

Managed Emergency Call Handling VESTA Service Guide

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1. INTRODUCTION

This Service Guide describes Lumen's Vesta Managed Emergency Call Handling Solution (VESTA – MECH). "Lumen" is defined for purposes of this Service Guide as CenturyLink Communications, LLC d/b/a Lumen Technologies Group or its affiliated entities providing Services under this Service Guide. Any references to "CenturyLink" and "Lumen" may both occur and mean the same.

2. SOLUTION OVERVIEW

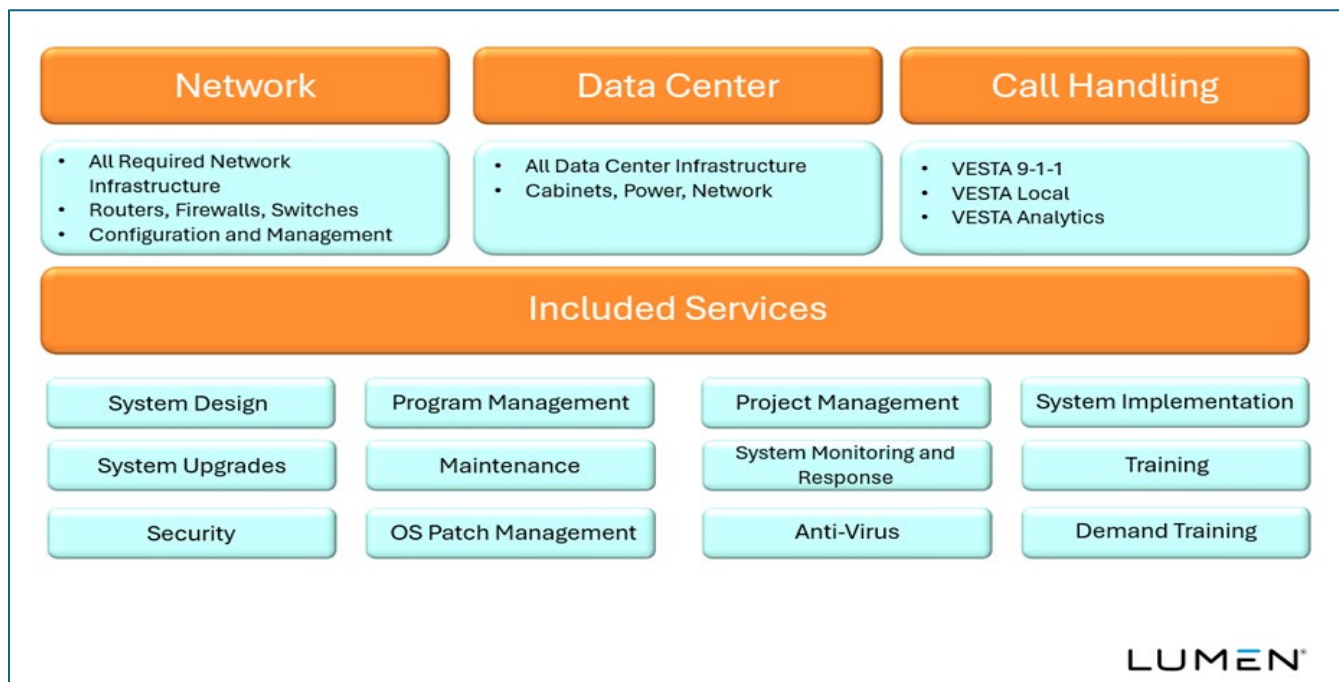
VESTA Managed Emergency Call Handling services offering is a configuration of specialized NG9-1-1 Customer Premises Equipment (CPE) and NG9-1-1 Call Management applications deployed in a Hosted Geo Diverse multitenant architecture and provisioned to serve multiple customer Public Safety Answering Points ("PSAPs"). The PSAPs can be distinct agencies onboarded to the shared platform at distinct points in time.

VESTA Core Call Processing, ALI Controllers, and Management servers reside in Lumen Data Centers; VESTA Call Taker CPE sits in the PSAP. Management of the Call Taking equipment is provided through the host over a Lumen managed Virtual Private Network (VPN).

The Services can support up to 50 PSAPs and 250 call handling positions on a geographically diverse host. Since each agency has their own requirements which drive their quantity of lines, trunks, positions, and annual call volumes, Lumen will work with PSAP customers to identify and forecast incremental growth for the hosts to avoid over-subscription on a single host.

When a VESTA system reaches capacity, Lumen will deploy additional geo-diverse VESTA instances for the next bank of 50 PSAPs / 250 positions.

3. VESTA MECH BUNDLE – INCLUDED SERVICES



3.1 Included: VESTA 9-1-1 Call Handling – Basic Services use the following mainstream release:

- Release 7.0 or later
- VESTA SFF Workstation
- LCD Monitor
- Multi-button Keypads

Functionality is as published in Motorola VESTA product bulletins and user guides which are incorporated herein and can be found here: <https://www.motorolasolutions.com/content/dam/msi/docs/products/command-center-software/case-studies/vesta-911-brochure.pdf>

3.2 Included: VESTA Analytics - Enterprise

- Two (2) Chassis
- Four (4) FXO 4 Port Cards for each Chassis (16 analog line connections)
- One (1) PRI Card

3.2.1 Services

Lumen includes the following set of services with the Managed Emergency Call Handling solution covering

- Program Management
- Project Management – Dedicated for life of program
- System Design
- System Implementation
- System Upgrades – Includes all hardware and software required for upgrade
- System Maintenance – Onsite and Remote
- System Monitoring and Response
- Initial System Training
- Follow-up or Demand Training
- Security Monitoring
- OS Patch Management

Building Blocks for Lumen Managed Emergency Call Handling			
Services			
Implementation Services	System Maintenance - CPE	System Admin and Change Management	Network Services
• Program Management • System Design • System Installation – Pre Activation • System Testing • System Training • System	1. CenturyLink Maintenance 2. Core – 24 x 7 x 365 3. PSAP – 24 x 7 x 365 4. Remote Monitoring & Response 5. OS Patch Management 6. Anti-virus Services 7. Application Updates	• Lumen System Admin – For any services requiring root access. • Change Management • Reporting	• Adaptive Network Security • Network Monitoring & Response • Circuit Tagging – All circuits are physically, and system tagged as critical 911 Services.

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M E C H VESTA v.1.101025

Lumen's Managed Emergency Call Handling Solution – Dedicated Resources

Lumen provides a dedicated team to service all program lifecycles

Lumen Role Title	Lumen Role Title
Program Manager	Has overall responsibility for the program.
Project Managers – Implementations	Has overall responsibility for new implementations
Project Managers – Change Management	Has overall responsibility for upgrades, service packs, and change management
Trainers	Provides user and admin training to PSAPs for new implementations and upgrades. Also provides admin training as required by PSAPs
Sales Engineers	Provides all solution engineering
Service Managers	Ongoing support for the customer; serves as an interface between customers, vendors, Lumen NOCs, for all service issues
Technical Support Engineers	Final escalation tier for service issues, conduct all “acceptable for field use” (AFU) testing of new application releases in Lumen lab
Technicians	Field Technicians

3.4 Lumen's Public Safety CPE ESInet for VESTA 9-1-1

Lumen's Public Safety CPE ESInet for VESTA 9-1-1 provides network connectivity between PSAPs and the VESTA Host over a secure private network

- All layer 2 and layer 3 networks are provided by Lumen.
- Lumen's carrier grade MPLS network provides all layer 3 connectivity between all Data Centers and remote PSAP
- Local access to PSAP from the Lumen MPLS backbone can be delivered over a variety of transport types. This can include:
 - Ethernet Local Access (ELA) – Supports up to 1G
 - Wave Local Access (WLA)
- Layer 2 Connectivity between Data Centers – Transparent Ethernet or Optical Wave Services
- Lumen will adhere to FCC tagging requirements for all NG9-1-1 circuits

3.5 Data Center Network

3.5.1 Overview

- Lumen currently has two data centers processing customer 911 traffic over the Lumen i3 Core ESInet. The i3 Core ESInet terminates at each data center where it passes calls into the Lumen Managed Emergency Call Handling

solution. These described connections are managed and segmented with Border Control Functional elements to maintain a segmented security posture for the individual services.

- The i3 Core ESInet is not part of the Managed Emergency Call Handling Solution. Lumen can provide a bundle offering at the customer's request.
- This i3 traffic is routed to the NG9-1-1 CPE Call Handling Vesta host system. The host VESTA in turn routes the calls to the remote VESTA PSAP over the Lumen VESTA NG9-1-1 CPE ESInet.

3.5.2 Data Center Network

- Lumen provides two fully diverse 1G MPLS over WLA (Wave Local Access) for all routed layer 3 ingress / egress traffic at each data center for VESTA 9-1-1.
- Lumen provides four 1G OWS circuits for layer 2 connectivity between data centers. These are configured in two separate link aggregation pairs and each pair is fully diverse.
- **VESTA ESInet** – All VESTA host to remote traffic is routed over a pair of diverse 1G MPLS circuits at each data center.
- **Data Center to Data Center Connectivity** – Lumen deploys a pair of diverse link aggregated layer 2 OWS circuits for Data Center to Data Center Connectivity.

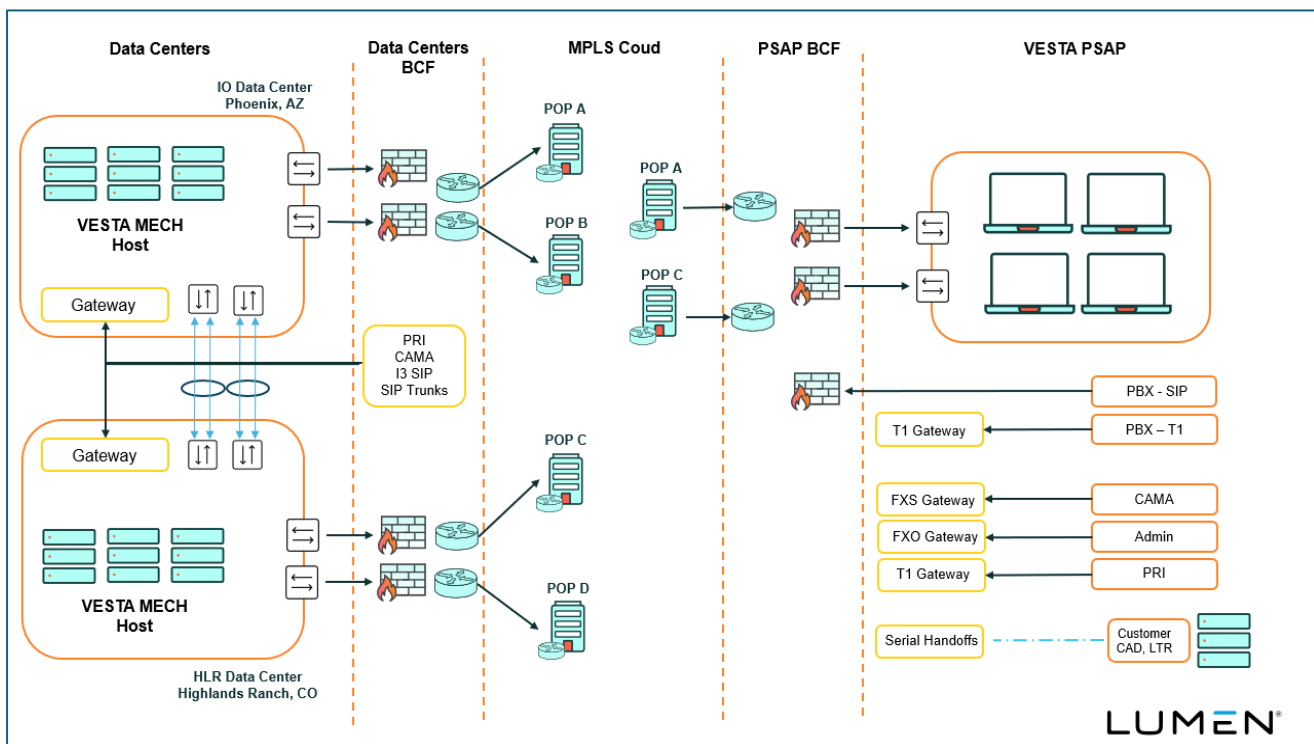


Figure 3.5.2 High Level Solution Design

3.5.3 PSAP Network

With the Lumen Managed NG9-1-1 PSAP solution, Lumen will provide all connectivity from the PSAP to the Lumen CPE NG9-1-1 ESInet. Providing a resilient, diverse or redundant connection from the Lumen MPLS POPs to the PSAP is dependent on the existing local service providers' network. Lumen will make every attempt to ensure a minimum redundant set of circuits from a pair of PRIV devices at the Lumen POP through LEC network to the PSAP.

Where diversity or redundancy is not present, Lumen will advise the customer of design limitations and optional solutions. The customer is responsible for all costs for deploying an optional solution.

Drawing 3.5.3a – Lumen preferred design

Drawing 3.5.3b – Only 1 Meet Point is available

Drawing 3.5.3c – Only 1 Meet Point and Lumen POP is available

Figure 3.5.3a

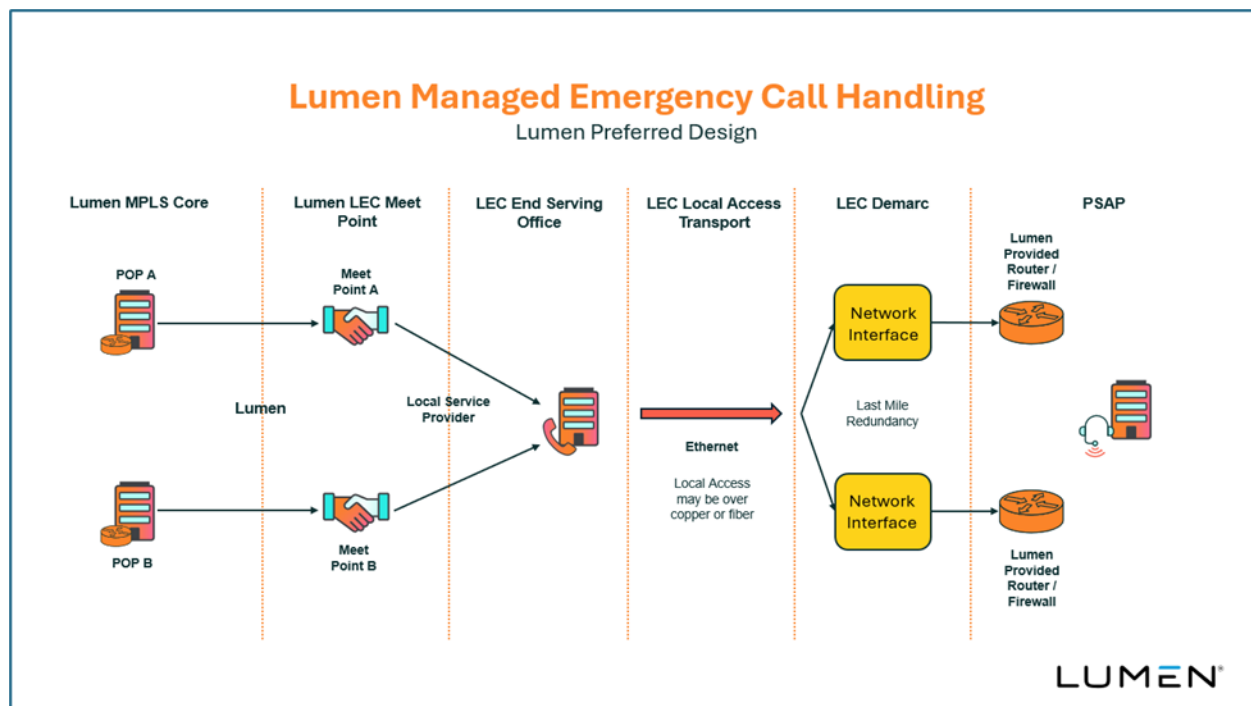


Figure 3.5.3b

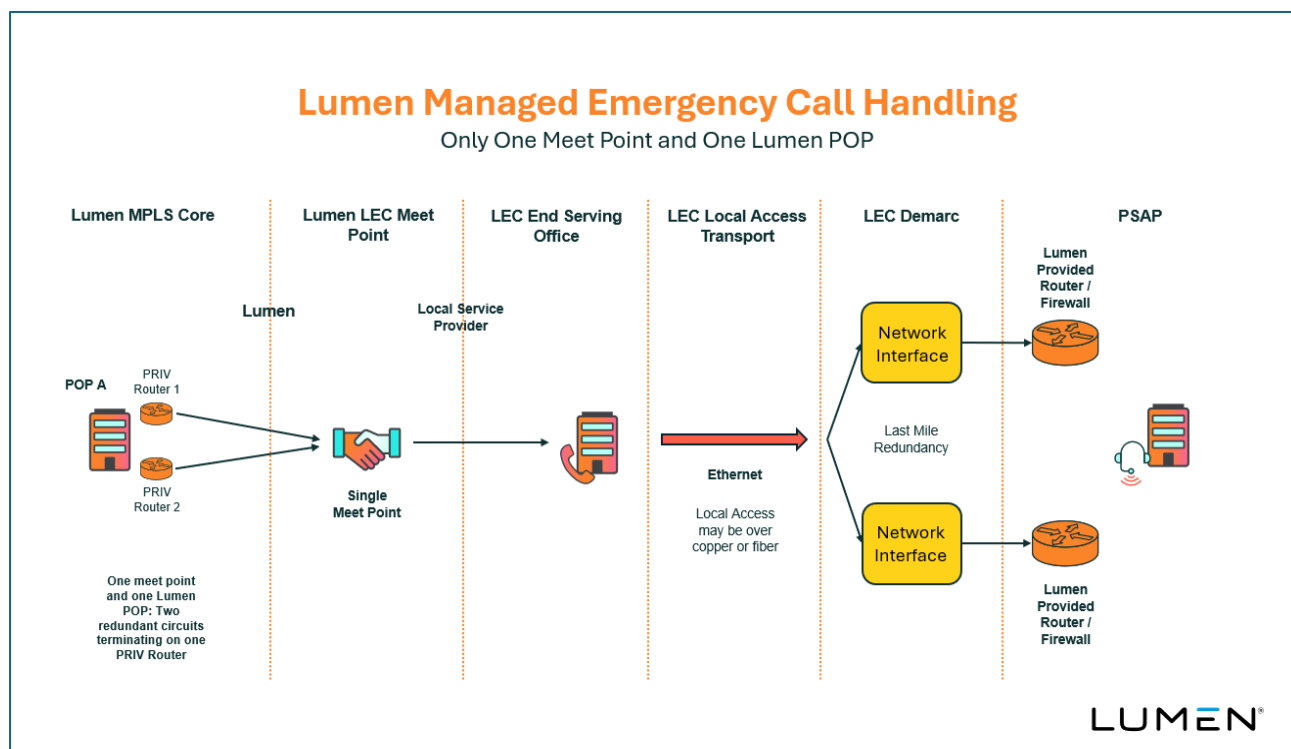
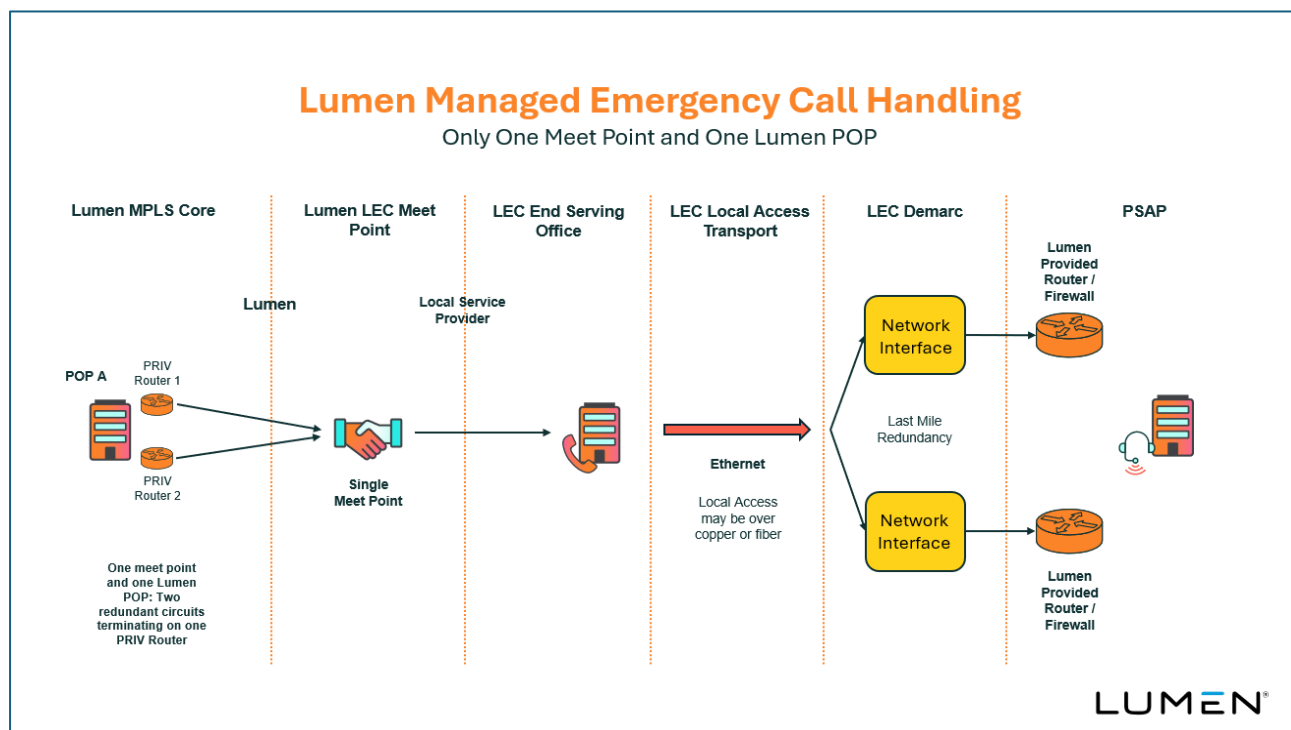


Figure 3.5.3c



3.6 PSAP Bandwidth

Lumen will consider several variables related to PSAP bandwidth during PSAP design, including, but not limited to:

- Position Count
- Conferencing
- On-Net Transfers
- Roaming or Hot Seating
- Admin Lines – including termination points
- Content Services (Rich Media, Video, Sensor Data, etc.)

All of the above services can impact the number of Concurrent SIP Sessions (CCS) and bandwidth needed, driven by the number of calls and type of media transmitted to and from the PSAP. In addition, the PSAP bandwidth needs to be sized to handle the number of CCS's and overhead for system applications, control, and management.

3.7 Lumen Tier 3 Data Centers

Lumen will provide physical, secure cages where Lumen will install all NG9-1-1 Managed Hosted PSAP CPE equipment. Access to these data centers is strictly controlled. Only Lumen authorized 9-1-1 support teams will have access to cages where hosted CPE equipment is located.

3.7.1 Data Center Infrastructure Included:

- All required network extensions from data center carrier “meet me rooms” to Lumen CPE cages
- All equipment cages and racks
- Power and Uninterruptible Power Supply (UPS)
- Backup Power and UPS
- Network Timing Solution
- Premium Level Data Center Support
- All installation and maintenance

3.7.2 Data Security

3.7.2.1 Physical Security

All solution data is stored and backed up in Lumen data centers. Primary storage and backup devices are placed in Lumen secure cages. Access to these secure cages is limited to authorized Lumen 911 support teams only. All vendors must be escorted by Lumen 911 technicians.

3.7.2.2 Data Backups

Lumen backs up all system and customer data as required by the manufacturer's best practices. Backup devices are installed and located at each data center to ensure data preservation. Only authorized Lumen 911 support teams and manufacturers can physically access the backup devices and the data contained on those devices.

3.7.2.3 Data Access

As a normal practice, all customer (PSAP Customer) data is stored in separate security domains, or sites, and each PSAP Customer can only access that PSAP Customer's own data. However, with proper authorization from each PSAP Customer, permission may be configured to grant other agencies or entities access to the PSAP Customer data. This may be useful when a State or regional entity requires access to all PSAP Customer MIS data. Lumen will

obtain permission from each PSAP Customer prior to granting other agencies or entities access to the PSAP Customer data for compliance with government requirements. Only after Lumen receives permission from the PSAP Customer will Lumen configure the permissions for other entities to access the applicable PSAP Customer data.

3.7.3 In Production Data Center Locations

Lumen has two data centers deployed and in production:

- **Data Center 1:** IO Data Center – Phoenix AZ
- **Data Center 2:** Highlands Ranch Data Center – Highlands Ranch CO

3.7.4 Optional Data Center Deployments

Lumen will consider optional regional data center deployments. Building new data center infrastructure will be done at an additional cost to the customer. Depending on deployment model and committed seats, Lumen may cover part or all of the data center infrastructure build.

4. Lumen Managed Emergency Call Handling Solution – VESTA CPE Equipment

4.1 Overview

Lumen’s VESTA Managed Emergency Call Handling solution is deployed to provide the most resiliency and avoids any single point of failure. The Lumen Managed NG9-1-1 PSAP Solution includes a base set of hardware and applications included in the seat price. Lumen may also provide optional hardware and applications at customers request at an additional charge.

Lumen’s Managed Emergency Call Handling VESTA 9-1-1 Solution is available in two configurations:

- VESTA 9-1-1 Prime Standard Operations – ACD is not included
- VESTA 9-1-1 Advanced Operations – Includes ACD

Table below is what Lumen is Including and what is considered optional in Lumen’s **Managed Emergency Call Handling** / per-seat pricing

Included and Optional VESTA Applications			
Qty	Description	Included	Optional
	VESTA 9-1-1 Basic Bundle	v	
1	ESInet Interface Module License	v	
1	VESTA 9-1-1 Prime Standard Operations	v	
1	VESTA 9-1-1 IRR Module	v	
1	VESTA 9-1-1 Multi-Queue Display		v
	VESTA CDR License	v	
1	VESTA Text2-911 SMS License (Does not include TCC services) (Does not include installation of required SMS firewall)	v	
	VESTA Basic Bundle with ACD		v
1	ESInet Interface Module License	v	

1	VESTA 9-1-1 Prime Standard Operations	v	
1	VESTA 9-1-1 IRR Module	v	
1	VESTA 9-1-1 Multi-Queue Display	v	
1	VESTA CDR License	v	
1	VESTA Text2-911 SMS License (Does not include TCC services) (Does not include installation of required SMS firewall)	v	
	VESTA Analytics	v	
1	Analytics Site License - (Per Site, not seat)	v	
1	Analytics Standard Seat License	v	
1	Analytics User License	v	
	VESTA Map Local	v	
1	VMAP Local PREM License / MED	v	
1	VMAP Local PREM License	v	
1	8GB RAM DDR4	v	
Optional Vesta Applications			
	VESTA Command Post		v
Included and Optional VESTA Hardware			
Qty	Description	Included	Optional
	VESTA 9-1-1 Workstation Equipment	v	
1	DKTP PRODESK Mini Workstation	v	
1	24" LED Wide Screen FP Monitor (For VESTA 9-11)	v	
1	24" LED Wide Screen FP Monitor (For VESTA Map Local)	v	
1	48 Button Keypad with USB Cable 25FT	v	
1	V911 SAM Box	v	
1	SAM External Speaker	v	
1	4W ELEC MIC Black Handset	v	
1	KVM Arbitrator (2 or 4 Port		v
	VESTA 9-1-1 Admin PC		
	VESTA 9-1-1 Admin PC (1) LED Wide Screen Monitor)		v
	VESTA 9-1-1 Phones / Voice Mail Options		
1	AASTRA 6731i Phone with Enhanced License Includes EIM, VESTA 9-1-1 CDR, and Analytics licenses		v
1	VESTA Enhanced Soft Phone Bundle		v
	Includes EIM, VESTA 9-1-1 CDR, and Analytics licenses		
1	Cisco POE Switch		v
1	PSAP Managed Firewall Required for SIP interfaces to customer UCC		v

	Gateways		
2	MED 1000B Chassis Bundle	V	
4	MED FXO-LS Bundle	V	
0	MED FXL-GS Bundle		V
0	MED FXS Bundle		V
1	MED 1000 1-SPAN Bundle	V	
0	MED 1000 2-SPAN Bundle		V
	Backroom Equipment		
1	19" Equipment Racks	V	
2	VESTA LAN Switches	V	
2	VESTA Routers	V	
4	CDR Outputs	V	
	Optional Required Hardware		
	Backroom and position UPS		V
	Local Timing Device – Nclock		V
	Cabling		V

4.2 VESTA Host

VESTA Host equipment is deployed as a geo-diverse multitenant system. The Lumen **Managed Emergency Call Handling Solution** includes the following as required for each host data center:

- Co-Location Space for host system components
- All racks and power requirements
 - All VESTA 9-1-1 Application Servers
 - MDS and DDS servers
- Analytics Servers
- Network Management Server
- Master Time Clock – Each host system
- Peripherals – KVM and monitors
- Backup Devices
- LAN switches
- Routers
- Patch Panels
- All cabling

4.3 VESTA Core Services and PSAP Design

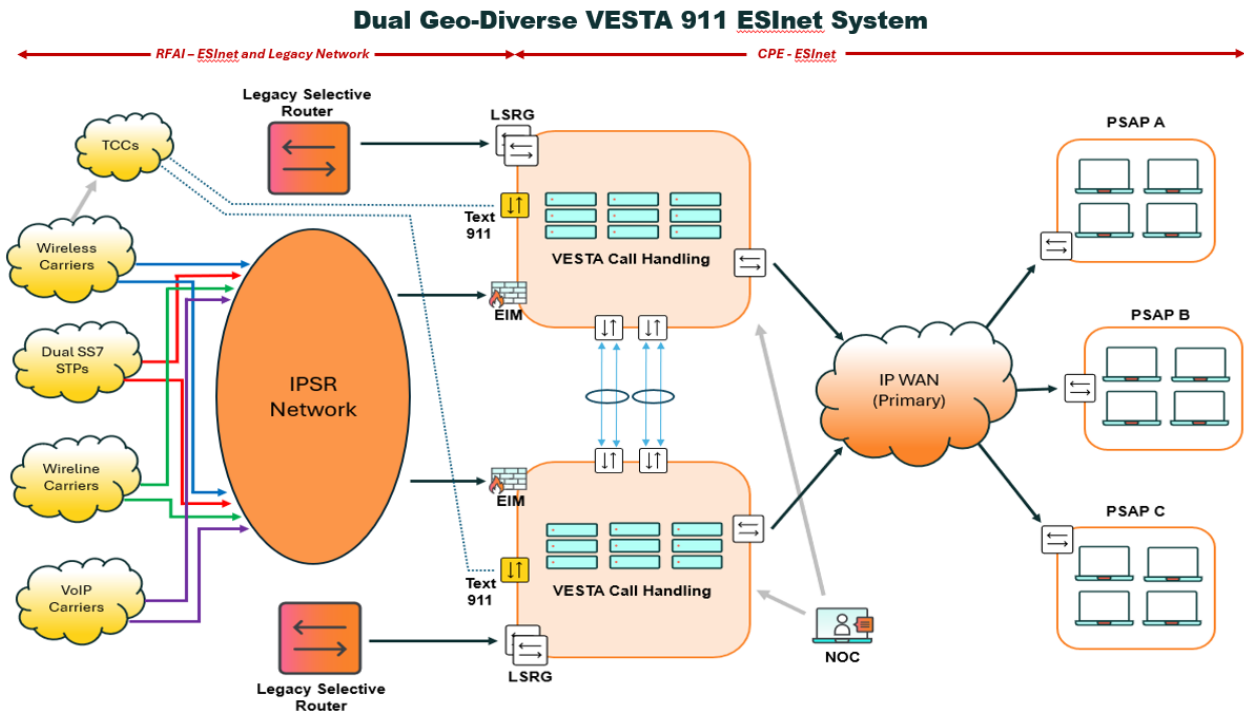
A Geo-Diverse VESTA 9-1-1 Solution runs in Active / Standby mode. Lumen deploys each VESTA 9-1-1 system alternating Side A and Side B at host data centers. Example:

VESTA System 1 – Side A is deployed at DC1, Side B is deployed at DC2

VESTA System 2 – Side B is deployed at DC1, Side A is deployed at DC2

Application servers, such as Hosted Analytics, are deployed with a single server. These will be installed at DC1.

4.4 VESTA Design VESTA in a Distributed GEO Diverse Configuration



5. System Installation

5.1 Included Installation Services

- Pre-site Survey
- Call Flow
- Core Equipment at Data Centers
 - Lumen provides all installation and configuration of Core VESTA NG9-1-1 CPE
- **PSAP Backroom Equipment** – Lumen will provide the following installation services:
 - Installation of equipment in Lumen or customer provided rack
 - Installation and configuration of all Lumen provided NG9-1-1 CPE ESInet routers
 - Installation and configuration of all Lumen provided switches
 - Installation and configuration of all VESTA gateways
 - Installation and configuration of any required Lumen application servers
 - Installation and configuration of up to four (4) serial handoffs for customer applications such as CAD and LTR
- **PSAP Position Equipment**
 - Installation and configuration of all Lumen provided VESTA front room equipment. This includes all Call Handling Positions, Admin Workstations, and Admin phones
- **Customer Requirements**
 - Customer is required to provide the following:

- Power – Customer is responsible for providing all power to backroom and front room equipment
- Customer is responsible for providing a location for all backroom equipment and must meet all environmental requirements of the manufacture's equipment
- Cabling – Customer is responsible for providing all position cabling. However, Lumen can perform any cabling work for the Customer. The details and the costs of cabling shall be captured in a Statement of Work.

5.2 Lumen Statement of Work (SOW)

Lumen will provide each PSAP customer with a customized SOW detailing all Lumen and customer requirements.

6. System Training

Lumen will provide the system training to each PSAP for the following roles:

- Admin Training – Lumen will provide Admin Training to all PSAPs
- User Training – Lumen will provide all User Training to all PSAPs

Customer and Lumen will agree upon the content and manner of training (on-site or remote) during the project's implementation.

7. System Maintenance

7.1 Monitoring and Response

7.1.1 Overview

Lumen provides a complete end-to-end monitoring solution of all network transport services, network equipment, and VESTA CPE applications and hardware.

Lumen will have primary responsibility to investigate PSAP problems and to determine if they were caused by Lumen or PSAP-owned equipment.

7.1.2 Lumen Managed NG9-1-1 PSAP ESInet

Lumen provides a NG9-1-1 PSAP ESInet with Managed Emergency Call Handling Solution.

Lumen will provide 365x7x24 monitoring and response of all Lumen provided network transport and terminating equipment.

All circuits provided by Lumen will follow FCC Tagging requirements, identifying them as critical NG9-1-1 infrastructure ensuring priority response and repair.

7.2 Lumen Managed NG9-1-1 CPE

Lumen provides remote monitoring of all CPE equipment in cooperation with Motorola. Alarms are captured and responded to 365 x 7 x 24 by Lumen. The affected PSAPs will be notified of any alarms identified as critical or major. Alarms will be resolved remotely and when required, a technician dispatch will be initiated by the Lumen 911 NOC.

7.3 Hardware

7.3.1 Included Covered Hardware

Lumen will provide any hardware included with the contracted Lumen Managed Emergency Call Handling solution.

7.4 Spares Crash Kits

Lumen will identify where crash kits will be located during the planning stages of each customer's implementation.

7.5 Exceptions

Customer is responsible for replacement cost of any equipment not due to normal wear and tear, due to customer misuse, or due to customer damage. Customer is responsible for replacement cost of any equipment damaged due to "Acts of God", such as lighting, flooding, roof leaks, etc.

7.6 Operating System Patch Management

- Lumen will install all OS patches as each manufacturer tested and approved equipment for field use
- Lumen technicians will deploy all OS patches on all servers
- Lumen may push patches out to the PSAP call taking positions and may require customers to reboot workstations
- Lumen Service Manager will schedule all OS patch dates with PSAP Customers

7.7 Application Patch Management – Security and / or Hotfixes

- Lumen will install all critical application patches as instructed by CPE equipment manufacturers.
- Lumen will install all application patches on all servers and critical system components. This may include routers, switches, or gateways.
- Lumen will install all application patches on site if required.
- Lumen will remotely push all application patches to workstations when only a reboot is required.
- Lumen Service Manager will schedule all application updates with PSAP Customers.

7.8 Anti-Virus Updates

- Lumen will update all anti-virus definition files monthly as released by manufacturer
- Updates will be pushed remotely, and no rebooting of workstations or servers will be required
- Lumen will notify customers of all scheduled pushes of definition files

7.9 Firmware and IOS updates

- Lumen will update gateway device firmware, firewall, router and switch IOS as recommended by the manufacturer.

8. System Upgrades

8.1 Overview

Lumen's Managed Emergency Call Handling Solution per-seat pricing includes all system software upgrades (no hardware) at no cost to the PSAPs. Lumen will perform a minimum of one software upgrade per year that adds features and functionality to the VESTA CPE solutions. This does not include hotfixes or service packs to address software and hardware fixes which are covered under Section 7 of this document.

- Lumen will provide all software required to upgrade
- Lumen will provide all field engineering and technician resources to implement upgrades

9. Software and Equipment EOL and EOS notices

9.1 EOL and EOS notices

Lumen will advise customer of all EOL (End of Life) and EOS (End of Services) with respective milestone dates.

9.2 EOL and EOS Process

When a manufacturer announces a product will be going EOL, Lumen will evaluate:

- End of Sale date – Last day product can be purchased
- Last date to renew manufacture support services
- Whether manufacture will support products beyond the EOS date
- Availability of replacement devices beyond EOS date
- Criticality of device in call delivery
- Lumen will replace devices determined unsupportable before or after EOS date.

10. Billable Move, Add, or Change Orders (MAC)

Any service or equipment not described in this service guide may be billable to the customer.

The following are examples of billable work activities:

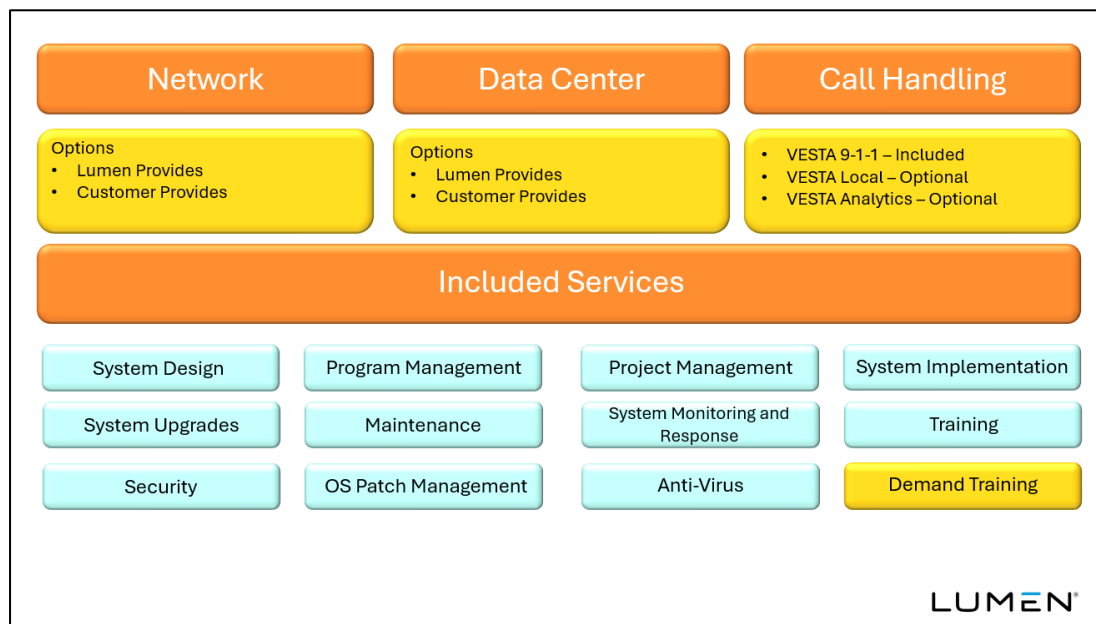
- Add new call taking positions (*Monthly recurring rate would also apply*)
- Adding new admin or Centralized Automatic Message Accounting (CAMA) analog trunk gateways (*Monthly recurring rate would also apply*)
- Terminating new admin lines on existing system
- Interfacing to a new admin phone system
- Interfacing to a new logging recorder
- Interfacing to a new CAD system
- Interfacing to a new radio system
- Move or rearrangement of existing 9-1-1 equipment, network, wiring and cabling.
- Damaged equipment NOT through normal “wear and tear”
- Food and water spilled on equipment
- Damage due to flooding, lightening, or other “Acts of God”
- Moving existing equipment at PSAP request
- Rewiring console furniture at PSAP request
- Moving equipment to new PSAP building

While the above are the most common examples of billable activities, the list is not inclusive of all possible billable MAC (Move, Add, Change) requests

11. Solution and Deployment Options

11.1 Lumen’s Managed Emergency Call Handling Turnkey Solution

Turnkey Solution – Lumen’s VESTA Managed Emergency Call Handling is offered as a full turnkey solution and Lumen provides all solution building blocks (equipment, network, data centers, system installation, monitoring, maintenance, and system upgrades are included in the per-seat pricing for full term of the contract).



11.2 Legacy E9-1-1 and NG9-1-1 Core Services ESInet

Lumen's Managed Emergency Call Handling Solution does not include legacy E9-1-1 services. Lumen provides all CPE hardware and CPE configuration services where customers' E9-1-1 services or/and NG9-1-1 services will terminate.

Customers may bundle Lumen's NG9-1-1 core services solution with the Managed NG9-1-1 PSAP solution. Further information about Lumen's NG9-1-1 Core Services can be found at: <https://www.lumen.com/en-us/services/ng911.html>

12. Lumen Managed Emergency Call Handling Solution – Infrastructure Functional Building Blocks

12.1 Overview

Lumen provides all Infrastructure and services to deliver a fully managed, resilient, Geo-Diverse, Multitenant CPE solution.

12.2 Functional Building Blocks

The solution's infrastructure includes three key functional components:

- Network Infrastructure
- Host Data Center Infrastructure
- VESTA NG9-1-1 CPE Call Handling Solutions

Major VESTA Applications

- VESTA 9-1-1
- VESTA Analytics – Hosted Enterprise
- VESTA Local

Building Blocks VESTA Managed Emergency Call Handling

Network	Data Center	VESTA Call Handling CPE
Layer 3 Private CPE ESInet ☐ CenturyLink National MPLS Network ☐ CenturyLink OWS ☐ CenturyLink Ethernet ☐ CenturyLink Geo-Max (Optional, Availability) ☐ NxDS1, DS3, OC3 Data Center Network ☐ All Layer 3 network connections to CenturyLink MPLS cloud is over two 1G OWS circuits at each data center ☐ All Layer 2 network connections between data centers is over 1G diverse OWS circuits ☐ Ability to terminate customer administrative telephony services at data center (PRI, SIP, TDM) Remote PSAP Network ☐ Will be routed to diverse POPs ☐ If infrastructure exist, will be diverse from serving POP to serving Central Office ☐ Redundant last mile to PSAP ☐ Optional Diversity Options – Last mile Data CPE Hardware ☐ CenturyLink provides all routers, switches, firewalls	Tier 3 Data Centers ☐ Secure Building Access ☐ 7x24x365 Security ☐ Secure Cages and Cabinets ☐ Power and UPS ☐ Backup Power and UPS ☐ Extensions from “Meet me Room” VESTA Network ☐ Two 1G IQ Private Ports (MPLS) at each data center provides all layer 3 connectivity ☐ Each circuit is physical diverse and terminate at diverse CenturyLink POPs ☐ Two physically diverse 1G Point-to-Point OWS circuits provide layer 2 connectivity between data centers for Geo Diverse VESTA cores (Side A and Side B) VESTA Geo-Diversity ☐ All equipment is deployed in Geo-Diverse Data Centers ☐ Core Data Center Network Infrastructure – exceeds Five-9s reliability	VESTA 9-1-1 ☐ VESTA 9-1-1 ☐ ACD Option ☐ VESTA Analytics - Enterprise ☐ VESTA Map Local Deployment Model ☐ VESTA – Geo Diverse / Multitenant ☐ Critical Core System Components hosted in Geo-Diverse Data Centers. Side A in DC1, Side B in DC2 PSAP CPE Includes all position workstation equipment ☐ CPU ☐ SAM Box ☐ (2) Monitors ☐ Keyboard, Mouse ☐ Ports for position recording ☐ Ports for headset integration ☐ Optional KVM, Geno Keypad Includes Backroom Equipment ☐ Routers, Switches ☐ CAD and LTR handoff ☐ CAMA Gateways Admin Gateway