

DATE: 09/26/2018

TIME: 2:30PM EDT

LOCATION: WV Office of Technology

NOTE: Online responses to this solicitation are prohibited. Please see the Instructions to Bidders in Section 2 for proposal submission.

INVOICE TO		SHIP TO	
ALL STATE AGENCIES VARIOUS LOCATIONS AS INDICATED BY ORDER		STATE OF WEST VIRGINIA VARIOUS LOCATIONS AS INDICATED BY ORDER	
No City	WV99999	No City	WV 99999
US		US	

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
4	Managed and Hosted Voice Services	0.00000	EA		See pricing response

Comm Code	Manufacturer	Specification	Model #
81161700			

**Extended Description :**

See Attachment\_A Cost Sheet for proposal pricing.

Vendor shall use the Attachment\_A Cost Sheet for proposal pricing.

Note: online proposal submissions are prohibited.

Please see Section 5 Vendor Proposal Subsection 5.3 for further instructions.

**SCHEDULE OF EVENTS**

Line	Event	Event Date
1	Mandatory Pre-Bid Meeting @ 2:30pm EDT:	2018-09-26
2	Technical Questions due by 2:00pm EDT:	2018-10-05
3	Technical Questions due by 2:00pm EDT:	2018-11-01

<b>SWC1900000001</b>	<b>Document Phase</b> Final	<b>Document Description</b> ADDENDUM_2: RFP for Managed and Hosted Voice Services	<b>Page 3 of 3</b>
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**ADDITIONAL TERMS AND CONDITIONS**

See attached document(s) for additional Terms and Conditions



Purchasing Division  
 2019 Washington Street East  
 Post Office Box 50130  
 Charleston, WV 25305-0130

State of West Virginia  
 Request for Proposal  
 35 - Telecomm

Proc Folder: 462803

Doc Description: ADDENDUM 3: RFP for Managed and Hosted Voice Services

Proc Type: Statewide MA (Open End)

Date Issued	Solicitation Closes	Solicitation No	Version
2018-11-02	2018-11-21 13:30:00	CRFP 0212 SWC1900000001	4

**BID RECEIVING LOCATION**

BID CLERK  
 DEPARTMENT OF ADMINISTRATION  
 PURCHASING DIVISION  
 2019 WASHINGTON ST E  
 CHARLESTON WV 25305  
 US

**VENDOR**

Vendor Name, Address and Telephone Number: Lumos Networks, LLC  
 1200 Greenbrier St.  
 Charleston, WV 25311

**FOR INFORMATION CONTACT THE BUYER**

Mark A Atkins  
 (304) 558-2307  
 mark.a.atkins@wv.gov

Signature X

FEIN # 84-1452950

DATE 11/21/18

All offers subject to all terms and conditions contained in this solicitation

**ADDITIONAL INFORMATION:**

ADDENDUM 3 is issued for the following:

1. To publish the Agency's response to the questions submitted by Vendors during the Technical Questioning second and final period.
2. To Publish revised Attachment\_A Cost Sheet. (rev. 11-02-2018 Excel formatted).

Other changes made.

The West Virginia Department of Administration, Purchasing Division (hereinafter referred to as the "Purchasing Division") is issuing this solicitation as a request for proposal ("RFP"), as authorized by W. Va. Code 5A-3-10b, for the West Virginia Office of Technology (hereinafter referred to as the "Agency") to provide Managed Voice Services for the State's Legacy VoIP Environment, while working to migrate those Legacy Environments to a Hosted VoIP Platform, included Hosted Contact Center Services per attached documents.

**MANDATORY PRE-BID MEETING:**

DATE: 09/26/2018

TIME: 2:30PM EDT

LOCATION: WV Office of Technology

NOTE: Online responses to this solicitation are prohibited. Please see the Instructions to Bidders in Section 2 for proposal submission.

INVOICE TO		SHIP TO	
ALL STATE AGENCIES VARIOUS LOCATIONS AS INDICATED BY ORDER		STATE OF WEST VIRGINIA VARIOUS LOCATIONS AS INDICATED BY ORDER	
No City	WV99999	No City	WV 99999
US		US	

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
1	Managed and Hosted Voice Services	0.00000	EA		See pricing response

Item Code	Manufacturer	Specification	Model #
81700			

**Extended Description :**

See Attachment\_A Cost Sheet for proposal pricing. (Revised 11-02-2018)

Vendor shall use the Attachment\_A Cost Sheet for proposal pricing.

Note: online proposal submissions are prohibited.

Please see Section 5 Vendor Proposal Subsection 5.3 for further instructions.

**SCHEDULE OF EVENTS**

Line	Event	Event Date
1	Mandatory Pre-Bid Meeting @ 2:30pm EDT:	2018-09-26
2	Technical Questions due by 2:00pm EDT:	2018-10-05
3	Technical Questions due by 2:00pm EDT:	2018-11-01

<b>SWC1900000001</b>	<b>Document Phase</b> Final	<b>Document Description</b> ADDENDUM_3: RFP for Managed and Hosted Voice Services	<b>Page 3</b> <b>of 3</b>
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**ADDITIONAL TERMS AND CONDITIONS**

See attached document(s) for additional Terms and Conditions



Purchasing Division  
 2019 Washington Street East  
 Post Office Box 50130  
 Charleston, WV 25305-0130

State of West Virginia  
 Request for Proposal  
 35 - Telecomm

Proc Folder: 462803

Doc Description: ADDENDUM\_4: RFP for Managed and Hosted Voice Services

Proc Type: Statewide MA (Open End)

Date Issued	Solicitation Closes	Solicitation No	Version
2018-11-15	2018-11-21 13:30:00	CRFP 0212 SWC1900000001	5

**BID RECEIVING LOCATION**

BID CLERK  
 DEPARTMENT OF ADMINISTRATION  
 PURCHASING DIVISION  
 2019 WASHINGTON ST E  
 CHARLESTON WV 25305  
 US

**VENDOR**

Vendor Name, Address and Telephone Number: Lumos Networks, LLC  
 1200 Greenbrier St.  
 Charleston, WV 25311

**FOR INFORMATION CONTACT THE BUYER**

Mark A Atkins  
 (304) 558-2307  
 mark.a.atkins@wv.gov

Signature X *Mark A Atkins*

FEIN # 84-1452950

DATE 11/21/18

All offers subject to all terms and conditions contained in this solicitation

**ADDITIONAL INFORMATION:**

ADDENDUM 4 is issued for the following:

1. To Publish revised Attachment\_A Cost Sheet. (rev. 11-15-2018 Excel formatted) due to a calculation error.

Other changes made.

The West Virginia Department of Administration, Purchasing Division (hereinafter referred to as the "Purchasing Division") is issuing this solicitation as a request for proposal ("RFP"), as authorized by W. Va. Code 5A-3-10b, for the West Virginia Office of Technology (hereinafter referred to as the "Agency") to provide Managed Voice Services for the State's Legacy VoIP Environment, while working to migrate those Legacy Environments to a Hosted VoIP Platform, included Hosted Contact Center Services per attached documents.

**MANDATORY PRE-BID MEETING:**

DATE: 09/26/2018

TIME: 2:30PM EDT

LOCATION: WV Office of Technology

NOTE: Online responses to this solicitation are prohibited. Please see the Instructions to Bidders in Section 2 for proposal submission.

INVOICE TO		SHIP TO	
ALL STATE AGENCIES VARIOUS LOCATIONS AS INDICATED BY ORDER		STATE OF WEST VIRGINIA VARIOUS LOCATIONS AS INDICATED BY ORDER	
No City	WV99999	No City	WV 99999
US		US	

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
1	Managed and Hosted Voice Services	0.00000	EA		See pricing response

Comm Code	Manufacturer	Specification	Model #
61700			

**Extended Description :**

See Attachment\_A Cost Sheet for proposal pricing. (Revised 11-02-2018)

Vendor shall use the Attachment\_A Cost Sheet for proposal pricing.

Note: online proposal submissions are prohibited.

Please see Section 5 Vendor Proposal Subsection 5.3 for further instructions.

**SCHEDULE OF EVENTS**

Line	Event	Event Date
1	Mandatory Pre-Bid Meeting @ 2:30pm EDT:	2018-09-26
2	Technical Questions due by 2:00pm EDT:	2018-10-05
3	Technical Questions due by 2:00pm EDT:	2018-11-01



SWC1900000001	<b>Document Phase</b> Final	<b>Document Description</b> ADDENDUM_4: RFP for Managed and Hosted Voice Services	<b>Page 3 of 3</b>
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**ADDITIONAL TERMS AND CONDITIONS**

See attached document(s) for additional Terms and Conditions

**ADDENDUM ACKNOWLEDGEMENT FORM**  
**SOLICITATION NO.: CRFP 0212 SWC190000001**

**Instructions:** Please acknowledge receipt of all addenda issued with this solicitation by completing this addendum acknowledgment form. Check the box next to each addendum received and sign below. Failure to acknowledge addenda may result in bid disqualification.

**Acknowledgment:** I hereby acknowledge receipt of the following addenda and have made the necessary revisions to my proposal, plans and/or specification, etc.

**Addendum Numbers Received:**

(Check the box next to each addendum received)

- |  |  |
|--|--|
| <input checked="" type="checkbox"/> Addendum No. 1 | <input type="checkbox"/> Addendum No. 6  |
| <input checked="" type="checkbox"/> Addendum No. 2 | <input type="checkbox"/> Addendum No. 7  |
| <input checked="" type="checkbox"/> Addendum No. 3 | <input type="checkbox"/> Addendum No. 8  |
| <input checked="" type="checkbox"/> Addendum No. 4 | <input type="checkbox"/> Addendum No. 9  |
| <input type="checkbox"/> Addendum No. 5            | <input type="checkbox"/> Addendum No. 10 |

I understand that failure to confirm the receipt of addenda may be cause for rejection of this bid. I further understand that that any verbal representation made or assumed to be made during any oral discussion held between Vendor's representatives and any state personnel is not binding. Only the information issued in writing and added to the specifications by an official addendum is binding.

Lumos Networks, LLC

\_\_\_\_\_  
Company

  
\_\_\_\_\_  
Authorized Signature

11/21/18

\_\_\_\_\_  
Date

**NOTE:** This addendum acknowledgment should be submitted with the bid to expedite document processing.

# REQUEST FOR PROPOSAL

## (CRFP 0212 SWC1900000001)

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### SECTION 1: GENERAL INFORMATION

#### 1.1. Introduction:

The West Virginia Department of Administration, Purchasing Division (hereinafter referred to as the "Purchasing Division") is issuing this solicitation as a request for proposal ("RFP"), as authorized by W. Va. Code §5A-3-10b, for the West Virginia Office of Technology (hereinafter referred to as the "Agency") to provide Managed Voice Services for the State's Legacy VoIP Environment, while working to migrate those Legacy Environments to a Hosted VoIP Platform, included Hosted Contact Center Services.

The RFP is a procurement method in which vendors submit proposals in response to the request for proposal published by the Purchasing Division. It requires an award to the highest scoring vendor, rather than the lowest cost vendor, based upon a technical evaluation of the vendor's technical proposal and a cost evaluation. This is referred to as a best value procurement. Through their proposals, vendors offer a solution to the objectives, problem, or need specified in the RFP, and define how they intend to meet (or exceed) the RFP requirements.

#### 1.2. RFP Schedule of Events:

RFP Released to Public.....	08/29/2018
Mandatory Pre-bid Conference.....	09/26/2018 @ 2:30pm EDT
Vendor's Written Questions Submission Deadline.....	10/05/2018 by 2:00pm EDT
Addendum Issued.....	TBD
Technical Bid Opening Date.....	10/24/2018 at 1:30pm EDT
Technical Evaluation Begins.....	10/24/2018
Oral Presentation.....	TBD
Cost Bid Opening.....	TBD
Cost Evaluation Begins.....	TBD
Contract Award Made.....	TBD

**REQUEST FOR PROPOSAL**  
(CRFP 0212 SWC1900000001)

**SECTION 2: INSTRUCTIONS TO VENDORS SUBMITTING BIDS**

**Instructions begin on next page.**

## **INSTRUCTIONS TO VENDORS SUBMITTING BIDS**

**1. REVIEW DOCUMENTS THOROUGHLY:** The attached documents contain a solicitation for bids. Please read these instructions and all documents attached in their entirety. These instructions provide critical information about requirements that if overlooked could lead to disqualification of a Vendor's bid. All bids must be submitted in accordance with the provisions contained in these instructions and the Solicitation. Failure to do so may result in disqualification of Vendor's bid.

**2. MANDATORY TERMS:** The Solicitation may contain mandatory provisions identified by the use of the words "must," "will," and "shall." Failure to comply with a mandatory term in the Solicitation will result in bid disqualification.

**3. PREBID MEETING:** The item identified below shall apply to this Solicitation.

A pre-bid meeting will not be held prior to bid opening

A NON-MANDATORY PRE-BID meeting will be held at the following place and time:

A MANDATORY PRE-BID meeting will be held at the following place and time:

DATE: 09/26/2018

TIME: 2:30pm EDT

LOCATION: West Virginia Office of Technology  
1900 Kanawha Blvd. E.,  
Building 5, 10th Floor  
Charleston, WV 25305

All Vendors submitting a bid must attend the mandatory pre-bid meeting. Failure to attend the mandatory pre-bid meeting shall result in disqualification of the Vendor's bid. No one person attending the pre-bid meeting may represent more than one Vendor.

An attendance sheet provided at the pre-bid meeting shall serve as the official document verifying attendance. The State will not accept any other form of proof or documentation to verify attendance. Any person attending the pre-bid meeting on behalf of a Vendor must list on the attendance sheet his or her name and the name of the Vendor he or she is representing.

Additionally, the person attending the pre-bid meeting should include the Vendor's E-Mail address, phone number, and Fax number on the attendance sheet. It is the Vendor's responsibility to locate the attendance sheet and provide the required information. Failure to complete the attendance sheet as required may result in disqualification of Vendor's bid.

All Vendors should arrive prior to the starting time for the pre-bid. Vendors who arrive after the starting time but prior to the end of the pre-bid will be permitted to sign in, but are charged with knowing all matters discussed at the pre-bid.

Questions submitted at least five business days prior to a scheduled pre-bid will be discussed at the pre-bid meeting if possible. Any discussions or answers to questions at the pre-bid meeting are preliminary in nature and are non-binding. Official and binding answers to questions will be published in a written addendum to the Solicitation prior to bid opening.

**4. VENDOR QUESTION DEADLINE:** Vendors may submit questions relating to this Solicitation to the Purchasing Division. Questions must be submitted in writing. All questions must be submitted on or before the date listed below and to the address listed below in order to be considered. A written response will be published in a Solicitation addendum if a response is possible and appropriate. Non-written discussions, conversations, or questions and answers regarding this Solicitation are preliminary in nature and are nonbinding.

Submitted e-mails should have solicitation number in the subject line.

Question Submission Deadline: October 05, 2018 due by 2:00pm EDT

Submit Questions to: Mark Atkins, Senior Buyer  
2019 Washington Street, East  
Charleston, WV 25305  
Fax: (304) 558-4115 (Vendors should not use this fax number for bid submission)  
Email: Mark.A.Atkins@wv.gov

**5. VERBAL COMMUNICATION:** Any verbal communication between the Vendor and any State personnel is not binding, including verbal communication at the mandatory pre-bid conference. Only information issued in writing and added to the Solicitation by an official written addendum by the Purchasing Division is binding.

**6. BID SUBMISSION:** All bids must be submitted electronically through wvOASIS or signed and delivered by the Vendor to the Purchasing Division at the address listed below on or before the date and time of the bid opening. Any bid received by the Purchasing Division staff is considered to be in the possession of the Purchasing Division and will not be returned for any reason. The Purchasing Division will not accept bids, modification of bids, or addendum acknowledgment forms via e-mail. Acceptable delivery methods include electronic submission via wvOASIS, hand delivery, delivery by courier, or facsimile.

The bid delivery address is:  
Department of Administration, Purchasing Division  
2019 Washington Street East  
Charleston, WV 25305-0130

A bid that is not submitted electronically through wvOASIS should contain the information listed below on the face of the envelope or the bid may be rejected by the Purchasing Division.:

SEALED BID: VOIP Hosted Services  
BUYER: Mark Atkins  
SOLICITATION NO.: CRFP 0212 SWC1900000001  
BID OPENING DATE: 10/24/2018  
BID OPENING TIME: 1:30pm EDT  
FAX NUMBER: 304-558-3970

The Purchasing Division may prohibit the submission of bids electronically through wvOASIS at its sole discretion. Such a prohibition will be contained and communicated in the wvOASIS system resulting in the Vendor's inability to submit bids through wvOASIS. Submission of a response to an Expression or Interest or Request for Proposal is not permitted in wvOASIS.

**For Request For Proposal ("RFP") Responses Only:** In the event that Vendor is responding to a request for proposal, the Vendor shall submit one original technical and one original cost proposal plus Five (5) convenience copies of each to the Purchasing Division at the address shown above. Additionally, the Vendor should identify the bid type as either a technical or cost proposal on the face of each bid envelope submitted in response to a request for proposal as follows:

BID TYPE: (This only applies to CRFP)

- Technical  
 Cost

**7. BID OPENING:** Bids submitted in response to this Solicitation will be opened at the location identified below on the date and time listed below. Delivery of a bid after the bid opening date and time will result in bid disqualification. For purposes of this Solicitation, a bid is considered delivered when confirmation of delivery is provided by wvOASIS (in the case of electronic submission) or when the bid is time stamped by the official Purchasing Division time clock (in the case of hand delivery).

Bid Opening Date and Time: **October 24, 2018 at 1:30pm EDT**

Bid Opening Location: Department of Administration, Purchasing Division  
2019 Washington Street East  
Charleston, WV 25305-0130

**8. ADDENDUM ACKNOWLEDGEMENT:** Changes or revisions to this Solicitation will be made by an official written addendum issued by the Purchasing Division. Vendor should acknowledge receipt of all addenda issued with this Solicitation by completing an Addendum Acknowledgment Form, a copy of which is included herewith. Failure to acknowledge addenda may result in bid disqualification. The addendum acknowledgement should be submitted with the bid to expedite document processing.

**9. BID FORMATTING:** Vendor should type or electronically enter the information onto its bid to prevent errors in the evaluation. Failure to type or electronically enter the information may result in bid disqualification.

**10. ALTERNATE MODEL OR BRAND:** Unless the box below is checked, any model, brand, or specification listed in this Solicitation establishes the acceptable level of quality only and is not intended to reflect a preference for, or in any way favor, a particular brand or vendor. Vendors may bid alternates to a listed model or brand provided that the alternate is at least equal to the model or brand and complies with the required specifications. The equality of any alternate being bid shall be determined by the State at its sole discretion. Any Vendor bidding an alternate model or brand should clearly identify the alternate items in its bid and should include manufacturer's specifications, industry literature, and/or any other relevant documentation demonstrating the equality of the alternate items. Failure to provide information for alternate items may be grounds for rejection of a Vendor's bid.

This Solicitation is based upon a standardized commodity established under W. Va. Code § 5A-3-61. Vendors are expected to bid the standardized commodity identified. Failure to bid the standardized commodity will result in your firm's bid being rejected.

**11. EXCEPTIONS AND CLARIFICATIONS:** The Solicitation contains the specifications that shall form the basis of a contractual agreement. Vendor shall clearly mark any exceptions, clarifications, or other proposed modifications in its bid. Exceptions to, clarifications of, or modifications of a requirement or term and condition of the Solicitation may result in bid disqualification.

**12. COMMUNICATION LIMITATIONS:** In accordance with West Virginia Code of State Rules §148-1-6.6, communication with the State of West Virginia or any of its employees regarding this Solicitation during the solicitation, bid, evaluation or award periods, except through the Purchasing Division, is strictly prohibited without prior Purchasing Division approval. Purchasing Division approval for such communication is implied for all agency delegated and exempt purchases.

**13. REGISTRATION:** Prior to Contract award, the apparent successful Vendor must be properly registered with the West Virginia Purchasing Division and must have paid the \$125 fee, if applicable.

**14. UNIT PRICE:** Unit prices shall prevail in cases of a discrepancy in the Vendor's bid.



**15. PREFERENCE:** Vendor Preference may be requested in purchases of motor vehicles or construction and maintenance equipment and machinery used in highway and other infrastructure projects. Any request for preference must be submitted in writing with the bid, must specifically identify the preference requested with reference to the applicable subsection of West Virginia Code § 5A-3-37, and should include with the bid any information necessary to evaluate and confirm the applicability of the requested preference. A request form to help facilitate the request can be found at:

<http://www.state.wv.us/admin/purchase/vrc/Venpref.pdf>.

**15A. RECIPROCAL PREFERENCE:** The State of West Virginia applies a reciprocal preference to all solicitations for commodities and printing in accordance with W. Va. Code § 5A-3-37(b). In effect, non-resident vendors receiving a preference in their home states, will see that same preference granted to West Virginia resident vendors bidding against them in West Virginia. A request form to help facilitate the request can be found at:

<http://www.state.wv.us/admin/purchase/vrc/Venpref.pdf>.

**16. SMALL, WOMEN-OWNED, OR MINORITY-OWNED BUSINESSES:** For any solicitations publicly advertised for bid, in accordance with West Virginia Code §5A-3-37(a)(7) and W. Va. CSR § 148-22-9, any non-resident vendor certified as a small, women-owned, or minority-owned business under W. Va. CSR § 148-22-9 shall be provided the same preference made available to any resident vendor. Any non-resident small, women-owned, or minority-owned business must identify itself as such in writing, must submit that writing to the Purchasing Division with its bid, and must be properly certified under W. Va. CSR § 148-22-9 prior to contract award to receive the preferences made available to resident vendors. Preference for a non-resident small, women-owned, or minority owned business shall be applied in accordance with W. Va. CSR § 148-22-9.

**17. WAIVER OF MINOR IRREGULARITIES:** The Director reserves the right to waive minor irregularities in bids or specifications in accordance with West Virginia Code of State Rules § 148-1-4.6.

**18. ELECTRONIC FILE ACCESS RESTRICTIONS:** Vendor must ensure that its submission in wvOASIS can be accessed and viewed by the Purchasing Division staff immediately upon bid opening. The Purchasing Division will consider any file that cannot be immediately accessed and viewed at the time of the bid opening (such as, encrypted files, password protected files, or incompatible files) to be blank or incomplete as context requires, and are therefore unacceptable. A vendor will not be permitted to unencrypt files, remove password protections, or resubmit documents after bid opening to make a file viewable if those documents are required with the bid. A Vendor may be required to provide document passwords or remove access restrictions to allow the Purchasing Division to print or electronically save documents provided that those documents are viewable by the Purchasing Division prior to obtaining the password or removing the access restriction.

**19. NON-RESPONSIBLE:** The Purchasing Division Director reserves the right to reject the bid of any vendor as Non-Responsible in accordance with W. Va. Code of State Rules § 148-1-5.3, when the Director determines that the vendor submitting the bid does not have the capability to fully perform, or lacks the integrity and reliability to assure good-faith performance.”

**20. ACCEPTANCE/REJECTION:** The State may accept or reject any bid in whole, or in part in accordance with W. Va. Code of State Rules § 148-1-4.5. and § 148-1-6.4.b.”

**21. YOUR SUBMISSION IS A PUBLIC DOCUMENT:** Vendor’s entire response to the Solicitation and the resulting Contract are public documents. As public documents, they will be disclosed to the public following the bid/proposal opening or award of the contract, as required by the competitive bidding laws of West Virginia Code §§ 5A-3-1 et seq., 5-22-1 et seq., and 5G-1-1 et seq. and the Freedom of Information Act West Virginia Code §§ 29B-1-1 et seq.

**DO NOT SUBMIT MATERIAL YOU CONSIDER TO BE CONFIDENTIAL, A TRADE SECRET, OR OTHERWISE NOT SUBJECT TO PUBLIC DISCLOSURE.**

Submission of any bid, proposal, or other document to the Purchasing Division constitutes your explicit consent to the subsequent public disclosure of the bid, proposal, or document. The Purchasing Division will disclose any document labeled “confidential,” “proprietary,” “trade secret,” “private,” or labeled with any other claim against public disclosure of the documents, to include any “trade secrets” as defined by West Virginia Code § 47-22-1 et seq. All submissions are subject to public disclosure without notice.

**22. INTERESTED PARTY DISCLOSURE:** West Virginia Code § 6D-1-2 requires that the vendor submit to the Purchasing Division a disclosure of interested parties to the contract for all contracts with an actual or estimated value of at least \$1 Million. That disclosure must occur on the form prescribed and approved by the WV Ethics Commission prior to contract award. A copy of that form is included with this solicitation or can be obtained from the WV Ethics Commission. This requirement does not apply to publicly traded companies listed on a national or international stock exchange. A more detailed definition of interested parties can be obtained from the form referenced above.

**23. WITH THE BID REQUIREMENTS:** In instances where these specifications require documentation or other information with the bid, and a vendor fails to provide it with the bid, the Director of the Purchasing Division reserves the right to request those items after bid opening and prior to contract award pursuant to the authority to waive minor irregularities in bids or specifications under W. Va. CSR § 148-1-4.6. This authority does not apply to instances where state law mandates receipt with the bid.

**REQUEST FOR PROPOSAL**  
**(CRFP 0212 SWC1900000001)**

**SECTION 3: GENERAL TERMS AND CONDITIONS**

General Terms and Conditions begin on next page.

## **GENERAL TERMS AND CONDITIONS:**

**1. CONTRACTUAL AGREEMENT:** Issuance of a Award Document signed by the Purchasing Division Director, or his designee, and approved as to form by the Attorney General's office constitutes acceptance of this Contract made by and between the State of West Virginia and the Vendor. Vendor's signature on its bid signifies Vendor's agreement to be bound by and accept the terms and conditions contained in this Contract. Lumos Networks has read, understands, and will comply with the requirement.

**2. DEFINITIONS:** As used in this Solicitation/Contract, the following terms shall have the meanings attributed to them below. Additional definitions may be found in the specifications included with this Solicitation/Contract. Lumos Networks has read, understands, and will comply with all of item 2.

**2.1. "Agency" or "Agencies"** means the agency, board, commission, or other entity of the State of West Virginia that is identified on the first page of the Solicitation or any other public entity seeking to procure goods or services under this Contract.

**2.2. "Bid" or "Proposal"** means the vendors submitted response to this solicitation.

**2.3. "Contract"** means the binding agreement that is entered into between the State and the Vendor to provide the goods or services requested in the Solicitation.

**2.4. "Director"** means the Director of the West Virginia Department of Administration, Purchasing Division.

**2.5. "Purchasing Division"** means the West Virginia Department of Administration, Purchasing Division.

**2.6. "Award Document"** means the document signed by the Agency and the Purchasing Division, and approved as to form by the Attorney General, that identifies the Vendor as the contract holder.

**2.7. "Solicitation"** means the official notice of an opportunity to supply the State with goods or services that is published by the Purchasing Division.

**2.8. "State"** means the State of West Virginia and/or any of its agencies, commissions, boards, etc. as context requires.

**2.9. "Vendor" or "Vendors"** means any entity submitting a bid in response to the Solicitation, the entity that has been selected as the lowest responsible bidder, or the entity that has been awarded the Contract as context requires.

**3. CONTRACT TERM; RENEWAL; EXTENSION:** The term of this Contract shall be determined in accordance with the category that has been identified as applicable to this Contract below: **Lumos understands and will Comply with the Contract Term Provisions noted below.**

**Term Contract**

**Initial Contract Term:** **Initial Contract Term:** This Contract becomes effective on Upon award and extends for a period of Four (4) year(s).

**Renewal Term:** This Contract may be renewed upon the mutual written consent of the Agency, and the Vendor, with approval of the Purchasing Division and the Attorney General's office (Attorney General approval is as to form only). Any request for renewal should be delivered to the Agency and then submitted to the Purchasing Division thirty (30) days prior to the expiration date of the initial contract term or appropriate renewal term. A Contract renewal shall be in accordance with the terms and conditions of the original contract. Unless otherwise specified below, renewal of this Contract is limited to see below successive one (1) year periods or multiple renewal periods of less than one year, provided that the multiple renewal periods do not exceed the total number of months available in all renewal years combined. Automatic renewal of this Contract is prohibited. Renewals must be approved by the Vendor, Agency, Purchasing Division and Attorney General's office (Attorney General approval is as to form only)

**Alternate Renewal Term** – This contract may be renewed for Two (2) successive Two (2) year periods or shorter periods provided that they do not exceed the total number of months contained in all available renewals. Automatic renewal of this Contract is prohibited. Renewals must be approved by the Vendor, Agency, Purchasing Division and Attorney General's office (Attorney General approval is as to form only)

**Delivery Order Limitations:** In the event that this contract permits delivery orders, a delivery order may only be issued during the time this Contract is in effect. Any delivery order issued within one year of the expiration of this Contract shall be effective for one year from the date the delivery order is issued. No delivery order may be extended beyond one year after this Contract has expired.

**Fixed Period Contract:** This Contract becomes effective upon Vendor's receipt of the notice to proceed and must be completed within \_\_\_\_\_ days.

**Fixed Period Contract with Renewals:** This Contract becomes effective upon Vendor's receipt of the notice to proceed and part of the Contract more fully described in the attached specifications must be completed within \_\_\_\_\_ days. Upon completion of the work covered by the preceding sentence, the vendor agrees that maintenance, monitoring, or warranty services will be provided for \_\_\_\_\_ year(s) thereafter.

**One Time Purchase:** The term of this Contract shall run from the issuance of the Award Document until all of the goods contracted for have been delivered, but in no event will this Contract extend for more than one fiscal year.

**Other:** See attached.

**4. NOTICE TO PROCEED:** Vendor shall begin performance of this Contract immediately upon receiving notice to proceed unless otherwise instructed by the Agency. Unless otherwise specified, the fully executed Award Document will be considered notice to proceed. Lumos Networks has read, understands, and will comply with the requirement.

**5. QUANTITIES:** The quantities required under this Contract shall be determined in accordance with the category that has been identified as applicable to this Contract below. Lumos Networks has read, understands, and will comply with the requirement.

**Open End Contract:** Quantities listed in this Solicitation are approximations only, based on estimates supplied by the Agency. It is understood and agreed that the Contract shall cover the quantities actually ordered for delivery during the term of the Contract, whether more or less than the quantities shown.

**Service:** The scope of the service to be provided will be more clearly defined in the specifications included herewith.

**Combined Service and Goods:** The scope of the service and deliverable goods to be provided will be more clearly defined in the specifications included herewith.

**One Time Purchase:** This Contract is for the purchase of a set quantity of goods that are identified in the specifications included herewith. Once those items have been delivered, no additional goods may be procured under this Contract without an appropriate change order approved by the Vendor, Agency, Purchasing Division, and Attorney General's office.

**6. EMERGENCY PURCHASES:** The Purchasing Division Director may authorize the Agency to purchase goods or services in the open market that Vendor would otherwise provide under this Contract if those goods or services are for immediate or expedited delivery in an emergency. Emergencies shall include, but are not limited to, delays in transportation or an unanticipated increase in the volume of work. An emergency purchase in the open market, approved by the Purchasing Division Director, shall not constitute of breach of this Contract and shall not entitle the Vendor to any form of compensation or damages. This provision does not excuse the State from fulfilling its obligations under a One Time Purchase contract. Lumos Networks has read, understands, and will comply with the requirement.

**7. REQUIRED DOCUMENTS:** All of the items checked below must be provided to the Purchasing Division by the Vendor as specified below. Lumos Networks has read, understands, and will comply with the requirement.

**BID BOND (Construction Only):** Pursuant to the requirements contained in W. Va. Code § 5-22-1(c), All Vendors submitting a bid on a construction project shall furnish a valid bid bond in the amount of five percent (5%) of the total amount of the bid protecting the State of West Virginia. The bid bond must be submitted with the bid.

**PERFORMANCE BOND:** The apparent successful Vendor shall provide a performance bond in the amount of 100% of the contract. The performance bond must be received by the Purchasing Division prior to Contract award.

**LABOR/MATERIAL PAYMENT BOND:** The apparent successful Vendor shall provide a labor/material payment bond in the amount of 100% of the Contract value. The labor/material payment bond must be delivered to the Purchasing Division prior to Contract award.

In lieu of the Bid Bond, Performance Bond, and Labor/Material Payment Bond, the Vendor may provide certified checks, cashier's checks, or irrevocable letters of credit. Any certified check, cashier's check, or irrevocable letter of credit provided in lieu of a bond must be of the same amount and delivered on the same schedule as the bond it replaces. A letter of credit submitted in lieu of a performance and labor/material payment bond will only be allowed for projects under \$100,000. Personal or business checks are not acceptable. Notwithstanding the foregoing, West Virginia Code § 5-22-1 (d) mandates that a vendor provide a performance and labor/material payment bond for construction projects. Accordingly, substitutions for the performance and labor/material payment bonds for construction projects is not permitted.

**MAINTENANCE BOND:** The apparent successful Vendor shall provide a two (2) year maintenance bond covering the roofing system. The maintenance bond must be issued and delivered to the Purchasing Division prior to Contract award.

**LICENSE(S) / CERTIFICATIONS / PERMITS:** In addition to anything required under the Section of the General Terms and Conditions entitled Licensing, the apparent successful Vendor shall furnish proof of the following licenses, certifications, and/or permits prior to Contract award, in a form acceptable to the Purchasing Division.

The apparent successful Vendor shall also furnish proof of any additional licenses or certifications contained in the specifications prior to Contract award regardless of whether or not that requirement is listed above.

**8. INSURANCE:** The apparent successful Vendor shall furnish proof of the insurance identified by a checkmark below and must include the State as an additional insured on each policy prior to Contract award. The insurance coverages identified below must be maintained throughout the life of this contract. Thirty (30) days prior to the expiration of the insurance policies, Vendor shall provide the Agency with proof that the insurance mandated herein has been continued. Vendor must also provide Agency with immediate notice of any changes in its insurance policies, including but not limited to, policy cancelation, policy reduction, or change in insurers. The apparent successful Vendor shall also furnish proof of any additional insurance requirements contained in the specifications prior to Contract award regardless of whether or not that insurance requirement is listed in this section. **Lumos Networks has read, understands, and will comply with the requirements as noted below.**

Vendor must maintain:

- Commercial General Liability Insurance** in at least an amount of: \_\_\_\_\_ per occurrence. \$ 1,000,000.00
- Automobile Liability Insurance** in at least an amount of: \$1,000,000.00 per occurrence.
- Professional/Malpractice/Errors and Omission Insurance** in at least an amount of: \_\_\_\_\_ per occurrence.
- Commercial Crime and Third Party Fidelity Insurance** in an amount of: \_\_\_\_\_ per occurrence.
- Cyber Liability Insurance** in an amount of: \$3,000,000.00 per occurrence.
- Builders Risk Insurance** in an amount equal to 100% of the amount of the Contract.
- Pollution Insurance** in an amount of: \_\_\_\_\_ per occurrence.
- Aircraft Liability** in an amount of: \_\_\_\_\_ per occurrence.
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Notwithstanding anything contained in this section to the contrary, the Director of the Purchasing Division reserves the right to waive the requirement that the State be named as an additional insured on one or more of the Vendor's insurance policies if the Director finds that doing so is in the State's best interest.

**9. WORKERS' COMPENSATION INSURANCE:** The apparent successful Vendor shall comply with laws relating to workers compensation, shall maintain workers' compensation insurance when required, and shall furnish proof of workers' compensation insurance upon request. Lumos Networks has read, understands, and will comply with the requirement.

**10. [Reserved]**

**11. LIQUIDATED DAMAGES:** This clause shall in no way be considered exclusive and shall not limit the State or Agency's right to pursue any other available remedy. Vendor shall pay liquidated damages in the amount specified below or as described in the specifications: Lumos Networks has read, understands, and will comply with the requirement.

\_\_\_\_\_ for \_\_\_\_\_

Liquidated Damages Contained in the Specifications

**12. ACCEPTANCE:** Vendor's signature on its bid, or on the certification and signature page, constitutes an offer to the State that cannot be unilaterally withdrawn, signifies that the product or service proposed by vendor meets the mandatory requirements contained in the Solicitation for that product or service, unless otherwise indicated, and signifies acceptance of the terms and conditions contained in the Solicitation unless otherwise indicated. Lumos Networks has read, understands, and will comply with the requirement.

**13. PRICING:** The pricing set forth herein is firm for the life of the Contract, unless specified elsewhere within this Solicitation/Contract by the State. A Vendor's inclusion of price adjustment provisions in its bid, without an express authorization from the State in the Solicitation to do so, may result in bid disqualification. Lumos Networks has read, understands, and will comply with the requirement.

**14. PAYMENT IN ARREARS:** Payment in advance is prohibited under this Contract. Payment may only be made after the delivery and acceptance of goods or services. The Vendor shall submit invoices, in arrears. Lumos Networks has read, understands, and will comply with the requirement.

**15. PAYMENT METHODS:** Vendor must accept payment by electronic funds transfer and P-Card. (The State of West Virginia's Purchasing Card program, administered under contract by a banking institution, processes payment for goods and services through state designated credit cards.) Lumos Networks has read, understands, and will comply with the requirement.

**16. TAXES:** The Vendor shall pay any applicable sales, use, personal property or any other taxes arising out of this Contract and the transactions contemplated thereby. The State of West Virginia is exempt from federal and state taxes and will not pay or reimburse such taxes. Lumos Networks has read, understands, and will comply with the requirement.

**17. ADDITIONAL FEES:** Vendor is not permitted to charge additional fees or assess additional charges that were not either expressly provided for in the solicitation published by the State of West Virginia or included in the unit price or lump sum bid amount that Vendor is required by the solicitation to provide. Including such fees or charges as notes to the solicitation may result in rejection of vendor's bid. Requesting such fees or charges be paid after the contract has been awarded may result in cancellation of the contract. Lumos Networks has read, understands, and will comply with the requirement.

**18. FUNDING:** This Contract shall continue for the term stated herein, contingent upon funds being appropriated by the Legislature or otherwise being made available. In the event funds are not appropriated or otherwise made available, this Contract becomes void and of no effect beginning on July 1 of the fiscal year for which funding has not been appropriated or otherwise made available. Lumos Networks has read, understands, and will comply with the requirement.

**19. CANCELLATION:** The Purchasing Division Director reserves the right to cancel this Contract immediately upon written notice to the vendor if the materials or workmanship supplied do not conform to the specifications contained in the Contract. The Purchasing Division Director may also cancel any purchase or Contract upon 30 days written notice to the Vendor in accordance with West Virginia Code of State Rules § 148-1-5.2.b. Lumos Networks has read, understands, and will comply with the requirement.

**20. TIME:** Time is of the essence with regard to all matters of time and performance in this Contract. Lumos Networks has read, understands, and will comply with the requirement.

**21. APPLICABLE LAW:** This Contract is governed by and interpreted under West Virginia law without giving effect to its choice of law principles. Any information provided in specification manuals, or any other source, verbal or written, which contradicts or violates the West Virginia Constitution, West Virginia Code or West Virginia Code of State Rules is void and of no effect. Lumos Networks has read, understands, and will comply with the requirements.

**22. COMPLIANCE WITH LAWS:** Vendor shall comply with all applicable federal, state, and local laws, regulations and ordinances. By submitting a bid, Vendor acknowledges that it has reviewed, understands, and will comply with all applicable laws, regulations, and ordinances. Lumos Networks has read, understands, and will comply with the requirements.

**SUBCONTRACTOR COMPLIANCE:** Vendor shall notify all subcontractors providing commodities or services related to this Contract that as subcontractors, they too are required to comply with all applicable laws, regulations, and ordinances. Notification under this provision must occur prior to the performance of any work under the contract by the subcontractor. Lumos Networks has read, understands, and will comply with the requirements.

**23. ARBITRATION:** Any references made to arbitration contained in this Contract, Vendor's bid, or in any American Institute of Architects documents pertaining to this Contract are hereby deleted, void, and of no effect. Lumos Networks has read, understands, and will comply with the requirements.

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**24. MODIFICATIONS:** This writing is the parties' final expression of intent. Notwithstanding anything contained in this Contract to the contrary no modification of this Contract shall be binding without mutual written consent of the Agency, and the Vendor, with approval of the Purchasing Division and the Attorney General's office (Attorney General approval is as to form only). Any change to existing contracts that adds work or changes contract cost, and were not included in the original contract, must be approved by the Purchasing Division and the Attorney General's Office (as to form) prior to the implementation of the change or commencement of work affected by the change. Lumos Networks has read, understands, and will comply with the requirement.

**25. WAIVER:** The failure of either party to insist upon a strict performance of any of the terms or provision of this Contract, or to exercise any option, right, or remedy herein contained, shall not be construed as a waiver or a relinquishment for the future of such term, provision, option, right, or remedy, but the same shall continue in full force and effect. Any waiver must be expressly stated in writing and signed by the waiving party. Lumos Networks has read, understands, and will comply with the requirement.

**26. SUBSEQUENT FORMS:** The terms and conditions contained in this Contract shall supersede any and all subsequent terms and conditions which may appear on any form documents submitted by Vendor to the Agency or Purchasing Division such as price lists, order forms, invoices, sales agreements, or maintenance agreements, and includes internet websites or other electronic documents. Acceptance or use of Vendor's forms does not constitute acceptance of the terms and conditions contained thereon. Lumos Networks has read, understands, and will comply with the requirement.

**27. ASSIGNMENT:** Neither this Contract nor any monies due, or to become due hereunder, may be assigned by the Vendor without the express written consent of the Agency, the Purchasing Division, the Attorney General's office (as to form only), and any other government agency or office that may be required to approve such assignments. Lumos Networks has read, understands, and will comply with the requirement.

**28. WARRANTY:** The Vendor expressly warrants that the goods and/or services covered by this Contract will: (a) conform to the specifications, drawings, samples, or other description furnished or specified by the Agency; (b) be merchantable and fit for the purpose intended; and

(c) be free from defect in material and workmanship. Lumos Networks has read, understands, and will comply with the requirement.

**29. STATE EMPLOYEES:** State employees are not permitted to utilize this Contract for personal use and the Vendor is prohibited from permitting or facilitating the same. Lumos Networks has read, understands, and will comply with the requirement.

**30. PRIVACY, SECURITY, AND CONFIDENTIALITY:** The Vendor agrees that it will not disclose to anyone, directly or indirectly, any such personally identifiable information or other confidential information gained from the Agency, unless the individual who is the subject of the information consents to the disclosure in writing or the disclosure is made pursuant to the Agency's policies, procedures, and rules. Vendor further agrees to comply with the Confidentiality Policies and Information Security Accountability Requirements, set forth in <http://www.state.wv.us/admin/purchase/privacy/default.html>. Lumos Networks has read, understands, and will comply with the requirement.

**31. YOUR SUBMISSION IS A PUBLIC DOCUMENT:** Vendor's entire response to the Solicitation and the resulting Contract are public documents. As public documents, they will be disclosed to the public following the bid/proposal opening or award of the contract, as required by the competitive bidding laws of West Virginia Code §§ 5A-3-1 et seq., 5-22-1 et seq., and 5G-1-1 et seq. and the Freedom of Information Act West Virginia Code §§ 29B-1-1 et seq.

**DO NOT SUBMIT MATERIAL YOU CONSIDER TO BE CONFIDENTIAL, A TRADE SECRET, OR OTHERWISE NOT SUBJECT TO PUBLIC DISCLOSURE.**

Submission of any bid, proposal, or other document to the Purchasing Division constitutes your explicit consent to the subsequent public disclosure of the bid, proposal, or document. The Purchasing Division will disclose any document labeled "confidential," "proprietary," "trade secret," "private," or labeled with any other claim against public disclosure of the documents, to include any "trade secrets" as defined by West Virginia Code § 47-22-1 et seq. All submissions are subject to public disclosure without notice. *Lumos Networks has read, understands, and will comply with the requirement.*

**32. LICENSING:** In accordance with West Virginia Code of State Rules § 148-1-6.1.e, Vendor must be licensed and in good standing in accordance with any and all state and local laws and requirements by any state or local agency of West Virginia, including, but not limited to, the West Virginia Secretary of State's Office, the West Virginia Tax Department, West Virginia Insurance Commission, or any other state agency or political subdivision. Obligations related to political subdivisions may include, but are not limited to, business licensing, business and occupation taxes, inspection compliance, permitting, etc. Upon request, the Vendor must provide all necessary releases to obtain information to enable the Purchasing Division Director or the Agency to verify that the Vendor is licensed and in good standing with the above entities. *Lumos Networks has read, understands, and will comply with the requirement.*

**SUBCONTRACTOR COMPLIANCE:** Vendor shall notify all subcontractors providing commodities or services related to this Contract that as subcontractors, they too are required to be licensed, in good standing, and up-to-date on all state and local obligations as described in this section. Obligations related to political subdivisions may include, but are not limited to, business licensing, business and occupation taxes, inspection compliance, permitting, etc. Notification under this provision must occur prior to the performance of any work under the contract by the subcontractor. *Lumos Networks has read, understands, and will comply with the requirement.*

**33. ANTITRUST:** In submitting a bid to, signing a contract with, or accepting a Award Document from any agency of the State of West Virginia, the Vendor agrees to convey, sell, assign, or transfer to the State of West Virginia all rights, title, and interest in and to all causes of action it may now or hereafter acquire under the antitrust laws of the United States and the State of West Virginia for price fixing and/or unreasonable restraints of trade relating to the particular commodities or services purchased or acquired by the State of West Virginia. Such assignment shall be made and become effective at the time the purchasing agency tenders the initial payment to Vendor. *Lumos Networks has read, understands, and will comply with the requirement.*

**34. VENDOR CERTIFICATIONS:** By signing its bid or entering into this Contract, Vendor certifies (1) that its bid or offer was made without prior understanding, agreement, or connection with any corporation, firm, limited liability company, partnership, person or entity submitting a bid or offer for the same material, supplies, equipment or services; (2) that its bid or offer is in all respects fair and without collusion or fraud; (3) that this Contract is accepted or entered into without any prior understanding, agreement, or connection to any other entity that could be considered a violation of law; and (4) that it has reviewed this Solicitation in its entirety; understands the requirements, terms and conditions, and other information contained herein.

Vendor's signature on its bid or offer also affirms that neither it nor its representatives have any interest, nor shall acquire any interest, direct or indirect, which would compromise the performance of its services hereunder. Any such interests shall be promptly presented in detail to the Agency. The individual signing this bid or offer on behalf of Vendor certifies that he or she is authorized by the Vendor to execute this bid or offer or any documents related thereto on Vendor's behalf; that he or she is authorized to bind the Vendor in a contractual relationship; and that, to the best of his or her knowledge, the Vendor has properly registered with any State agency that may require registration. Lumos Networks has read, understands, and will comply with the requirement.

**35. VENDOR RELATIONSHIP:** The relationship of the Vendor to the State shall be that of an independent contractor and no principal-agent relationship or employer-employee relationship is contemplated or created by this Contract. The Vendor as an independent contractor is solely liable for the acts and omissions of its employees and agents. Vendor shall be responsible for selecting, supervising, and compensating any and all individuals employed pursuant to the terms of this Solicitation and resulting contract. Neither the Vendor, nor any employees or subcontractors of the Vendor, shall be deemed to be employees of the State for any purpose whatsoever. Vendor shall be exclusively responsible for payment of employees and contractors for all wages and salaries, taxes, withholding payments, penalties, fees, fringe benefits, professional liability insurance premiums, contributions to insurance and pension, or other deferred compensation plans, including but not limited to, Workers' Compensation and Social Security obligations, licensing fees, etc. and the filing of all necessary documents, forms, and returns pertinent to all of the foregoing.

Vendor shall hold harmless the State, and shall provide the State and Agency with a defense against any and all claims including, but not limited to, the foregoing payments, withholdings, contributions, taxes, Social Security taxes, and employer income tax returns. Lumos Networks has read, understands, and will comply with the requirement.

**36. INDEMNIFICATION:** The Vendor agrees to indemnify, defend, and hold harmless the State and the Agency, their officers, and employees from and against: (1) Any claims or losses for services rendered by any subcontractor, person, or firm performing or supplying services, materials, or supplies in connection with the performance of the Contract; (2) Any claims or losses resulting to any person or entity injured or damaged by the Vendor, its officers, employees, or subcontractors by the publication, translation, reproduction, delivery, performance, use, or disposition of any data used under the Contract in a manner not authorized by the Contract, or by Federal or State statutes or regulations; and (3) Any failure of the Vendor, its officers, employees, or subcontractors to observe State and Federal laws including, but not limited to, labor and wage and hour laws. Lumos Networks has read, understands, and will comply with the requirement.

**37. PURCHASING AFFIDAVIT:** In accordance with West Virginia Code §§ 5A-3-10a and 5-22-1(i), the State is prohibited from awarding a contract to any bidder that owes a debt to the State or a political subdivision of the State, Vendors are required to sign, notarize, and submit the Purchasing Affidavit to the Purchasing Division affirming under oath that it is not in default on any monetary obligation owed to the state or a political subdivision of the state. Lumos Networks has read, understands, and will comply with the requirement.

**38. ADDITIONAL AGENCY AND LOCAL GOVERNMENT USE:** This Contract may be utilized by other agencies, spending units, and political subdivisions of the State of West Virginia; county, municipal, and other local government bodies; and school districts ("Other Government Entities"), provided that both the Other Government Entity and the Vendor agree. Any extension of this Contract to the aforementioned Other Government Entities must be on the same prices, terms, and conditions as those offered and agreed to in this Contract, provided that such extension is in compliance with the applicable laws, rules, and ordinances of the Other Government Entity. A refusal to extend this Contract to the Other Government Entities shall not impact or influence the award of this Contract in any manner. Lumos Networks has read, understands, and will comply with the requirement.

**39. CONFLICT OF INTEREST:** Vendor, its officers or members or employees, shall not presently have or acquire an interest, direct or indirect, which would conflict with or compromise the performance of its obligations hereunder. Vendor shall periodically inquire of its officers, members and employees to ensure that a conflict of interest does not arise. Any conflict of interest discovered shall be promptly presented in detail to the Agency. Lumos Networks has read, understands, and will comply with the requirement.

**40. REPORTS:** Vendor shall provide the Agency and/or the Purchasing Division with the following reports identified by a checked box below: Lumos Networks has read, understands, and will comply with the requirement.

Such reports as the Agency and/or the Purchasing Division may request. Requested reports may include, but are not limited to, quantities purchased, agencies utilizing the contract, total contract expenditures by agency, etc. Lumos Networks has read, understands, and will comply with the requirement.

Quarterly reports detailing the total quantity of purchases in units and dollars, along with a listing of purchases by agency. Quarterly reports should be delivered to the Purchasing Division via email at [purchasing.requisitions@wv.gov](mailto:purchasing.requisitions@wv.gov). Lumos Networks has read, understands, and will comply with the requirement.

**41. BACKGROUND CHECK:** In accordance with W. Va. Code § 15-2D-3, the Director of the Division of Protective Services shall require any service provider whose employees are regularly employed on the grounds or in the buildings of the Capitol complex or who have access to sensitive or critical information to submit to a fingerprint-based state and federal background inquiry through the state repository. The service provider is responsible for any costs associated with the fingerprint-based state and federal background inquiry.

After the contract for such services has been approved, but before any such employees are permitted to be on the grounds or in the buildings of the Capitol complex or have access to sensitive or critical information, the service provider shall submit a list of all persons who will be physically present and working at the Capitol complex to the Director of the Division of Protective Services for purposes of verifying compliance with this provision. The State reserves the right to prohibit a service provider's employees from accessing sensitive or critical information or to be present at the Capitol complex based upon results addressed from a criminal background check.

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Service providers should contact the West Virginia Division of Protective Services by phone at (304) 558-9911 for more information. Lumos Networks has read, understands, and will comply with the requirement.

**42. PREFERENCE FOR USE OF DOMESTIC STEEL PRODUCTS:** Except when authorized by the Director of the Purchasing Division pursuant to W. Va. Code § 5A-3-56, no contractor may use or supply steel products for a State Contract Project other than those steel products made in the United States. A contractor who uses steel products in violation of this section may be subject to civil penalties pursuant to W. Va. Code § 5A-3-56. As used in this section:

- a. "State Contract Project" means any erection or construction of, or any addition to, alteration of or other improvement to any building or structure, including, but not limited to, roads or highways, or the installation of any heating or cooling or ventilating plants or other equipment, or the supply of and materials for such projects, pursuant to a contract with the State of West Virginia for which bids were solicited on or after June 6, 2001.
- b. "Steel Products" means products rolled, formed, shaped, drawn, extruded, forged, cast, fabricated or otherwise similarly processed, or processed by a combination of two or more or such operations, from steel made by the open heath, basic oxygen, electric furnace, Bessemer or other steel making process. The Purchasing Division Director may, in writing, authorize the use of foreign steel products if:
- c. The cost for each contract item used does not exceed one tenth of one percent (.1%) of the total contract cost or two thousand five hundred dollars (\$2,500.00), whichever is greater. For the purposes of this section, the cost is the value of the steel product as delivered to the project; or
- d. The Director of the Purchasing Division determines that specified steel materials are not produced in the United States in sufficient quantity or otherwise are not reasonably available to meet contract requirements.

Lumos Networks has read, understands, and will comply with the requirements in paragraphs 42a. through 42d above.

**43. PREFERENCE FOR USE OF DOMESTIC ALUMINUM, GLASS, AND STEEL:** In Accordance with W. Va. Code § 5-19-1 et seq., and W. Va. CSR § 148-10-1 et seq., for every contract or subcontract, subject to the limitations contained herein, for the construction, reconstruction, alteration, repair, improvement or maintenance of public works or for the purchase of any item of machinery or equipment to be used at sites of public works, only domestic aluminum, glass or steel products shall be supplied unless the spending officer determines, in writing, after the receipt of offers or bids, (1) that the cost of domestic aluminum, glass or steel products is unreasonable or inconsistent with the public interest of the State of West Virginia, (2) that domestic aluminum, glass or steel products are not produced in sufficient quantities to meet the contract requirements, or (3) the available domestic aluminum, glass, or steel do not meet the contract specifications. This provision only applies to public works contracts awarded in an amount more than fifty thousand dollars (\$50,000) or public works contracts that require more than ten thousand pounds of steel products.

The cost of domestic aluminum, glass, or steel products may be unreasonable if the cost is more than twenty percent (20%) of the bid or offered price for foreign made aluminum, glass, or steel products. If the domestic aluminum, glass or steel products to be supplied or produced in a

“substantial labor surplus area”, as defined by the United States Department of Labor, the cost of domestic aluminum, glass, or steel products may be unreasonable if the cost is more than thirty percent (30%) of the bid or offered price for foreign made aluminum, glass, or steel products. This preference shall be applied to an item of machinery or equipment, as indicated above, when the item is a single unit of equipment or machinery manufactured primarily of aluminum, glass or steel, is part of a public works contract and has the sole purpose or of being a permanent part of a single public works project. This provision does not apply to equipment or machinery purchased by a spending unit for use by that spending unit and not as part of a single public works project.

All bids and offers including domestic aluminum, glass or steel products that exceed bid or offer prices including foreign aluminum, glass or steel products after application of the preferences provided in this provision may be reduced to a price equal to or lower than the lowest bid or offer price for foreign aluminum, glass or steel products plus the applicable preference. If the reduced bid or offer prices are made in writing and supersede the prior bid or offer prices, all bids or offers, including the reduced bid or offer prices, will be reevaluated in accordance with this rule. *Lumos Networks has read, understands, and will comply with the requirements.*

**44. INTERESTED PARTY SUPPLEMENTAL DISCLOSURE:** W. Va. Code § 6D-1-2 requires that for contracts with an actual or estimated value of at least \$1 million, the vendor must submit to the Agency a supplemental disclosure of interested parties reflecting any new or differing interested parties to the contract, which were not included in the original pre-award interested party disclosure, within 30 days following the completion or termination of the contract. A copy of that form is included with this solicitation or can be obtained from the WV Ethics Commission. This requirement does not apply to publicly traded companies listed on a national or international stock exchange. A more detailed definition of interested parties can be obtained from the form referenced above. *Lumos Networks has read, understands, and will comply with the requirements.*



**DESIGNATED CONTACT:** Vendor appoints the individual identified in this Section as the Contract Administrator and the initial point of contact for matters relating to this Contract.

(Name, Title)

Greg Florence, Major Account Manager

(Printed Name and Title)

1200 Greenbrier St, Charleston, WV 25311

(Address)

(304) 414-0411

(Phone Number) / (Fax Number)

florenceg@lumosnet.com

(email address)

**CERTIFICATION AND SIGNATURE:** By signing below, or submitting documentation through wvOASIS, I certify that I have reviewed this Solicitation in its entirety; that I understand the requirements, terms and conditions, and other information contained herein; that this bid, offer or proposal constitutes an offer to the State that cannot be unilaterally withdrawn; that the product or service proposed meets the mandatory requirements contained in the Solicitation for that product or service, unless otherwise stated herein; that the Vendor accepts the terms and conditions contained in the Solicitation, unless otherwise stated herein; that I am submitting this bid, offer or proposal for review and consideration; that I am authorized by the vendor to execute and submit this bid, offer, or proposal, or any documents related thereto on vendor's behalf; that I am authorized to bind the vendor in a contractual relationship; and that to the best of my knowledge, the vendor has properly registered with any State agency that may require registration.

Lumos Networks LLC

(Company)

 GREG FLORENCE Major Account Manager

(Authorized Signature) (Representative Name, Title)

Greg Florence - Major Account Manager

(Printed Name and Title of Authorized Representative)

November 21, 2018

(Date)

(304) 414-0411

(Phone Number) (Fax Number)

## **DEFINITIONS, ABBREVIATIONS, ACRONYMS:**

1. ANI, Automatic Number Identification
2. CoS, Class of Service
3. DID, Direct Inward Dial
4. DNIS, Dialed Number Identification Service
5. E.164, the international public telecommunication numbering plan
6. High Security, any use case where the Vendor's solution requires a higher security baseline standard. High security use cases are either the result of regulatory or legal compliance requirements and/or risk assessment indicates a higher level of security is warranted.
7. ID, Identification
8. IP, Internet Protocol
9. LAN, Local Area Network
10. LMS, Learning Management System
11. M/S, Millisecond
12. MACD, Move, Add, Change, Delete
13. Microsoft O365, Microsoft Office 365
14. MPLS, Multiprotocol Label Switching
15. MWI, Message Waiting Indicator
16. PHI, Protected Health Information
17. PII, Personally Identifiable Information
18. PMBOK, Project Management Body of Knowledge
19. PMO, Project Management Office
20. POTS, Plain Old Telephone Service
21. PRI, Primary Rate Interface
22. PS/ALI, Private Switch/Automatic Location Identifier
23. PSAP, Public Safety Answering Point
24. PSTN, Public Switched Telephone Network
25. QoS, Quality of Service
26. SIP, Session Initiation Protocol
27. SOW, Statement of Work
28. SRST, Survivable Remote Site Telephony
29. Standard Security, any use case where the Vendor's solution does not require heightened security baseline standards. The standard security use case is delineated to provide the State a potentially lower cost option when a standard level of security provides an appropriate level of protection.
30. TCR, Telecommunications Change Request
31. UCaaS, Unified Communications as a Service
32. UCCaaS, Unified Communications and Collaborations as a Service
33. VCC, Virtual Contact Center
34. VLAN, Virtual Local Area Network
35. VoIP, Voice over Internet Protocol
36. WAN, Wide Area Network
37. WBS, Work Breakdown Structure
38. WVOT, West Virginia Office of Technology

# REQUEST FOR PROPOSAL

## (CRFP 0212 SWC1900000001)

### SECTION 4: PROJECT SPECIFICATIONS

**4.1. Background and Current Operating Environment:** As outlined in the West Virginia State Code §5A-6-4e “the Chief Technology Officer shall oversee telecommunications services used by state spending units for the purpose of maximizing efficiency to the fullest possible extent”. Additionally, per State Code §5A-6-4a (11), the Chief Technology Officer develops a “unified and integrated structure for information systems for all executive agencies.” In pursuance of those objectives, the West Virginia Office of Technology is seeking proposals from Vendors to establish an open-end, Statewide Contract for Managed Voice Services and Hosted Voice over Internet Protocol (“VoIP”) Services, encompassing Unified Communications as a Service (“UCaaS”), and Hosted Contact Center Services.

It is the State’s intent to establish a contract with a single Vendor to provide maintenance, management, and support for the State’s current IP Telephony platforms while working to migrate those telephony services to a fully managed and hosted VoIP solution. Additionally, the Vendor will be expected to provide daily management and operational support for multiple Contact Centers while working to migrate those Contact Centers to its hosted solution.

Currently, the State of West Virginia has an estimated 10,000 phones on multiple Cisco VoIP solutions – 3x Cisco Unified Call Manager and Unity Express, 4x Cisco Unified Call Manager and Unity, 7x Cisco Unified Call Manager and Unity Connection, 10x Cisco Unified Call Manager and Unity Connection, Cisco Call Manager Express, ten (10) Cisco Contact Center Version 7 sites, and a Hosted VoIP Solution with Verizon Business Solutions (UCCaaS and Contact Center); it is anticipated all of those sites currently utilizing a VoIP solution will be migrated to the Vendor’s proposed hosted solution. In addition to the current VoIP Agencies, the State also requires the flexibility to implement a VoIP solution at sites where one does not currently exist. Potentially, the State may leverage the awarded contract to implement another estimated 10,000 users where traditional telephony services exist. [Lumos Networks has read and understands.](#)

The State of WV’s current environments consist of the following:

- Cisco Unified Messaging
- Cisco Unity Connection
- Cisco Unity Express
- Cisco Call Manager Express
- Cisco Contact Center Express
- Cisco Expressway C&E
- Cisco Presence
- Cisco Jabber
- Cisco Gateways using VoIP Session Initiation Protocol (“SIP”) Trunks, Primary Rate Interface (“PRIs”) Circuits, and Analog POTS (“Plain Old Telephone Service”) lines
- Microsoft Skype for Business 2016
- Microsoft Active Directory

- Microsoft Office 365
- Cisco Survivable Remote Site Telephony (“SRST”)
- Bridge Communications Operator Console
- Singlewire Informacast Paging
- Verizon hosted solution- Unified Communications and Collaborations as a Service (UCCaaS)
- Verizon hosted solution - Virtual Contact Center (VCC)

More information regarding the State’s current telephony infrastructure can be found in **Appendix\_A**.

Meanwhile, the State’s current Wide Area Network (“WAN”) is undergoing a conversion from Switched Ethernet to Multiprotocol Label Switching (“MPLS”) services, which may impact how the Vendor’s proposed solution will be implemented. The WVOT is working with Verizon Business to migrate an estimated 500 data circuits across the State with a projected completion of December 2018. Thus far, approximately 275 circuits have been migrated, meaning that the proposed VoIP solution may be implemented at those sites using MPLS circuits to ensure quality of service. The State has deployed Cisco routers for WAN communications. Local Area Networks (“LANs”) are comprised of various switches manufactured by Cisco, Hewlett Packard, Brocade, and Extreme.

**4.2. Project Goals and Mandatory Requirements:** The State of West Virginia is seeking to establish a contract with a Vendor for the management of the State’s current Legacy Environment and to migrate its Legacy Environment to a Hosted VoIP Solution, including Contact Center Services. Vendor should describe its approach and methodology to providing the service or solving the problem described by meeting the goals/objectives identified below. **Vendor’s response should include any information about how the proposed approach is superior or inferior to other possible approaches as well as identify areas where the proposed solution exceeds the project expectations.** Lumos Networks has provided responses to sections 4.2 and 4.3 in the Appendix section of the RFP response.

**4.2.1. Goals and Objectives** – The project goals and objectives are listed below.

**4.2.1.1 Voice Services**

**4.2.1.1.1 Managed Voice Services – Support of State’s Legacy IP Environment**

**4.2.1.1.1.1** The State’s goal is to contract with a single Vendor for all application, hardware, and MACD management, maintenance, and support of its current IP Telephony platforms (as described in **Appendix\_A**), with the goal of the Vendor migrating the State’s current IP telephony infrastructure, excluding network infrastructure, to a unified, hosted IP platform within 24 months. The State further desires an economical monthly per phone cost for these support services. As such:

The State is proposing the following division of duties for the support of its Legacy IP Environment:

**Vendor Duties:**

1. Create an operational plan of the State's Legacy IP Environment for the State's review and approval
2. Daily management, operational support, and ongoing maintenance of the State's current telephony environment, as outlined in **Appendix\_A**.
3. MACD changes to the State's current telephony infrastructure.
4. Replacement of failed parts where feasible, outdated telephony equipment, or other telephony components. If the Vendor is unable to furnish parts or replace equipment, the State expects the Vendor to migrate that site to the Vendor's Hosted VoIP platform.
5. Set-up mutually agreed upon standing meetings with the State to address concerns, changes, service interruptions, and project progress.
6. The Vendor should alert the State points of contact after being notified of any service interruptions, in writing, that exceed sixty (60) minutes. The Vendor should provide updates to the State every sixty (60) minutes thereafter until the issue is resolved.
7. The Vendor should have a 24x7x365 operations center that includes Tier 1 support to receive trouble tickets and onsite operational support for critical failures.

**State Duties:**

1. Management of State's LAN/WAN Network Infrastructure
2. Ordering, disconnecting, and billing services

**4.2.1.1.1.2** The State desires the Vendor provide the State with its proposed Operations Plan within 30 calendar days of contract effective date, outlining its plan for managing, supporting, and maintaining the State's current IP telephony infrastructure. The Vendor's Operations Plan should include a strategy for assuming its duties, as outlined above. Please describe your company's experience and strategy in developing operations plans for supporting legacy environments.

**4.2.1.1.1.3** The State desires that the State and Vendor finalize and agree upon an Operations Plan within 60 calendar days of contract effective date for the management, support, and maintenance of the State's current telephony infrastructure. Please describe your company's ability to deliver the finalized Operations Plan to the State within 60 calendar days of contract effective date

with scheduling the appropriate meetings, making changes after State input, and meeting deadlines.

**4.2.1.1.1.4** The State desires the Vendor to be fully managing its Legacy Environment within 90 calendar days of contract effective date and until all sites wishing to adopt these services have been migrated to a Hosted VoIP solution. Please describe your company's experience in providing support of a Legacy Environment, its experience in taking over existing infrastructure, and provide a plan showing how this goal can be met.

**4.2.1.1.1.5** It is the State's desire that the awarded Vendor of this contract will establish a local support system to continue support and maintenance of the State's Legacy IP systems. Please describe your company's ability to provide maintenance and support of the State's Legacy Environment.

**4.2.1.1.1.6** The State desires all application, hardware, and MACD support for the State's current telephony infrastructure will be entered via the Vendor's self-service web portal and/or a Vendor-provided toll-free number within 90 calendar days from contract effective date. If the Vendor determines that an issue or problem falls within the State's purview, the Vendor should notify the State's points of contact in writing within one hour of reaching this determination. Please describe your company's support offerings or its ability/plan to accomplish this.

**4.2.1.1.2 Transition from the State's Legacy IP Environment to the Vendor's Hosted Solution**

**4.2.1.1.2.1** The State desires all sites listed in **Appendix\_A** be migrated to a Hosted VoIP solution within 730 calendar days from contract effective date. The State reserves the right to reprioritize this list as necessary. Please describe your company's plan to accomplish these migrations.

**4.2.1.1.2.2** The Vendor should include site preparation and coordination services to implement a turn-key solution at various State locations, including simultaneous deployments to the Vendor's hosted solution. These services should be provided by Vendor personnel knowledgeable in both the Vendor's solution and legacy

public switched telephone services. The State desires the Vendor perform site assessment and readiness work for the implementation of its hosted solution, at no additional cost, including a proposed division of duties (Vendor, State), which results in a Statement of Work for each site, as follows:

**VENDOR duties:**

- Gather site's end-user data in order to get site ready for Vendor's hosted solution;
- Provide list of equipment/specifications needed for site readiness, including cabling infrastructure requirements;
- Conduct review to move, at a minimum, existing telephony system to new environment;
- Provide the State with necessary ordering information for TCRs;
- The State owns all data gathered under the scope of the contract and is able to obtain copies of all configuration files gathered as part of this contract. The Vendor should update, maintain the data repository in a manner negotiated with the State upon award, and provide information upon request in an Excel or csv format;
- Configure, tag, label, and drop-ship phones to site;

**STATE duties:**

- Confirm site readiness;
- Coordinate between the Agency, Vendor, and other applicable parties;
- Purchase, configure, update and refresh network hardware;
- Prepare, process, and submit TCR to Vendor based on information provided;
- Place physical phones.

The Vendor should describe its solution's capability to meet or exceed each of these objectives.

#### **4.2.1.1.3 Hosted Voice Services**

The State's goal is to obtain a reliable, customizable, and scalable UCaaS solution providing hosted voice-over-IP (VOIP) services for an estimated 10,000 state employees located at various sites throughout the State. The State desires these services be provided at no additional cost, except where noted in this section. To that end:

**4.2.1.1.3.1** The Vendor's solution should offer four voice packages.

These packages should include: A Basic Package with at least Ad Hoc Conferencing, Call Forwarding, Call History, Call Hold, Call Waiting, Caller ID, and Do Not Disturb; an Enhanced Package including at least all features in the Basic package plus Voice Mail (including Immediate Divert to Voicemail and Message Waiting Indicator); a Premium Package including at least all of the features in the Enhanced Package plus Extension Mobility; and an Analog line option. All packages should be available with high and standard security options. Equipment for the analog line package will not be required for this contract. Please describe your Company's offerings.

**4.2.1.1.3.2** The State desires six handset options for use under this contract: a 2-line phone, a 6-line phone with sidecar capabilities, a conference phone, a softphone, a wireless phone, and an ADA-compliant hardware option. The State further desires a leasing option for all handsets on this contract, by which the State will pay a monthly lease price to be added to the price of the monthly voice package. In the event that a phone is broken or stops functioning, the State desires the Vendor replace that phone, at no additional cost. Additionally, the State desires that the Vendor refresh equipment in-line with the Original Equipment Manufacturer's refresh program, at no additional cost. At the end of the contract, the State will own all of the phones. Please describe your company's leasing options, refresh programs, and ability to meet this goal.

**4.2.1.1.3.3** The State utilizes Cisco SRST and local voice services in case of data network failure. At the initial deployment of the site to the Vendor's hosted solution, if requested, the Vendor should work with an Agency to implement call control and PSTN connectivity, in case the data network fails at a State location. This should include the provisioning of at least one local phone line for 911 calling. The Vendor should include the provisioning of one failover line in the cost of its monthly package. If the site requests more than one failover line, the State understands there may be additional charges for that work. Please describe your solution's ability to meet this goal and any additional costs.



- 4.2.1.1.3.4** The Vendor's solution should support station-to-station calling that remains "on-net" (on the State's private data network) at no additional cost. Please describe your solution's ability to meet this goal.
- 4.2.1.1.3.5** The Vendor's solution should provide at least two PSTN connections via SIP Trunks over secure private connections engineered for voice quality of service. These PSTN connections should adhere to the industry standard of 150 m/s latency or better, and jitter of 40 m/s or better. Please describe your network engineering architecture and your practices to continuously achieve these standards.
- 4.2.1.1.3.6** The Vendor's solution should provide a MPLS network connection to Verizon's MPLS core to reduce and/or eliminate the backhaul of traffic to the State's core network. The State has provided a column on the **Attachment\_A Cost Sheet** for both one-time installation costs and for monthly recurring costs for these connections. Please describe your ability to meet this goal.
- 4.2.1.1.3.7** As an option for small sites with non-private network handoffs, the State desires a solution utilizing public networking with the ability to securely transmit sensitive data. Please describe any offerings to support this goal.
- 4.2.1.1.3.8** The Vendor's solution should include Caller ID services (inbound traffic) and custom number and naming (outbound traffic) that State Agencies may utilize to customize their displayed information. The Vendor should provide this capability at no additional cost. Please describe your solution's ability to provide these services.
- 4.2.1.1.3.9** The Vendor's solution should include unlimited local and nationwide calling at no additional charge. Please describe your no cost offerings.
- 4.2.1.1.3.10** The Vendor's solution should provide international calling. The State understands fees may be associated with international calling. The Vendor should provide its per minute international calling rates for Mexico, Canada, and Jamaica in the **Attachment\_A Cost Sheet**. These will be used as part of the cost evaluation. The Vendor should also attach an appendix of its international calling rates for all countries. This appendix will be used to establish the international

calling rates per country in the awarded contract and will be required prior to award. Please describe your solution's international calling offerings.

- 4.2.1.1.3.11** The Vendor's solution should provide comprehensive site coverage to meet the State's local and long-distance IP-based calling requirements. Please describe your coverage, as well as how you plan to meet the State's coverage needs.
- 4.2.1.1.3.12** The Vendor's solution should provide load balancing for all traffic in-bound from the PSTN. Please describe your solution's ability to meet this goal.
- 4.2.1.1.3.13** The Vendor's solution should ensure 911 call delivery to the appropriate local PSAPS. Additionally, the State desires support for Private Switch/Automatic Location Identification (PS/ALI) services for 911 calls. Please describe your process for ensuring the accuracy of 911 call delivery, as well as the process to support PS/ALI.
- 4.2.1.1.3.14** The Vendor's solution should support the following industry standard protocols: G.711 (uncompressed), G.729 (compression), and T.38 (fax). Please describe the protocols supported by your solution.
- 4.2.1.1.3.15** The Vendor's solution should have the ability to scale the number of simultaneous concurrent calls on a monthly and/or seasonal basis at the State's request. Please describe your solution's ability and your process to accomplish this, including division of duties.
- 4.2.1.1.3.16** The Vendor's solution should include interoperability with the following: IPv4 addressing (RFC 791), RFC 1918 for private IP addressing, and support SIP over TCP or UDP. Carrier grade NAT (RFC 6598), link-local IP addresses (RFC 3927), and Multicast addresses (RFC 3171) will not be accepted. Please describe your solution's interoperability to accomplish this goal.
- 4.2.1.1.3.17** The Vendor's solution should provide the following quality and reliability standards: QoS tagging IEEE 802.1Q-2011; not rewriting, marking, or remarking any VLAN tags affixed to packets by the State, without the State's expressed consent; at a minimum, one Class of

Service (COS) marking per Ethernet service. Please describe your solution's ability to meet this goal.

- 4.2.1.1.3.18** The State desires a Unified Messaging solution; therefore, the Vendor's solution should fully integrate with Microsoft O365, allowing users to listen, forward, and delete voicemails from both O365 and the hosted environment. Voicemails should be retained in the solution for 15 days or longer. In addition, the Vendor's solution should be provisioned to fully integrate with the State's Active Directory and Active Directory Federated Services. Please describe your abilities to meet these goals.
- 4.2.1.1.3.19** Some State Agencies utilize paging and notification to the PC desktop, over-head paging, or through-the-phone-speaker paging. The Vendor's solution should include an option for providing, maintaining, and supporting a paging solution, including any associated hardware, software, and licenses, and if requested by Agency, or integrate with an existing or Agency-owned paging solution. The State understands there may be fees associated with this offering. Please describe your offerings with respect to these deployments.
- 4.2.1.1.3.20** The State desires an option for Agencies with high call volume and receptionist personnel that will utilize an Operator Console for fast and efficient call control. The State understands there may be fees associated with this offering. Please describe your solution's Operator Console offerings.
- 4.2.1.1.3.21** If requested by an Agency, the State desires the ability to integrate a third-party call recording solution with the Vendor's hosted solution. Please describe your solution's ability to meet this goal.
- 4.2.1.1.3.22** The State desires that the Vendor use currently-owned State IP telephony handsets where the handset is still supported on the Vendor's solution. Please describe your company's ability to use the State's current handsets and its ability to meet this objective.

#### **4.2.1.1.4 Hosted Contact Center Services**

**4.2.1.1.4.1** The State's goal is to obtain a reliable, customizable, and scalable solution to provide hosted contact center services for an estimated twenty-five (25) individual contact center sites that works in conjunction with the Vendor's proposed Hosted VoIP solution. Certain sites require the capability to transmit and/or store call recordings that may contain sensitive data (such as PHI or PII). For ease of deployment and maintenance, the State prefers the contact center solution be web-based. The solution should provide the following capabilities:

- Ability for a simple, drag-and-drop, easy-to-understand interface to create customized call routing and role-based queues that can be deployed to sites with non-technical administration
- Should provide chat capabilities
- Should provide live data reporting
- If requested by an Agency, the solution should have the ability to interface with an Agency's database to populate information based on data provided by the caller
- If requested by an Agency, the solution should provide the flexibility for agents to use a public-switched-telephone-network (PSTN) phone to utilize the solution
- Should provide scalability for up to 800 agents and the ability to expand in the future

Please describe your solution and identify any areas in your solution that exceed the items requested above.

**4.2.1.1.4.2** Some of the State's call centers operate on a 24x7x365 basis, delivering critical services to the communities. As such, the State prefers the Vendor's solution have inherent redundancy and survivability characteristics that will ensure minimal service disruptions, such as data centers in geographically diverse regions allowing for failover, equipment and power redundancies in those data centers, etc. Please describe your solution's redundancy and its ability to meet and/or exceed this goal.

**4.2.1.1.4.3** The Vendor's solution should include enhanced features for Administrators, Supervisors, and Agents to effectively meet the needs of their customers. As such, the solution should provide the following capabilities:

- Agent and Supervisor client that provides Blended agents: Inbound and outbound capability
  - Ability to monitor critical performance metrics allowing managers to coach, train, and encourage agent behavior
  - Ability for Supervisors to change an agent's status
  - Ability for Supervisors to silently monitor inbound and outbound calls
  - Ability to interrupt an agent's call to interact with both the caller and the agent
  - Ability for Supervisors to remove an agent from a call
  - Ability to change an agent's skill profile in real time
- Please describe your solution and identify any areas in your solution that exceed the items requested above.

**4.2.1.1.4.4** Some State agencies require the ability to utilize call recording, both on-demand and session-initiated. Certain call recordings will contain sensitive data (PHI, PII, etc.) and will require proper security protocols when transmitting or storing this information, with role-based access as defined by the State. Please describe your solution's call recording capabilities, and any additional requirements for the State in order to utilize these features.

**4.2.1.1.4.5** The State may utilize an outbound predictive dialing campaign, at an Agency's request. Please describe your solution's capabilities in providing predictive dialing campaigns.

#### **4.2.1.2 Security for Vendor's Hosted Solution**

The State's goal is to ensure the Vendor's solution adheres to industry standard security practices and provides for sensitive data protection (where required) as it relates to cloud-based services. As such, the Vendor should:

- 4.2.1.2.1** Describe how its solution leverages high security standards associated with regulated data and/or high availability requirements, but also offers a cost-effective, standard-security solution option to the state.
- 4.2.1.2.2** Describe its policies and procedures for conducting sub-contractor assurance, validating both the capability of the vendor to fulfill contracted responsibilities and adhere to all applicable to security & privacy policies and controls of all parties.
- 4.2.1.2.3** Describe its company's cyber security and privacy management program including an overview of the governance structure, cyber

security strategy, and the experience of personnel in key security and privacy roles.

#### **4.2.1.3 Service and Support for Vendor's Hosted Solution**

The State's goal is to partner with a Vendor whose service and support structures allow the State to focus on its core services, while ensuring telephony and contact center systems are available to State Agencies, with certain Agency sites (hospitals, jails, etc.) operating critical services 24x7x365. The State desires a Vendor to provide all levels of tiered support, including Tier 1 support for end-users. To this end, the Vendor's service and support structure for the Vendor's hosted solution should provide for the following:

**4.2.1.3.1** Performance monitoring, capacity planning, and real-time surveillance of the Vendor's network to ensure 99.9% availability of services and provide network utilization reports upon request. Please describe your company's process and ability for providing this information upon request, including any lead times needed and how the State submits these requests.

**4.2.1.3.2** The State desires regularly scheduled meetings and/or calls to discuss the following areas:

- Architecture and Design
- Implementation
- Ordering and Billing
- Service and Support
- Project Management

Please describe your company's ability to hold regular meetings on each of these topics, as well as your company's implementation plans for starting these discussions.

**4.2.1.3.3** Vendor should contact the State's engineering points of contact by phone within 30 minutes of a Vendor network outage that affects multiple sites on the State's network. This verbal notification should be followed with a written report that provides an explanation of the problem, the cause of the problem, the solution to the problem, the estimated time for recovery, and the steps taken or to be taken to prevent a reoccurrence. To that end, please describe your company's notification procedures in the case of an outage.

**4.2.1.3.4** Vendor should provide written notification of ten (10) business days or more in advance of any planned upgrades, modifications, etc. that may affect the State's customers to the State's engineering points of contact. Please describe your company's notification process for planned maintenance.

- 4.2.1.3.5** Vendor should provide notification of three (3) business days or more in advance of emergency maintenance. While the State understands emergency outages and/or unplanned maintenance windows occur, it is expected that these situations are kept to a minimum. Please describe your company's notification process for emergency maintenance and outages.
- 4.2.1.3.6** If the Vendor's work requires them to be at a State site, the Vendor should provide Agency at least 72 hours' notice before arriving at the site and comply with State law and all Agency policies, including but not limited to background checks for contractors, vendors, and visitors. Please describe your approach and methodology in your solution/response.
- 4.2.1.3.7** The Vendor's network operation support center should provide: all tiers of support, including end-user support, advanced technical expertise, be staffed with resources that are proficient in spoken and written English, maintain and take responsibility for trouble tickets reported by the State until resolved, and provide a tiered support escalation process. Please describe your network operation support center's structure, processes, and procedures for handling trouble tickets, resolving those tickets, and reporting back to the State's point of contacts.
- 4.2.1.3.8** The Vendor's solution should include a documented support and escalation structure to address outages. The State prefers the severity of the issue/support problem to determine the average problem resolution response time, as outlined below:
- Severity Level 1 is defined as an urgent situation, where the customer's services are unavailable and the customer is unable to use/access the network. The Vendor should resolve Severity Level 1 problems as quickly as possible, which on average should not exceed two (2) business hours. If repair inside the 2-hour window is not feasible, then regular 1-hour updates are desired.
  - Severity Level 2 is defined as significant outages and/or repeated failures resulting in limited effective use by the customer. The service may operate but is severely restricted (i.e. slow response, intermittent but repeated inaccessibility, etc.). The Vendor should resolve Severity Level 2 problems as quickly as possible, which on average should not exceed four (4) business hours. If repair inside the 4-hour window is not feasible, then regular 2-hour updates are desired.
  - Severity Level 3 is defined as a minor problem that exists with the service, but most of the functions are still usable, and some circumvention may be required to provide service. The Vendor should resolve Severity Level 3 problems as quickly as possible, which on average should not exceed ten (10) business hours. If repair inside the 10-hour window is not feasible, then updates are

desired at the start of the next business day and every day thereafter until repairs are complete.

Please describe your company's severity level structure, as well as your documented procedures for handling outages, including escalation processes, notification methods, and resolution times.

**4.2.1.3.9** The State desires the ability to place initial service orders, any changes with an associated charge, or to disconnect services, electronically and receive confirmation of receipt and subsequent order detail. The State desires details including the following data elements:

- Telecommunications Change Request (TCR) Form Number
- Date order was received
- Customer Name
- Customer on-site address
- Projected due date
- Rate element identifier (circuit ID or other)
- Additional order details

Additionally, the State prefers the Vendor's solution has a web portal for Agencies to enter moves, add, and changes that do not contain billing elements. MACD changes should be resolved by the same or next business day. Please describe your company's ability to accept, process, and report on electronic order submissions, as well as any requirements from the State needed to implement such a program.

**4.2.1.3.10** The State maintains a Learning Management System (LMS) for training purposes. The State desires web-based training and training materials for all services offered under this contract. The State desires the Vendor to provide materials that can be uploaded into its LMS, initial Train the Trainer session(s), and documentation/reference materials that can be distributed to and used by end-users. The State intends to incorporate these materials into its LMS, as well. Additionally, the State desires training sessions, if requested by the Agency, and the Vendor should include a professional services rate for training that would be above and beyond the initial training included in the site deployment. The expects the Vendor's training materials to be updated as necessary. The training services for the hosted voice services should be included in the monthly per package cost. Please provide information regarding your training program.

**4.2.1.3.11** The State desires an hourly rate for Hosted Contact Center Training Services in the instance the State desires training sessions beyond the training provided at initial implementation. The training at initial implementation should be built into the one-time costs for the Contact Center. These training services should include training for



all contact center roles and should be provided at the State's request. Please describe your Contact Center training offerings and your solution's ability to meet this goal.

**4.2.2. Mandatory Project Requirements** – The following mandatory requirements relate to the goals and objectives and must be met by the Vendor as a part of its submitted proposal. Vendor should describe how it will comply with the mandatory requirements and include any areas where its proposed solution exceeds the mandatory requirement. Failure to comply with mandatory requirements will lead to disqualification, but the approach/methodology that the vendor uses to comply, and areas where the mandatory requirements are **exceeded**, will be included in technical scores where appropriate. The mandatory project requirements are listed below.

#### **4.2.2.1 Managed Voice Services**

**4.2.2.1.1** The Vendor must provide a turnkey technical support solution that ensures the continued operations and MACD needs of the State's existing telephony infrastructure, as defined in **Appendix A**, through the migration period to a Hosted VoIP solution. Additionally, the Vendor must, at the State's discretion, migrate any site to the hosted solution.

#### **4.2.2.2 Hosted Voice Services**

- 4.2.2.2.1** The Vendor must agree the State owns all data gathered under the scope of this contract and the Vendor must produce and/or return the data upon the State's request in an editable format.
- 4.2.2.2.2** Vendor's solution must provide support for local failover and/or survivability services, if requested by Agency, in the event the hosted service becomes inaccessible.
- 4.2.2.2.3** Vendor's solution must provide local telephone numbers in West Virginia.
- 4.2.2.2.4** Vendor's solution must support inbound Automatic Number Identification (ANI).
- 4.2.2.2.5** Vendor's solution must include inbound Caller ID, outbound custom telephone number, and outbound custom name display.
- 4.2.2.2.6** Vendor's solution must support Dialed Number Information Services (DNIS) on 800 # toll-free telephone services.
- 4.2.2.2.7** Vendor's solution must support rerouting of calls to an alternate site at the State's directive.
- 4.2.2.2.8** Vendor's solution must support 900/976 blocking.

- 4.2.2.2.9 Vendor's solution must support x11 services (currently 211, 411, 511, 611, 811, 911).
- 4.2.2.2.10 Vendor's solution must include Direct Inward Dial (DID) feature and service.
- 4.2.2.2.11 Vendor's solution must support Operator services.
- 4.2.2.2.12 Vendor's solution must support local number portability.
- 4.2.2.2.13 Vendor's solution must provide unlimited free local and long-distance calling.
- 4.2.2.2.14 Vendor's hosting center(s) must be located within the continental United States.
- 4.2.2.2.15 Vendor must provide Train the Trainer sessions for Hosted Voice Services implementations.

#### **4.2.2.3 Hosted Contact Center Services**

Vendor's Contact Center solution must support:

- 4.2.2.3.1 Automatic Call Distributor (ACD)
- 4.2.2.3.2 Computer telephony integration (CTI)
- 4.2.2.3.3 Call control
- 4.2.2.3.4 E.164
- 4.2.2.3.5 Interactive voice response (IVR)
- 4.2.2.3.6 Voice Recording
- 4.2.2.3.7 High Availability with load balancing and built-in redundancy
- 4.2.2.3.8 Vendor must provide Train the Trainer sessions, encompassing all Hosted Contact Center roles – Administrator, Supervisor, and Agents.

#### **4.2.2.4 Security**

- 4.2.2.4.1 The proposed solution must adhere to the security and privacy baseline standards in accordance to the high-security and standard-security use-case requirements.

- 4.2.2.4.2** Must adhere to the State of West Virginia's Cyber Security & Privacy policies, procedures, and standards; these can be viewed at the following link: <https://technology.wv.gov/security/Pages/policies-issued-by-the-cto.aspx>
- 4.2.2.4.3** Must adhere to all applicable security and privacy standards and provide compliance for components and network segments that are subject to the following:
- Health Insurance Portability and Accountability Act (HIPAA) requirements as outlined in the attached Business Associate Addendum (BAA) (see **Attachment\_B**)
  - Federal Information Security Management Act (FISMA), National Institute of Standards Technology's Special Publication (NIST SP) 800-53, NIST SP 800-17 which serve as the baseline;
  - Family Education Rights and Privacy Act (FERPA) requirements;
  - Criminal Justice Information System (CJIS) requirements;
  - Payment Card Industry Data Security Standards (PCI-DSS) requirements;
  - Federal tax Information (FTI) and Internal Revenue Service publication 1075 (IRS 1075) requirements;
  - Centers for Medicare & Medicaid (CMS) Services Information Security Policy requirements.
  - Ensure network boundary and access control protection such as dual session boundary controllers and firewalls.
  - Data-at-rest and data-in-transit encryption.
  - Role-based access control for all applications which process and/or store sensitive data, to ensure need-to-know policies are enforceable.
- 4.2.2.4.4** Vendor must draft a cyber risk management plan outlining the process, by which, cyber risk management activities are conducted to identify, assess, communicate, and manage shared cyber risk. The Vendor must provide this prior to the first implementation on the Vendor's hosted solution.
- 4.2.2.4.5** Vendor must draft an incident management plan aligned with NIST SP 800-61rev2, whereas both the State and Vendor must mutually approve. The plan must include the outlined scope, responsibility matrix, communications plan, procedures, and deliverables associated with cyber security incident response. In addition, the plan must outline incident reporting requirements, semiannual security reports, and cyber threat intelligence sharing. The Vendor must provide this prior to the first implementation on the Vendor's hosted solution.
- 4.2.2.4.6** The Vendor must adhere to personnel security requirements for background checks in accordance with state law. The vendor is liable for all costs associated with ensuring staff meets all requirements.
- 4.2.2.4.7** Vendor must agree to drafting an audit management plan designed to assist the state with conducting internal and external compliance audits when the

vendor-supplied solution is within the audit scope. At minimum, the plan must include:

- How the vendor will provide a NIST 800-53 security controls report, outlining organizational responsibilities (State, Vendor, or Shared), per each applicable control for each major application/information system within the audit scope.
- Plan of Action & Milestone documentation for non-compliant security & privacy controls when the vendor holds primary or shared control responsibility.

The Vendor must provide this prior to the first implementation on the Vendor's hosted solution.

#### **4.2.2.5 Service and Support**

**4.2.2.5.1** Vendor must provide a network operation support center(s) for all tiers of support, including end-user support, that is available 24x7x365 and is accessible via a toll-free number.

**4.2.2.5.2** The successful Vendor must assign an experienced and skilled Project Manager who will provide a high-level project management plan including key components such as a project charter, issue tracking, statements of work (SOW), work breakdown structures (WBS), implementation schedules, etc. in accordance with the Project Management Body of Knowledge (PMBOK) or other industry standard project management methodology stated in West Virginia State Code (§5A-6-4b). The link can be found at:

<http://www.legis.state.wv.us/WVCODE/Code.cfm?chap=05a&art=6#06>.

The project management plan must be submitted to and approved by the WVOT Project Management Office (PMO) prior to engaging the first agency for VoIP services implementation.

**4.2.2.5.3** The successful Vendor's Project Manager must track and report (via written status reports) the following: schedule, scope, budget, issues, risks, specified performance indicators, and other metrics determined appropriate throughout the project and each site implementation.

**4.2.2.5.4** Vendor must work with the WVOT using the established Telecommunications Change Request (TCR) (**Attachment\_C**) procedures for ordering and implementing these telecommunications services.

**4.2.2.5.5** Vendor billing errors must be credited back to the State from the effective date of the error. The State reserves the right to withhold payment until credit is received.

**4.2.2.5.6** For auditing, billing, and support purposes, the State requires any service with an associated rate to be identified on its monthly bill. As such, the State must be provided, at a minimum, the following:

- Billing Month

- Billed Entity Name
- Customer Name/Account (if different from billed entity)
- Service Location
- Service Period
- Itemized Cost for Individual Billing Components
- Itemized Call Detail
- Itemized Cost for Any One-Time or Non-Recurring Charges
- Itemized Cost for Any Surcharges and Total Cost

The cost identified in the bill must match the contract rates for the specified services. The Vendor must provide the State's monthly bill in an editable format such as Excel and/or csv.

**4.2.2.5.7** The Vendor must invoice on a consistent monthly billing cycle across all services. Services installed or disconnected for a partial month must be prorated based on the date the service is activated/accepted or disconnected. The Vendor must not bill the State of services until the services have been activated and accepted as functional. The Vendor shall not bill the State for services after the disconnect due date listed on the submitted TCR.

**4.2.2.5.8** The Vendor must provide and update a weekly status report and/or order log for submitted TCRs.

**4.2.2.5.9** If, as part of its proposal, the Vendor submits appendices or other supplemental materials, the Vendor must denote specifically in those materials where the relevant information is located.

**4.2.2.5.10** The State expects full, complete, and timely cooperation in disentangling the relationship in the event that the Agreement expires or terminates for any reason. In the event of expiration or termination, the State expects that the Vendor shall, among other things: return all State data and documentation to the State, including but not limited to configuration information; transfer ownership of all leased equipment at no cost to the State (other than the payments already received by the Vendor under the Agreement); and, allow the State or the replacement provider(s) continued access to all billing, ordering, and trouble ticketing systems, and processes that have been employed in servicing the State, in accordance with methods and procedures to be agreed upon and established in the Agreement. Please acknowledge your acceptance of this.

**4.3. Qualifications and Experience:** Vendor should provide information and documentation regarding its qualifications and experience in providing services or solving problems similar to those requested in this RFP. Information and documentation should include, but is not limited to, copies of any staff certifications or degrees applicable to this project, proposed staffing plans, descriptions of past projects completed (descriptions should include the location of the project, project manager name and contact information, type of project, and what the project goals and objectives were and how

they were met.), references for prior projects, and any other information that vendor deems relevant to the items identified as desirable or mandatory below. [Lumos Networks has provided responses to sections 4.2 and 4.3 in the Appendix section of the RFP response.](#)

**4.3.1. Qualification and Experience Information:** Vendor should describe in its proposal how it meets the desirable qualification and experience requirements listed below.

- 4.3.1.1. Vendor should provide three (3) examples demonstrating at least three (3) years of experience in providing a Hosted VoIP solution of a similar size and scope – 15,000 users across 200 sites with one example being a public entity. Vendor should provide a summarization of each project including goals and objectives, total number of phones deployed per site, length of time deployment took, if still in service, and reference for each example. [Please see References section of RFP response.](#)
- 4.3.1.2. Vendor should provide at least one (1) example demonstrating at least three (3) years of experience in providing single/multiple Hosted Call Center solutions of a similar size and scope – 500 users across 20 sites. Vendor should provide a summarization the project including goals and objectives, total number of agents per site, length of time deployment took, if still in service, and reference for the example. [Please see References section of RFP response.](#)
- 4.3.1.3 The State desires an Account Team (including Account Support Representative, Technical Support Representative, Solution Implementation Support Representative, Contract Manager, Billing Support Representative, Security/Compliance Specialist, and Project Manager) for the winning solution and life of the contract. Vendor should describe in detail the responsibilities of key roles and staff's experience in working in these roles. [Please see Account Team section of RFP response.](#)
- 4.3.1.4 Vendor should describe its experience and process in conducting cyber risk management ensuring shared risk is identified, assessed, communicated, and managed.
- 4.3.1.5 Vendor should describe its experience and process for conducting NIST SP 800-53 security assessment and authorization control families' activities, designed to ensure each vendor-provided solution implementation adheres to security and privacy requirements before being placed into production.
- 4.3.1.6 Vendor should list all government or standards organization security certifications it currently holds that apply specifically to the vendor's proposal, as well as those in process at time of response. Specifically include HIPAA, CMS, FERPA, CJIS Security Policy, PCI Data Security Standards (DSS), IRS Publication 1075, FISMA, NIST 800-53, NIST SP 800-171, and FIPS 200 if they apply.
- 4.3.1.7 Vendor should provide a detailed list of the third-party attestations, reports, security credentials (e.g., FedRamp), and certifications relating to cybersecurity and privacy controls.

**4.3.1.8** Vendor should describe its experience and capabilities in supporting their customers concerning compliance audits when the vendor-supplied solution is within the scope of audit.

**4.3.1.9** Vendor should describe its experience and provide an overview of their incident management process and cyber threat intelligence sharing process for incidents associated with the vendor provided solution.

**4.4. Oral Presentations:** The Agency will require oral presentations of all Vendors participating in the RFP process. The date of the presentations will be determined at a later time and all vendors will be notified in advance. During oral presentations, Vendors may not alter or add to their submitted proposal, but only clarify information. A description of the materials and information to be presented is provided below:

Materials and Information Requested at Oral Presentation:

**4.4.1.** Summary of solution, including product and support offerings, ability to deliver the solution in the specified timeframes, and experience in providing managed and hosted voice solutions. Lumos Networks has read, understands, and will comply with the requirement.

**4.4.2.** The State will ask clarifying questions regarding the Vendor's submitted technical response.

Lumos Networks has read, understands, and will comply with the requirement.

**4.4.3.** Contact Center Presentation to see a live demonstration of Vendor's offering. Lumos

Networks has read, understands, and will comply with the requirement.

# REQUEST FOR PROPOSAL

## (CRFP 0212 SWC1900000001)

### SECTION 5: VENDOR PROPOSAL

- 5.1. Economy of Preparation:** Proposals should be prepared simply and economically providing a concise description of the items requested in Section 4. Emphasis should be placed on completeness and clarity of the content.
- 5.2. Incurring Cost:** Neither the State nor any of its employees or officers shall be held liable for any expenses incurred by any Vendor responding to this RFP, including but not limited to preparation, delivery, or travel.
- 5.3. Proposal Format:** Vendors should provide responses in the format listed below:
- 5.3.1. Two-Part Submission:** Vendors must submit proposals in two received submitted in two distinct parts: technical and cost. Technical proposals must not contain any cost information relating to the project. Cost proposal must contain all cost information and must be sealed in a separate envelope from the technical proposal to facilitate a secondary cost proposal opening.
  - 5.3.2. Title Page:** State the RFP subject, number, Vendor's name, business address, telephone number, fax number, name of contact person, e-mail address, and Vendor signature and date.
  - 5.3.3. Table of Contents:** Clearly identify the material by section and page number.
  - 5.3.4. Response Reference:** Vendor's response should clearly reference how the information provided applies to the RFP request. For example, listing the RFP number and restating the RFP request as a header in the proposal would be considered a clear reference.
  - 5.3.5. Proposal Submission:** All proposals must be submitted to the Purchasing Division prior to the date and time stipulated in the RFP as the opening date. All submissions must be in accordance with the provisions listed in Section 2: Instructions to Bidders Submitting Bids.



# REQUEST FOR PROPOSAL

## (CRFP 0212 SWC1900000001)

### SECTION 6: EVALUATION AND AWARD

- 6.1. Evaluation Process:** Proposals will be evaluated in two parts by a committee of three (3) or more individuals. The first evaluation will be of the technical proposal and the second is an evaluation of the cost proposal. The Vendor who demonstrates that it meets all of the mandatory specifications required, attains the minimum acceptable score and attains the highest overall point score of all Vendors shall be awarded the contract.
- 6.2. Evaluation Criteria:** Proposals will be evaluated based on criteria set forth in the solicitation and information contained in the proposals submitted in response to the solicitation. The technical evaluation will be based upon the point allocations designated below for a total of 70 of the 100 points. Cost represents 30 of the 100 total points.

#### Evaluation Point Allocation:

##### Project Goals and Proposed Approach

- Approach & Methodology to Goals/Objectives 55 Points Possible
  - 4.2.1.1 Voice Services (40 Points Possible)
  - 4.2.1.2 Security of Solution's Services (5 Points Possible)
  - 4.2.1.3 Service and Support of Hosted Solution (10 Points Possible)
- Approach & Methodology to Compliance with Mandatory Project Requirements 0 Points Possible

##### Qualifications and experience

- Qualifications and Experience Generally 10 Points Possible
  - 4.3 Vendor Qualifications and Experience
- Exceeding Mandatory Qualification/Experience Requirements 0 Points Possible

Oral Presentation 5 Points Possible

Total Technical Score: 70 Points Possible

Total Cost Score: 30 Points Possible

**Total Proposal Score: 100 Points Possible**

- 6.3. Technical Bid Opening:** At the technical bid opening, the Purchasing Division will open and announce the technical proposals received prior to the bid opening deadline. Once opened, the technical proposals will be provided to the Agency evaluation committee for technical evaluation.
- 6.4. Technical Evaluation:** The Agency evaluation committee will review the technical proposals, assign points where appropriate, and make a final written recommendation to the Purchasing Division.
- 6.5. Proposal Disqualification:**
- 6.5.1. Minimum Acceptable Score ("MAS"):** Vendors must score a minimum of 70% (49 points) of the total technical points possible in order to move past the technical evaluation and have their cost proposal evaluated. All vendor proposals not attaining the MAS will be disqualified.
- 6.5.2. Failure to Meet Mandatory Requirement:** Vendors must meet or exceed all mandatory requirements in order to move past the technical evaluation and have their cost proposals evaluated. Proposals failing to meet one or more mandatory requirements of the RFP will be disqualified.
- 6.6. Cost Bid Opening:** The Purchasing Division will schedule a date and time to publicly open and announce cost proposals after technical evaluation has been completed and the Purchasing Division has approved the technical recommendation of the evaluation committee. All cost bids received will be opened. Cost bids for disqualified proposals will be opened for record keeping purposes only and will not be evaluated or considered. Once opened, the cost proposals will be provided to the Agency evaluation committee for cost evaluation.

The Purchasing Division reserves the right to disqualify a proposal based upon deficiencies in the technical proposal even after the cost evaluation.

- 6.7. Cost Evaluation:** The Agency evaluation committee will review the cost proposals, assign points in accordance with the cost evaluation formula contained herein and make a final recommendation to the Purchasing Division.

**Cost Evaluation Formula:** Each cost proposal will have points assigned using the following formula for all Vendors not disqualified during the technical evaluation. The lowest cost of all proposals is divided by the cost of the proposal being evaluated to generate a cost score percentage. That percentage is then multiplied by the points attributable to the cost proposal to determine the number of points allocated to the cost proposal being evaluated.

**Step 1:**  $\text{Lowest Cost of All Proposals} / \text{Cost of Proposal Being Evaluated} = \text{Cost Score Percentage}$

**Step 2:**  $\text{Cost Score Percentage} \times \text{Points Allocated to Cost Proposal} = \text{Total Cost Score}$

Example:

Proposal 1 Cost is \$1,000,000

Proposal 2 Cost is \$1,100,000

Points Allocated to Cost Proposal is 30

Proposal 1: Step 1 – \$1,000,000 / \$1,000,000 = Cost Score Percentage of 1 (100%)  
Step 2 – 1 X 30 = Total Cost Score of 30

Proposal 2: Step 1 \$1,000,000 / \$1,100,000 – Cost Score Percentage of 0.909091 (90.9091%)  
Step 2 – 0.909091 X 30 = Total Cost Score of 27.27273

**6.8. Availability of Information:** Proposal submissions become public and are available for review immediately after opening pursuant to West Virginia Code §5A-3-11(h). All other information associated with the RFP, including but not limited to, technical scores and reasons for disqualification, will not be available until after the contract has been awarded pursuant to West Virginia Code of State Rules §148-1-6.3.d.

By signing below, I certify that I have reviewed this Request for Proposal in its entirety; understand the requirements, terms and conditions, and other information contained herein; that I am submitting this proposal for review and consideration; that I am authorized by the bidder to execute this bid or any documents related thereto on bidder's behalf; that I am authorized to bind the bidder in a contractual relationship; and that, to the best of my knowledge, the bidder has properly registered with any State agency that may require registration.

Lumos Networks LLC

(Company)

Greg Florence - GREG FLORENCE - MAJOR ACCOUNT MANAGER

(Representative Name, Title)

(304) 414-0411

(Contact Phone/Fax Number)

November 21, 2018

(Date)



Purchasing Division  
 2019 Washington Street East  
 Post Office Box 50130  
 Charleston, WV 25305-0130

State of West Virginia  
 Request for Proposal  
 35 – Telecomm

Proc Folder: 462803

Doc Description: ADDENDUM\_5: RFP for Managed and Hosted Voice Services

Proc Type: Statewide MA (Open End)

Date Issued	Solicitation Closes	Solicitation No	Version
2018-11-16	2018-11-27 13:30:00	CRFP 0212 SWC1900000001	6

**BID RECEIVING LOCATION**  
 BID CLERK  
 DEPARTMENT OF ADMINISTRATION  
 PURCHASING DIVISION  
 2019 WASHINGTON ST E  
 CHARLESTON WV 25305  
 US

**VENDOR**  
 Vendor Name, Address and Telephone Number: Lumos Networks, LLC  
 1200 Greenbrier St.  
 Charleston, WV 25311

**FOR INFORMATION CONTACT THE BUYER**  
 Mark A Atkins  
 (304) 558-2307  
 mark.a.atkins@wv.gov

Signature X *Meg Florence* FEIN # 84-1452950 DATE 11/27/18

All offers subject to all terms and conditions contained in this solicitation

**ADDITIONAL INFORMATION:**

ADDENDUM\_5 Is issued for the following:

1. To move the Bid Opening date from 11/21/2018 to 11/27/2018 at 1:30pm EST.
2. To Publish revised Attachment\_A Cost Sheet. (rev. 11-16-2018 Excel formatted) due to a calculation error.

No other changes made.

The West Virginia Department of Administration, Purchasing Division (hereinafter referred to as the "Purchasing Division") is issuing this solicitation as a request for proposal ("RFP"), as authorized by W. Va. Code 5A-3-10b, for the West Virginia Office of Technology (hereinafter referred to as the "Agency") to provide Managed Voice Services for the State's Legacy VoIP Environment, while working to migrate those Legacy Environments to a Hosted VoIP Platform, included Hosted Contact Center Services per attached documents.

**MANDATORY PRE-BID MEETING:**

DATE: 09/26/2018

TIME: 2:30PM EDT

LOCATION: WV Office of Technology

NOTE: Online responses to this solicitation are prohibited. Please see the Instructions to Bidders in Section 2 for proposal submission.

INVOICE TO		SHIP TO	
ALL STATE AGENCIES VARIOUS LOCATIONS AS INDICATED BY ORDER		STATE OF WEST VIRGINIA VARIOUS LOCATIONS AS INDICATED BY ORDER	
No City	WV99999	No City	WV 99999
US		US	

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
1	Managed and Hosted Voice Services	0.00000	EA		See pricing response

Comm Code	Manufacturer	Specification	Model #
81161700			

**Extended Description :**

See Attachment\_A Cost Sheet for proposal pricing. (Revised 11-16-2018)

Vendor shall use the Attachment\_A Cost Sheet for proposal pricing.

Note: online proposal submissions are prohibited.

Please see Section 5 Vendor Proposal Subsection 5.3 for further instructions.

**SCHEDULE OF EVENTS**

Line	Event	Event Date
1	Mandatory Pre-Bid Meeting @ 2:30pm EDT:	2018-09-26
2	Technical Questions due by 2:00pm EDT:	2018-10-05
3	Technical Questions due by 2:00pm EDT:	2018-11-01

<b>SWC1900000001</b>	<b>Document Phase</b> Final	<b>Document Description</b> ADDENDUM_5: RFP for Managed and Hosted Voice Services	<b>Page 3 of 3</b>
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**ADDITIONAL TERMS AND CONDITIONS**

See attached document(s) for additional Terms and Conditions



Purchasing Division  
 2019 Washington Street East  
 Post Office Box 50130  
 Charleston, WV 25305-0130

State of West Virginia  
 Request for Proposal  
 35 - Telecomm

Proc Folder: 462803

Doc Description: ADDENDUM\_5: RFP for Managed and Hosted Voice Services

Proc Type: Statewide MA (Open End)

Date Issued	Solicitation Closes	Solicitation No	Version
2018-11-16	2018-11-27 13:30:00	CRFP 0212 SWC1900000001	6

**BID RECEIVING LOCATION**

BID CLERK  
 DEPARTMENT OF ADMINISTRATION  
 PURCHASING DIVISION  
 2019 WASHINGTON ST E  
 CHARLESTON  
 US

WV 25305

**VENDOR**

Vendor Name, Address and Telephone Number: Lumos Networks, LLC  
 1200 Greenbrier St.  
 Charleston, WV 25311

**FOR INFORMATION CONTACT THE BUYER**

Mark A Atkins  
 (304) 558-2307  
 mark.a.atkins@wv.gov

Signature X

*Greg Florence*

FEIN # 84-1452950

DATE 11/27/18

offers subject to all terms and conditions contained in this solicitation

**ADDENDUM INFORMATION**

ADDENDUM 5 is issued for the following:

1. To move the Bid Opening date from 11/21/2018 to 11/27/2018 at 1:30pm EST.
2. To Publish revised Attachment\_A Cost Sheet. (rev. 11-16-2018 Excel formatted) due to a calculation error.

other changes made.

The West Virginia Department of Administration, Purchasing Division (hereinafter referred to as the "Purchasing Division") is issuing this solicitation as a request for proposal ("RFP"), as authorized by W. Va. Code 5A-3-10b, for the West Virginia Office of Technology (hereinafter referred to as the "Agency") to provide Managed Voice Services for the State's Legacy VoIP Environment, while working to migrate those Legacy Environments to a Hosted VoIP Platform, included Hosted Contact Center Services per attached documents.

**MANDATORY PRE-BID MEETING:**

DATE: 09/26/2018  
 TIME: 2:30PM EDT  
 LOCATION: WV Office of Technology

NOTE: Online responses to this solicitation are prohibited. Please see the Instructions to Bidders in Section 2 for proposal submission.

BUYER	SHIP TO
ALL STATE AGENCIES VARIOUS LOCATIONS AS INDICATED BY ORDER  No City                      WV99999  US	STATE OF WEST VIRGINIA VARIOUS LOCATIONS AS INDICATED BY ORDER  No City                      WV 99999  US

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
1	Managed and Hosted Voice Services	0.00000	EA		See pricing response

Comm Code	Manufacturer	Specification	Model #
81161700			

**Extended Description :**

See Attachment\_A Cost Sheet for proposal pricing. (Revised 11-16-2018)

Vendor shall use the Attachment\_A Cost Sheet for proposal pricing.

Note: online proposal submissions are prohibited.

Please see Section 5 Vendor Proposal Subsection 5.3 for further instructions.

**DETAILS OF EVENTS**

Line	Event	Event Date
1	Mandatory Pre-Bid Meeting @ 2:30pm EDT:	2018-09-26
2	Technical Questions due by 2:00pm EDT:	2018-10-05
3	Technical Questions due by 2:00pm EDT:	2018-11-01



**SOLICITATION NUMBER: CRFP 0212 SWC1900000001**  
**Addendum Number: 5**

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The purpose of this addendum is to modify the solicitation identified as CRFP 0212 SWC1900000001 ("Solicitation") to reflect the change(s) identified and described below.

**Applicable Addendum Category:**

- Modify bid opening date and time
- Modify specifications of product or service being sought
- Attachment of vendor questions and responses
- Attachment of pre-bid sign-in sheet
- Attachment of Revised 11-16-2018 Attachment\_A Cost Sheet
- Other

**Description of Modification to Solicitation:**

1. To move the Bid Opening date from 11/21/2018 to 11/27/2018 at 1:30pm EST.
2. To Publish the Attachment\_A Cost Sheets Revised 11-16-2018 due to calculation error.

No other changes made.

**Additional Documentation:** Documentation related to this Addendum (if any) has been included herewith as Attachment A and is specifically incorporated herein by reference.

**Terms and Conditions:**

1. All provisions of the Solicitation and other addenda not modified herein shall remain in full force and effect.
2. Vendor should acknowledge receipt of all addenda issued for this Solicitation by completing an Addendum Acknowledgment, a copy of which is included herewith. Failure to acknowledge addenda may result in bid disqualification. The addendum acknowledgement should be submitted with the bid to expedite document processing.

4.2.1.1.1) Managed Voice Services - Support of State's Legacy IP Environment	Cost Per Month (A)	Total Users (B)		Total Monthly Cost (C=A*B)	Total One Year Cost (D=C*12)
Management and Support of Legacy IPT Environment, per end user		10000		\$ -	\$ -

4.2.1.1.3.1) Hosted Voice Services Packages	Cost Per Month Standard Security (A)	Total Users (B)	Cost Per Month High Security (C)	Total Users (D)	Total Monthly Cost (E=A*B+C*D)	Total One Year Cost (F=E*12)
Analog Line Package, per end user		250		250	\$ -	\$ -
Basic Package (Call control features), per end user		500		500	\$ -	\$ -
Enhanced Package (Basic Package plus Voice Mail), per end user		3750		3750	\$ -	\$ -
Premium Package (Enhanced Package plus Extension Mobility), per end user		500		500	\$ -	\$ -
Universal Service Fund Fee at Current Tariffed Rate		5000		5000	\$ -	\$ -
<b>Total - Analog, Basic, Enhanced, Premium</b>					\$ -	\$ -

4.2.1.1.3.2) Phone Leasing/Month	Cost Per Month (A)	Total Phone Count (B)		Total Monthly Cost (C=A*B)	Total One Year Cost (D=C*12)
Softphone Package		250		\$ -	\$ -
2-Line Phone		7200		\$ -	\$ -
5-Line Phone with sidecar capabilities		1000		\$ -	\$ -
Conference Phone		1000		\$ -	\$ -
Wireless Phone		500		\$ -	\$ -
ADA-Compliant Phone		50		\$ -	\$ -
<b>Total - Softphone, 2-Line, 5-Line, Conference, Wireless, ADA-Compliant</b>				\$ -	\$ -

4.2.1.1.3.20) Bridge Operator Console	Cost Per Month (A)	Total Users (B)		Total Monthly Cost (C=A*B)	Total One Year Cost (D=C*12)
Standard		15		\$ -	\$ -
Advanced		1		\$ -	\$ -
<b>Total - Bridge Operator Console</b>				\$ -	\$ -

4.2.1.1.3.7) Small Site Option Utilizing Public Networking	Cost Per Month (A)	Total Users (B)		Total Monthly Cost (C=A*B)	Total One Year Cost (D=C*12)
Small Site Option, per end user		100		\$ -	\$ -

4.2.1.1.3.19) Paging Service	Cost Per Month (A)	Total Sites (B)		Total Monthly Cost (C=A*B)	Total One Year Cost (D=C*12)
Paging Service, per site		50		\$ -	\$ -

ATTACHMENT\_A Cost Sheets (Revised 11-16-2018) CRFQ 0212 SWC190000001 Hosted Voice Services

4.2.1.1.3.10) International Calling	Cost Per Minute	Total Minutes		Total Monthly Cost	Total One Year Cost
	(A)	(B)		(C=A*B)	(D=C*12)
Canada		100			\$ -
Mexico		100		\$ -	\$ -
Jamaica		100		\$ -	\$ -
<b>Total - International Calls</b>				\$ -	\$ -

4.2.1.1.3.15) Simultaneous Calls (including unlimited local and long distance)	Cost Per Month	Total Call Count		Total Monthly Cost	Total One Year Cost
	(A)	(B)		(C=A*B)	(D=C*12)
G.711 (Non-compressed)		500			\$ -
G.729 (Compressed)		1500		\$ -	\$ -
Additional Simultaneous Calls G.711		100		\$ -	\$ -
Additional Simultaneous Calls G.729		100		\$ -	\$ -
Block of 20 DIDs		100		\$ -	\$ -
<b>Total - Simultaneous Calls and DIDs</b>				\$ -	\$ -

4.2.1.1.3.6) MPLS Connectivity to the Vendor's Hosted Solution (including any associated charges)		One-Time Cost	Total Monthly Cost	Total One Year Cost
		(A)	(B)	(C=A+[B*12])
100Mbps with 75% QOS				\$ -
200Mbps with 75% QOS				\$ -
300Mbps with 75% QOS				\$ -
400Mbps with 75% QOS				\$ -
500Mbps with 75% QOS				\$ -
600Mbps with 75% QOS				\$ -
700Mbps with 75% QOS				\$ -
800Mbps with 75% QOS				\$ -
900Mbps with 75% QOS				\$ -
1Gbps with 75% QOS				\$ -
<b>Total</b>				\$ -

4.2.1.1.4) Hosted Contact Center Services	Cost Per Month Standard Security	Total Users Standard	Cost Per Month High Security	Total Users High	Total Monthly Cost Standard and High Security	Total One Year Cost
	(A)	(E)	(C)	(D)	(E=A*B+C*D)	(F=E*12)
Agent		240		240	\$ -	\$ -
Supervisor		10		10	\$ -	\$ -
<b>Total - Agents and Supervisors</b>					\$ -	\$ -

ATTACHMENT_A Cost Sheets (Revised 11-16-2018)		CRFQ 0212 SWC190000001		Hosted Voice Services		
		Total Sites Standard	One-Time Cost Per Site	Total Sites High	One-Time Cost Per Site	Total One-Time Costs
		(A)	(B)	(C)	(D)	(E=A*B+C*D)
Initial Implementation Services, One-Time Cost per site		10		10		\$ -

4.2.1.1.3.21, 4.2.1.1.4.4) Storage for Call Recordings per GB/month	Cost Per GB/month	Total Storage		Total Monthly Cost	Total One Year Cost
	(A)	(B)		(C=A*B)	(D=C*12)
Storage for Call Recordings per GB/month		100		\$ -	\$ -

C) Professional Services Fees			
Custom Implementation Services and Fees			
NOTE: All hourly rates quoted must be fully "loaded" to capture all direct and overhead expenses, travel, per diem, and any other travel.			
	\$/hr	Hours	Total
<b>4.2.1.1.3.21, 4.2.1.1.4.4) Call Recording</b>			
Position: Network Engineer		20	\$ -
Position: Telephony Engineer		20	\$ -
Position: Storage Engineer		20	\$ -
Position: Trainer		8	\$ -
<b>4.2.1.1.3.19) Paging Integration</b>			
Position: Project Manager		10	\$ -
Position: Network Engineer		15	\$ -
Position: Telephony Engineer		15	\$ -
<b>4.2.1.1.3.20) Operator Console Implementation</b>			
Position: Project Manager		8	\$ -
Position: Telephony Engineer		16	\$ -
Position: Network Engineer		8	\$ -
Position: Trainer		8	\$ -
<b>4.2.1.1.4.1) Integration to Agency-Specific Contact Center Applications</b>			
Position: Project Manager		50	\$ -
Position: Telephony Engineer		120	\$ -
Position: Network Engineer		120	\$ -
<b>4.2.1.1.3.3) SRST Provisioning of Additional Lines</b>			
Position: Telephony Engineer		40	\$ -
Position: Project Manager		8	\$ -
<b>4.2.1.3.10) Training Services for Hosted Voice Services</b>			
Position: Trainer for Hosted Voice Services	\$/Student	100	\$ -
<b>4.2.1.3.11) Training Services for Hosted Contact Center</b>			
Position: Trainer for Hosted Contact Center	\$/Student	10	\$ -
<b>Professional Services Total</b>			\$ -

<b>D. Total One Year Cost</b>			
4.2.1.1.1) Managed Voice - Support of State's Legacy IP Environment			\$ -
4.2.1.1.3.1) Hosted Voice Services Packages			\$ -
4.2.1.1.3.2) Phone Leasing/Month			\$ -
4.2.1.1.3.20) Bridge Operator Console			\$ -
4.2.1.1.3.7) Small Site Option			\$ -
4.2.1.1.3.19) Paging Service			\$ -
4.2.1.1.3.11) International Calling			\$ -
4.2.1.1.3.15) Simultaneous Calls			\$ -
4.2.1.1.3.6) MPLS Connection to Hosted Environment			\$ -
4.2.1.1.4) Hosted Contact Center Services			\$ -
4.2.1.1.3.21, 4.2.1.1.4.4) Storage for Call Recordings			\$ -
Professional Services			\$ -
D. Total Evaluation Cost = (Total One Year Costs + Total One-Time Costs)			\$ -

Note: Hours are estimates for bid evaluation purposes only; actual hours may be more or less at the Agency's discretion.

**ADDENDUM ACKNOWLEDGEMENT FORM**  
**SOLICITATION NO.: CRFP 0212 SWC1900000001**

**Instructions:** Please acknowledge receipt of all addenda issued with this solicitation by completing this addendum acknowledgment form. Check the box next to each addendum received and sign below. Failure to acknowledge addenda may result in bid disqualification.

**Acknowledgment:** I hereby acknowledge receipt of the following addenda and have made the necessary revisions to my proposal, plans and/or specification, etc.

**Addendum Numbers Received:**

(Check the box next to each addendum received)

- |  |  |
|--|--|
| <input checked="" type="checkbox"/> Addendum No. 1 | <input type="checkbox"/> Addendum No. 6  |
| <input checked="" type="checkbox"/> Addendum No. 2 | <input type="checkbox"/> Addendum No. 7  |
| <input checked="" type="checkbox"/> Addendum No. 3 | <input type="checkbox"/> Addendum No. 8  |
| <input checked="" type="checkbox"/> Addendum No. 4 | <input type="checkbox"/> Addendum No. 9  |
| <input checked="" type="checkbox"/> Addendum No. 5 | <input type="checkbox"/> Addendum No. 10 |

I understand that failure to confirm the receipt of addenda may be cause for rejection of this bid. I further understand that that any verbal representation made or assumed to be made during any oral discussion held between Vendor's representatives and any state personnel is not binding. Only the information issued in writing and added to the specifications by an official addendum is binding.

Lumos Networks, LLC

\_\_\_\_\_  
Company

  
\_\_\_\_\_  
Authorized Signature

11/27/18

\_\_\_\_\_  
Date

**NOTE:** This addendum acknowledgement should be submitted with the bid to expedite document processing.