Washington State Military Department
AMENDMENT

REDACTED

1. CONTRACTOR NAME/ADDRESS: **CenturyLink Communications Company, LLC f/k/a Qwest Communications Company, LLC ("CenturyLink"), its Affiliates including Qwest Corporation d/b/a CenturyLink QC ("CenturyLink QC") Corporate Headquarters, 1801 California Street Denver, CO 80202**	2. CONTRACT NUMBER: **E09-196**	3. AMENDMENT NUMBER: **M**
4. CONTRACTOR CONTACT PERSON, NAME/TITLE: **Bruce King, 206-224-1145** Bruce.King@Centurylink.com	5. MD STAFF CONTACT, NAME/TELEPHONE: **William Leneweaver, (253)-512-7039** Andy.leneweaver@mil.wa.gov	

6. TIN or SSN: **04-6141739**	7. CATALOG OF FEDERAL DOMESTIC ASST. (CFDA) #: **N/A**	8. FUNDING SOURCE NAME/AGREEMENT #: **RCW 38.52.540**

9. FUNDING AUTHORITY:
Washington State Military Department (Department) and **Enhanced 911**

10. DESCRIPTION/JUSTIFICATION OF AMENDMENT, MODIFICATION, OR CHANGE ORDER:

The original contract was for the development and maintenance of an Internet Protocol (IP)-enabled Emergency Services Information Network (ESINet) infrastructure. Among other amendments, the original contract was amended via Amendment J to add a new section titled Transition Services to the Statement of the Work to describe Contractor's obligations relating to transitioning the ESINet to the successor provider.

Without limiting the terms set forth herein, this Amendment M is being issued to amend Amendment J to add a specific scope of work for additional transition services and compensation for all transition services set forth in Schedules 1 and 2 of this Amendment. Further this amendment amends Amendment K to extend the maximum contract expiration date to December 31, 2019.

11. AMENDMENT TERMS AND CONDITIONS:

1. The existing contract is modified to add the following language to the Transition Services:

    a) Covered 911 Service Provider during PSAP Migration. The Department is transitioning the ESINet services to a successor provider via a phased cutover of PSAPs from Contractor's ESInet I to New Contractor's ESInet II ("PSAP Migration"). Prior to this cutover, Contractor shall route calls over ESInet I to the appropriate PSAPs and, as such, during this time, Contractor is a Covered 911 Service Provider as defined in 47 C.F.R. § 12.4(a)(i)(A) ("Covered 911 Service Provider") for all PSAPs in the State. Upon the Department's cut over of one or more PSAPs to ESInet II ("Migrated PSAPs"), the Department's successor provider shall be a Covered 911 Service Provider for such Migrated PSAPs and shall be solely responsible for routing calls from the Demarcation Point between ESInet I and ESInet II to such Migrated PSAPs. During the PSAP Migration, Contractor remains responsible for routing calls to PSAPs that have not migrated to ESInet II ("Unmigrated PSAPs"), and for routing calls intended for Migrated PSAPs to the Demarcation Point at ESInet II, at which point the successor provider assumes responsibility for delivering such calls to Migrated PSAPs and is therefore the Covered 911 Service Provider.

    b) Contractor shall provide all services as stated in the attached Schedule 1 ("Transition from ESInet I to ESInet II - Scope of Work") and Schedule 2. Contractor shall provide all services as stated in the attached Schedule 1 ("Transition from ESInet I to ESInet II - Scope of Work") and Schedule 2 that are within Contractor's (including its employees, representatives or contractors (including West)) direct control within the timeframes on Schedule 2. Contractor shall be compensated for the services as stated in the attached Schedule 1 ("Transition from ESInet I to ESInet II - Scope of Work") and Schedule 2 pursuant to the fees listed in Schedule 3. Pricing for Contractor's (including its employees, representatives or contractors (including West)) transition services set forth in Amendment M is described in Schedule 3. To the extent the parties have any disputes regarding the services to be provided by Contractor or the timeframes in which those services must be provided by Contractor, the matter will be escalated to executive representatives of the parties for resolution. To the extent services set forth in Schedules 1 and 2 are completed earlier than planned in Schedule 2, the parties shall cooperate in good faith to accelerate other services on Schedules 1 and 2 to complete the transition earlier than planned on Schedule 2. To the extent the parties are able to accelerate the transition earlier than planned on Schedule 2, the fees in Schedule 3 shall be adjusted to ensure that the Department is only invoiced for services actually performed by Contractor.

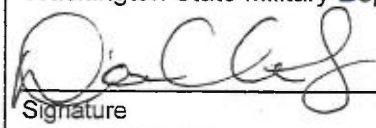OMR# N37976/16235

Century Link, E09-196M

REDACTED

2. The contract end date in Section 6 of the contract, as amended in Section 1 of Amendment K, is hereby extended to October 31, 2018, unless terminated earlier as provided in the contract, and such contract end date remains subject to the Department's unilateral right to extend at the option of the Department, upon thirty (30) days prior written notice to Contractor of the then-ending term or extension term, as applicable, for up five (5), three (3) month periods at existing contract rates, provided, however, that in no event shall the contract extend beyond December 31, 2019, unless otherwise agreed by the parties in writing.

3. Contractor and the successor ESINet provider, Comtech TCS, contemporaneously with the execution of this Amendment M, are entering into an agreement for Comtech TCS' use of the ALI database during the PSAP Migration ("ALI Transition Services") and Contractor agrees that the corresponding fees that would have been charged by Contractor to the Department for the ALI services that would have otherwise been provided to the Department will be reduced by the amount Contractor invoices Comtech TCS for such ALI Transition services.

4. All other terms and conditions remain in full force and effect.

This Amendment is incorporated in and made a part of the contract. Except as amended herein, all other terms and conditions of the contract remain in full force and effect. Any reference in the original contract or an Amendment to the "contract" shall mean "contract as amended". The Department and Contractor acknowledge and accept the terms of this Amendment as identified above, effective on the final date of execution below. By signing this Amendment, the signatories warrant they have the authority to execute this Amendment.
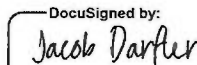
IN WITNESS WHEREOF, the parties hereto have executed this amendment.

FOR THE DEPARTMENT:	FOR THE CONTRACTOR:
Signature Date 7-25-17	DocuSigned by: _Jacob Darfler_ 7/24/2017
Dan Swisher, Chief Financial Officer	Signature Date
Washington State Military Department	Richard Fernandez
	Director, Offer Management
Signature Date 7-14-2017	for
Dawn C. Cortez	CenturyLink Communications, LLC f/k/a Qwest
Assistant Attorney General	Communications Company, LLC ("CenturyLink")
	including its Affiliate, Qwest Corporation d/b/a
	CenturyLink QC ("QC")

Form 10/27/00

Next Generation 9-1-1 Emergency Services Internet Protocol Network

Transition from ESInet I to ESInet II

Scope of Work

March 22, 2017

Table of Contents

List of Exhibits

Acronyms

Acronym	Definition
ALI	Automatic Location Identification
ANI	Automatic Number Identification
ANSI	American National Standards Institute
AP	Access Point
ATAC	Advanced Technical Assistance Center
ATP	Acceptance Test Plan
CAMA	Centralized Automatic Message Accounting
CBN	Callback Number
CDR	Call Detail Record
COID	Company ID
COTS	Commercial Off-the-Shelf
CPE	Customer Premises Equipment
CPN	Called Party Number
cps	Calls Per Second
CSP	Communications Service Provider
CSRIC	Communications Security, Reliability and Interoperability Council
DBMS	Database Management System
ELT	English Language Translation
ESInet	Emergency Services IP Network
ESN	Emergency Service Number
ESRK	Emergency Services Routing Key
ESZ	Emergency Services Zone
ETL	Extract/Transform/Load
FCC	Federal Communications Commission
IOT	Interoperability Testing
IP	Internet Protocol
ISP	Internet Service Provider
ISUP	ISDN User Part
LAN	Local Area Network
LATA	Local Access and Transport Area
LNG	Legacy Network Gateway
LPG	Legacy PSAP Gateway
LPGRFAI	Legacy PSAP Gateway – RFAI
LSRG	Legacy Selective Router Gateway
MIL	Washington State Military Department
MIS	Management Information System

Acronym	Definition
MOS	Mean Opinion Score
MPC	Mobile Positioning Center
MPLS	Multi-Protocol Label Switching
MSAG	Master Street Address Guide
MSRP	Message Session Relay Protocol
NG9-1-1	Next Generation 9-1-1
NGCS	Next Generation Core Services
NOC	Network Operations Center
OSP	Originating Service Provider
OTG	Originating Trunk Group
pANI	Pseudo Automatic Number Identification
PBX	Private Branch Exchange
POC	Point of Contact
POP	Point of Presence
POTS	Plain Old Telephone Service
PRF	Policy Routing Function
PRR	Policy Routing Rule
PSAP	Public Safety Answering Point
PSTN	Public Switched Telephone Network
RCA	Root Cause Analysis
RDN	Routable Dialing Number
RFAI	Request for Assistance Interface
RTP	Real-Time Transfer Protocol
SIL	Service Impairment Level
SIP	Session Initiation Protocol
SLA	Service Level Agreement
SME	Subject Matter Expert
SNMP	Simple Network Management Protocol
SOI	Service Order Input
SOW	Statement of Work
SR	Selective Router
SS7	Signaling System 7
STP	Signal Transfer Point
TCC	Text Control Center
TCP	Transmission Control Protocol
TCS	TeleCommunication Systems, Inc., a wholly owned subsidiary of Comtech Telecommunications Corp.

Acronym	Definition
TDM	Time-Division Multiplexing
UI	User Interface
UL	Underwriters Laboratories
URI	Uniform Resource Identifier
URL	Uniform Resource Locater
URN	Uniform Resource Name

Acronym	Definition
UTC	Universal Coordinated Time
VoIP	Voice over Internet Protocol
VPC	VoIP Positioning Center
VPN	Virtual Private Network
VRF	Virtual Routing and Forwarding

1. Introduction

1.1. Purpose

This Scope of Work (SOW) is in addition to the October 26, 2016 notification of transition, provided by the State of Washington, requesting that CenturyLink provide the transition services.

The intent of this SOW is to provide a clear understanding of the architecture, call-flows, data elements required, testing requirements and migration requirements necessary to transition from the State of Washington's current ESInet provided by CenturyLink (ESInet I) to the new ESInet being provided by Comtech TCS (Comtech) (ESInet II). This SOW includes the specific new obligations SoWA is asking of CenturyLink.

The expectation of the State of Washington in providing this document is that CenturyLink will redline this document and provide in Amendment M the additional work requested of CenturyLink to accomplish this SOW, to include the durational timing that CenturyLink agrees to support in completing this work.

This SOW is the product of the joint discussion held between Comtech, CenturyLink, their subcontractor West Safety Services and the State of Washington, held February 28 and March 1, 2017. During the discussions, all parties agreed that the transition outlined below was technically feasible and supportable.

2. ESInet I to ESInet II Transition Requirements

2.1. Phase 0: Interconnection and Testing

2.1.1.

Century Link, E09-196M

2

3

2.1.2. ESInet II to ESInet I Testing

ESInet I and ESInet II testing requirements for Transport, Signaling and ATP.

2.1.2.1. Transport

Upon Transport facility delivery into the West ▊▊▊▊▊▊▊▊▊▊ locations, Comtech will work with West to complete the following transport testing as detailed in the ESInet II Acceptance Test Plan.

- ESInet II will provide a remote loopback on each facility to ESInet I
- ESInet I will test circuit and confirm stability
- ESInet I will provide a remote loopback on each facility to ESInet II
- ESInet II will test circuit and confirm stability
- Standard DS3 / T1 circuit turn up testing

4

- ESInet I and ESInet II confirm facility testing is complete and notifies ESInet II to keep the facilities in service

2.1.2.2. Signaling

Prior to trunk testing, Comtech and West confirm T1 circuit testing has completed and passed, SS7 routesets are built and unscreened, Trunk Groups are provisioned in the ESInet I and ESInet II, and confirm TCIC, TSC and Trunk Group details.

- Each Trunk Group configured will be a 1 way Trunk Group
- ESInet I and ESInet II Gateways will be configured to COT test on each 5th call after test and acceptance of trunks
- ISUP Timers will be implemented in collaboration between ESInet I and ESInet II.
- Testing of ISUP trunk groups
  - COT test on establishment every CIC to ensure CICs line up on both sides
  - Signaling Profile in ISUP service must be set to ANSI 1995 configuration on both sides
  - Any additional standard configurations

Once all trunks pass above testing, the Acceptance Test Plan can commence.

2.1.2.3. Comtech IPSR Acceptance Test Plan

Comtech has provided the State of Washington with an ESInet II Acceptance Test Plan. Interconnection between ESInet I and ESInet II is required in order to complete all test cases. The execution of the acceptance test plan will prove that the ESInet II NG9-1-1 system is operationally ready for the next state: Phase 1 – PSAP Cutovers.

- The Comtech IPSR Acceptance Test Plan test cases were reviewed with the State of Washington, CenturyLink and West on March 1st 2017
- The high level details of the test cases reviewed can be found in section 2.7
- The Comtech IPSR Acceptance Test Plan is a separate document from the SOW and is subject to update as required
- The Comtech and CenturyLink Project teams will host a joint technical review of the IPSR acceptance test plan with corresponding technical team members

2.1.3. ALI Request / Response

Comtech will use existing ALI connections between Comtech and West for PSAP 04-001 requests from ESInet II to ALI 1.

Exhibit 2 Shows the ESInet II and ALI 1 Interconnection Requirement

5

2.1.3.1.

6

Century Link, E09-196M

2.1.3.2. ALI Interconnection for Interoperability testing of ESInet II to ALI 1

The ALI production interconnection current circuits

7

- Comtech and CenturyLink Vendor, West, production interconnection to ALI 1 will use current ALI circuits in place today
  - Comtech will increase the capacity on the existing fractional T1s
  - Comtech and CenturyLink Vendor, West, will work with Comtech to schedule a port speed update to the existing dedicated ▮▮▮▮▮▮▮ Router
  - Comtech will implement fully meshed ESInet II to ALI 1 connectivity
  - New subnets will be advertised by Comtech before the commencement of any testing
- ESInet II to ALI 1 Production Testing
  - Production ESInet II to ALI 1 testing will commence with the execution of the Comtech IPSR Acceptance Test Plan. The ESInet II production testing to ALI 1 will adhere to the same test cases used for the ESInet II to ALI 1 IOT.

2.1.3.3.   ESInet II Test PSAP

A test PSAP, located at the SECO offices in Camp Murray will be used for ESInet I to ESInet II ATP call testing when deemed necessary by the test case. Additional details around the ESInet II Test PSAP can be found in Section 2.2.

2.1.4. Interconnection and Testing Responsibility Timeline

Reference #	System/Service	Duration
A	ESInet II to ESInet I Intertandem circuits ordered and delivered	90 Business Days
B	ESInet II to ALI 1 IOT Testing	30 Business Days
C	ESInet II to ESInet I Trunk Worksheet Details completed	15 Business Days
D	ESInet II to ESInet I Circuit Testing and ISUP Integration	10 Business Days
E	Completion of ESInet II to ESInet I and ALI 1 ATP	30 Business Days
F	Completion of ESInet I to ESInet II Test PSAP Cutover	10 Business Days

2.1.5. Interconnection and Testing Responsibility Matrix

R = Responsible, A = Accountable, C = Consulted, I = Informed

Reference #	System/Service	Responsibility		
		Comtech	CTL/West	MIL
0-1	TRANSPORT: Provide traffic studies of current ESInet to determine interconnection sizing	A	C	R
0-2	TRANSPORT: Provide Locations for Interconnection to ESInet II	I	R	I
0-3	TRANSPORT: Provide ESInet II with LOA CFA for Circuit Orders	I, A	R	A
0-4	TRANSPORT: Place ASR order for required DS3 and T1	R	I	I
0-5				
0-6				
0-7	TELECOM: Provide Necessary Interconnection Details defined in 2.1.1 #8	R	NA	
0-8	TELECOM: ESInet I Provision gateway trunk groups	A	R	I
0-9	TELECOM: ESInet II Provision gateway trunk groups	R	A	I
0-10	TELECOM: ESInet I Perform COTS testing	A	R	I
0-11	TELECOM: ESInet II Perform COTS testing	R	A	I
0-12	TELECOM: Confirm acceptance of all Trunks	R	A	I
0-13	TELECOM: Comtech to provide expected behavior for route advancement	R	A	
0-14				
0-15	TEST DATA: Order and provide Test ESQKs for Test PSAPs	R	I	I
0-16				
0-17				
0-18				
0-19	ALI 1 TEST INTERCONNECT: Configure ALI 1 Port(s) to ESInet II	I	R	I
0-20	ALI 1 TEST INTERCONNECT: Update BGP Route Maps	A, I	R	I
0-21	ALI 1 TEST INTERCONNECT: ESInet I ALI Update Firewall Rules	A	R	I
0-22	ALI 1 TEST INTERCONNECT: ESInet II Update Firewall Rules	R	A	I
0-23	ALI 1 TEST INTERCONNECT: Configure and Turn up Connection from ESInet II to ALI 1	R	A	I
0-24	ALI 1 TEST INTERCONNECT: Configure and Turn up Connection from ALI 1 to ESInet II	A	R	I
0-25	ALI 1 TEST IOT: Conduct Technical Team Review of Comtech ESInet II to ALI 1 IOT ATP	R	C	I
0-26	ALI 1 TEST DATA: Provision ALI 1 Test Data Records to execute ALI ATP	R	A	I

9

Reference #	System/Service	Responsibility		
		Comtech	CTL/West	MIL
0-27	ALI RESPONSE DATA: Provide normalized NENA 04-001 ALI Request/Response	R	I	I
0-28	ALI RESPONSE DATA: Utilize normalized NENA 04-001 ALI Response	A	R	I
0-29	ALI 1 TEST IOT: Execute test cases for Comtech ESInet II to ALI 1 IOT ATP	R	C, A	I
0-30	ALI 1 TEST IOT: Provide ALI 1 Support for Comtech ESInet II to ALI 1 TEST IOT ATP	A, I	R	I
0-31	ALI 1 TEST IOT: Sign off on ESInet II to ALI 1 IOT complete	R	A,C	I
0-32	ALI 1 PRODUCTION INTERCONNECT: Augment existing Comtech and West T1	R	C,I	I
0-33	ALI 1 PRODUCTION INTERCONNECT: Update Current Comtech Cisco Router Port Speeds	A, C	R	I
0-34	ALI 1 PRODUCTION INTERCONNECT: Configure ALI 1 Ports for Comtech Production ESInet II	C	R	I
0-35				
0-36				
0-37	EXECUTE ACCEPTANCE TEST PLAN: Conduct Technical Team Review of Comtech Acceptance Test Plan	R	A,I	I
0-38	EXECUTE ACCEPTANCE TEST PLAN: ESInet II to ESInet I w/ ALI 1	R	C,I	I
0-39	EXECUTE ACCEPTANCE TEST PLAN: Provide ATP support	A	R	I
0-40	EXECUTE ACCEPTANCE TEST PLAN: State of Washington Accepts Completed ATP	A	I	R

2.2. Phase 1: PSAP Migration

After the State of Washington signs off of the ESInet II Acceptance Test Plan, PSAP ESInet I to ESInet II migrations will commence.

2.2.1. Final ATP Test Case: Test PSAP Cutover

Comtech and the CenturyLink, along with their vendor, West, will perform the final ATP test case by cutting over a Test PSAP, currently slated as ████████████████ , onto ESInet II per the standard cutover MOP. Once the cutover has completed, the cutover teams will perform the steps detailed in the roll-back MOP to ESInet I.

- Comtech and CenturyLink project management teams will hold a technical review of the Cutover MOP prior to the Final ATP test case: Test PSAP cutover.
    - o After the TEST PSAP cutover, Comtech will update standard PSAP cutover MOP per results and feedback from the cutover

2.2.2. PSAP Cutovers to ESInet II

Comtech and the CenturyLink, along with their Vendor, West, will participate in the PSAP cutovers to ESInet II. Comtech is responsible for publishing the PSAP cutover schedule. Cutovers schedule is for two PSAP transitions a week. Cutovers will not take place during holidays.

- Comtech will produce a standard cutover MOP to document and provide sign off on each PSAP transition. Comtech and CenturyLink will maintain internal MOP processes for each respective PSAP transition.

- The outline of the standard PSAP cutover MOP steps can be found in Section 2.9. The Standard PSAP Cutover MOP will be maintained as a separate document from the transition SOW.

- All cut overs will require a minimum of 30 calendar days advanced notice for each PSAP migration to all participating entities. The reschedule of a PSAP migration will similarly require a minimum of 30 days' notice. Cut overs will be scheduled for Tuesdays, Wednesdays or Thursdays only. CPE vendor engagement and scheduling for the cut overs will be the responsibility of the individual PSAP's.

2.2.3. Phase 1: PSAP Cutover Timeline

Reference #	System/Service	Duration
G	ESInet I to ESInet I PSAP Transition at an average rate of 2 cutovers per week.	312 Days

2.2.4. Phase 1: PSAP Cutover Responsibility Matrix

R = Responsible, A = Accountable, C = Consulted, I = Informed

Reference #	System/Service	Responsibility		
		Comtech	CTL/West	MIL
1-1	STANDARD PSAP CUTOVER MOP: Create, maintain and distribute	R	I	C
1-2	PSAP CUTOVER SCHEDULE: Create, maintain and distribute	R	I	A
1-3	PSAP REVIEW: Review PSAP cutover schedule with CenturyLink and Vendors	R	A	I
1-4	PSAP REVIEW: Sign off on Standard PSAP Cutover MOP	R	C,I	A
1-4.1	Comtech Provide PSAP Routing destination for the night of cut to CenturyLink for each PSAP migration 30 days in advance of PSAP cut over.	A	I	(R)
1-5	PSAP CUTOVER PRE-VALIDATION: ESInet II performs internal managed workflow for PSAP Cutover (including but not limited to, scripts complete, Network Equipment Validation, Initial translations compiled)	R,A	I	I

11

Reference #	System/Service	Responsibility		
		Comtech	CTL/West	MIL
1-6	PSAP CUTOVER PRE-VALIDATION: ESInet I performs internal managed workflow for PSAP Cutover (including but not limited to, scripts complete, Network Equipment Validation, Initial translations compiled)	I	R,A	I
1-7	PSAP CUTOVER: Host and Provide Conference Bridge for cutovers	R	I	I
1-8	PSAP CUTOVER: Provide respective ESInet II cutover personnel	R	I	I
1-9	PSAP CUTOVER: Provide respective ESInet I cutover personnel	I	R	I
1-10	PSAP CUTOVER: PSAP Pre-Test Validation Completed	R	I	A
1-11	PSAP CUTOVER: ESInet I Execute PSAP Cutover	A	R	A
1-12	PSAP CUTOVER: ESInet II Execute PSAP Cutover	R	A	A
1-13	PSAP CUTOVER: Sign off and Acceptance of Cutover	A	A	R
1-14	PSAP CUTOVER: Execute ESInet I Rollback MOP (if Required)	A	R	I
1-15	PSAP CUTOVER: Execute ESInet II Rollback MOP (if Required)	R	A	I
1-16	PSAP GO-LIVE: Send Go live to CenturyLink, West, State of WA, PSAP	R	I	I
1-17	PSAP ESINET I EQUIPMENT and CIRCUITS: Notification to remove ESInet I Network Equipment and Circuits at PSAP.	I	A	R

2.3. Phase 2: ALI Migration

The ALI Cutover from ALI 1 to ALI 2 will occur approximately 30 days after the PSAP cutovers have been completed.

2.3.1. Phase 2: ALI Cutover Timeline

Reference #	System/Service	Duration
H	Notification of ALI 1 to ALI 2 Transition	10 day
I	ALI database data provided from SoWA (CTL / West)	5 days
J	ALI 2 Data uploaded and validated	4 Days
K	ALI 2 Cutover	1 Days
L	Carrier/PSAP Dual Provisioning Starts for 30 days	1 Days
M	Carrier/PSAP Dual Provisioning Ends	30 Days
N	ALI 2 Remains Live	1 Day

2.3.2. Phase 2: ALI Migration Responsibility Matrix

R = Responsible, A = Accountable, C = Consulted, I = Informed

Reference #	System/Service	Responsibility		
		Comtech	CTL/West	MIL
2-1	ALI DATA: Provide the State of Washington with most current the ALI and MSAG data per required format request on date specified.	I	R	A
2-2	ALI DATA: Provide ALI record's data structure for each Class of Service and Type of Service existing in current ALI. This data needs to be provided in the NENA 2.1 512 format.	I	R	I
2-3	ALI CUTOVER: Notify Carriers of ALI Cutover Dates	R	I	I
2-4	ALI CUTOVER: Implement ALI Cutover	R	I	I
2-5	ALI CUTOVER: ESInet II routes PSAP 04-001 ALI Requests from ALI 1 to ALI 2	R	I	I
2-6	ALI CUTOVER: Dual Provisioning Start Notification (30 Days)	R	I	I
2-7	ALI CUTOVER: Dual Provisioning End Notification	R	I	I
2-8	ALI CUTOVER: ALI 1 Execute Rollback, if Required	I, A	R	I
2-9	ALI CUTOVER: ALI 2 Execute Rollback, if Required	R	I, A	I
2-10	ALI CUTOVER COMPLETE: Confirmation Sent to ALI 1	R	I	I
2-11	ALI CUTOVER COMPLETE: State sends decommission notice to ALI 1	I	A	R

2.4. Phase 3: Carrier Migration

The Carrier Cutover from ESInet I to ESInet II will kick off after the ALI cutover has been completed.

Reference #	System/Service	Duration
0	Carrier Cutovers from ESInet I to ESInet II start after ALI migration	192 Days

2.4.1. Phase 3: Carrier Migration Responsibility Matrix

R = Responsible, A = Accountable, C = Consulted, I = Informed

Reference #	System/Service	Responsibility		
		Comtech	CTL/West	MIL
3-1	CARRIER NOTIFICATION: Network Notification Letter of Authority provide to Carriers	A	I	R
3-2	CARRIER ESINET II TRANSITION: Provide Network interconnection details and process to connect to ESInet	R	I	I

13

Reference #	System/Service	Responsibility		
		Comtech	CTL/West	MIL
3-3	CARRIER ESINET II TRANSITION: Manage Carrier Cutovers	R		I
3-4	CARRIER ESINET II TRANSITION: Notify Customer Carrier Transition to ESInet is complete	R		I

2.5. ESInet I / ALI 1 and ESInet II / ALI 2 Project Management

Comtech, the State of Washington, CenturyLink and CenturyLink Vendor, West, agree to provide project management resources for the duration of this transition.

2.5.1. Project Management Requirements

2.5.1.1. Project Meetings

All project participants agree to participate in reoccurring meetings. Frequency determined by the State of Washington or as deemed necessary through the complete of the ESInet I to ESInet II transition and all its phases. Participants required are project members as well as technical staff when required.

2.5.1.2. Project Schedule

The State of Washington ESInet II vendor, Comtech, will provide CenturyLink and their vendor, West, with the published project plan for all phases of the transition.

2.5.1.3. Project Reports

Comtech, CenturyLink and their vendor West agree to provide weekly progress reports of tasks identified for completion throughout the transition. Each vendor is required to include any risks to the timeline. The State of Washington will provide the reporting format required during the weekly updates. .

Designated by the State of Washington, Comtech will maintain a list of risks, actions, issues and decisions.

2.6. Comtech NOC to CenturyLink NOC SLAs

In addition to the current Comtech and or CenturyLink State of Washington ESInet clearly defined contractual support requirements, see the documented Incident Management Interface Agreement Operating Procedure between Comtech TCS and CenturyLink for NG911 State of

14

Washington ESInet I to ESInet II Transition (Phases 1, 2 and 3) in support of this transition SOW.

2.7. High Level ESInet II ATP Required Test Cases

The table below outlines test cases in the State of Washington ESInet II Acceptance Test Plan that ESInet II will perform with ESInet I prior to cutting over PSAPS.

- The State of Washington ESInet II Acceptance Test Plan is maintained as a separate document by Comtech
- Additional test cases can be added as required
- The State of Washington requires sign off on the ESInet II prior to the start of Phase 1 PSAP Transition

Test Case #	Test Case Description	Test Case Result
1	Route by ESN (from ALI) and OTG to a PSAP	Purpose: Validate successful call routing using ESN and trunk group to a PSAP. Expected Result: Comtech NGCS successfully routed the call to the correct PSAP using ESN + trunk group.
2	911 is dialed, Comtech shall present ANI/pANI to the PSAP	Purpose: Validate that Comtech NGCS presents ANI/pANI successfully. Expected Result: Comtech NGCS is successfully presented ANI/pANI when 911 is dialed.
3	10 digit number in To Header, Comtech shall present ANI or pANI to a PSAP	Purpose: Validate that Comtech presents ANI/pANI to PSAP successfully for 10 digit number. Expected Result: Comtech NGCS will successfully present ANI/pANI for 10 digit number.
4	Multiple calls can be up at the same time on a PSAP	Purpose: Validate that multiple calls can be up at the same time on a PSAP. Expected Result: Comtech NGCS has successfully routed multiple calls to a PSAP.
5	Validate the call flow when caller hangs up a PSAP call	Purpose: Validate the call flow when receiving SIP BYE from the caller. Expected Result: Comtech NGCS has successfully routed the call to the correct PSAP and releases the call properly when BYE is received from Next Gen SR.
6	Validate the call flow when call taker hangs up a PSAP call	Purpose: Validate the call flow when receiving SIP BYE from the call taker. Expected Result: Comtech NGCS has successfully routed the call to the correct PSAP and releases the call properly when BYE is received from Next Gen SR.
7	Mute/un-mute without a conference established	Purpose: Mute/un-mute can be accomplished between caller and call taker. Expected Result: Verify mute/un-mute can be accomplished between caller and call taker.

REDACTED

Test Case #	Test Case Description	Test Case Result
8	Hold/un-hold without a conference established	Purpose: Hold/un-hold can be accomplished between caller and call taker. Expected Result: Verify hold/un-hold can be accomplished between caller and call taker.
9	PSAP conferences another PSAP using star codes	Purpose: PSAP conferences in another PSAP using star codes. Expected Result: Comtech NGCS has successfully routed the call to the correct PSAP. The PSAP can conference in another PSAP.
10	PSAP conferences in another PSAP using 5 digit transfer codes	Purpose: PSAP conferences in another PSAP using 5 digit transfer codes. Expected Result: Comtech NGCS has successfully routed the call to the correct PSAP. The PSAP can conference in another PSAP.
11	Conferencing using 10/11 digit PSTN number	Purpose: Conferencing using 10/11 digit PSTN number. Expected Result: Comtech NGCS has successfully routed the call to the correct PSAP. The PSAP can conference in any PSAP using 10 or 11 digit PSTN number.
12	Conferencing using 800 number	Purpose: Conferencing using an 800 number. Expected Result: Comtech NGCS has successfully routed the call to the correct PSAP. The PSAP can conference in to an 800 number.
13	Primary PSAP on ESInet II is not responding, alternate route to the next PSAP is a legacy PSAP on ESInet I	Purpose: Primary PSAP on ESInet II does not answer the call. Alternative Routing Plan is utilized to determine the next PSAP. Expected Result: Alternate PSAP on ESInet I is selected and routed successfully.
14	Primary PSAP on ESInet I is not responding, alternate route to the next PSAP is a legacy PSAP on ESInet II	Purpose: Primary PSAP on ESInet I does not answer the call. Alternative Routing Plan is utilized to determine the next PSAP. Expected Result: Alternate PSAP on ESInet II is selected and routed successfully.
15	Primary PSAP on ESInet II is not responding, alternate route to the next PSAP is an IP enabled PSAP on ESInet I	Purpose: Primary PSAP on ESInet II does not answer the call. Alternative Routing Plan is utilized to determine the next PSAP. Expected Result: Alternate PSAP on ESInet I is selected and routed successfully.
16	Primary PSAP on ESInet I is not responding, alternate route to the next PSAP is an IP enabled PSAP on ESInet II	Purpose: Primary PSAP on ESInet I does not answer the call. Alternative Routing Plan is utilized to determine the next PSAP. Expected Result: Alternate PSAP on ESInet II is selected and routed successfully.
17	Time-of-Day on PSAP, alternate route to the next PSAP	Purpose: Intended PSAP has time-of-day rule indicating it is not available. Alternative Routing Plan is utilized to determine call routing. Expected Result: Time-of-Day rule is in place. Alternate PSAP is selected and routed successfully.
18	Validate DTMF tones passing from PSAP to 10 digit number during conferencing	Purpose: Validate DTMF tones passing from PSAP to 10 digits number during conferencing. Expected Result: Comtech NGCS successfully accepts and forwards the DTMF tones to PSAPs during conference call.

16

Test Case #	Test Case Description	Test Case Result
19	Mute/un-mute feature can be activated during conference bridge initiated by ESInet II to ESInet I.	Purpose: Mute/un-mute feature can be activated during conference bridge. Expected Result: Verify mute/un-mute can be performed during conference bridge successfully.
20	Mute/un-mute, all parties unmute when controller hangs up	Purpose: Mute feature is canceled when initial controller hangs up. Expected Result: Verify mute has been canceled when controller hangs up.
21	Mute/un-mute, ESInet II PSAP can mute and un-mute all parties after ESInet I PSAP hangs up.	Purpose: ESInet II PSAP can mute/un-mute all parties. Expected Result: Verify ESInet I PSAP can mute/un-mute all parties.
22	SIP 486 Busy from ESInet II PSAP alternate routes to ESInet I PSAP	Purpose: Receive SIP 486 from PSAP. Alternative routing Plan is utilized to determine the next PSAP. Expected Result: Verify Comtech NGCS successfully performs alternate routing once receiving SIP 486 Busy.
23	Validate that last leg added to a conference can be dropped by the call taker.	Purpose: Validate that last leg added to a conference can be dropped by the call taker. Expected Result: The last leg added to a conference is dropped by the call taker..
24	Validate PSAP receives ALI responses from Comtech NGCS	Purpose: Validate ALI data can be displayed properly at the PSAP's screen. Expected Result: ALI data can be displayed properly on the PSAP screen.
25	Validate SIP OPTIONS to/from PSAP on ESInet I	Purpose: Validate SIP OPTIONS to/from PSAP Expected Result: SIP OPTIONS to/from PSAP on ESInet I
26	Fallback routing when no ESN (from ALI) or OTG on PSAP	Purpose: Validate Comtech NGCS successfully uses RDN responder to route the call to the PSAP when there is no ESN or trunk group found. Expected Result: Comtech NGCS successfully routed the call to the PSAP using RDN responder.

2.8. High Level ESInet II ALI Required Test Cases

The table below outlines test cases in the State of Washington ESInet II Acceptance Test required for ALI IOT and Production ALI 2 testing, which is provided in a separate test document. Modifications may be made to the test plan if required during testing.

Test Case #	Test Case Description	Test Case Result
1	Initial Comtech ESInet – West ALI connectivity	Initial network connectivity between Comtech lab and West ALI lab is established
2	ESInet – ALI: Heartbeat verification	Heartbeat messages are successfully sent and acknowledged between Comtech ESInet and West ALI lab.

17

Test Case #	Test Case Description	Test Case Result
3	ESInet – ALI: Wireless call rebids	When the PSAP operator rebids for the location information of the wireless subscriber, ESInet provides the location information in the expected format.
4	ESINET – ALI: VoIP call bid/rebids	When the PSAP operator rebids for the location information of the VoIP subscriber, ESInet provides the location information in the expected format.
5	ESInet – ALI: Wireline call	When the PSAP operator bids for the location information of a wireline subscriber, ESInet provides the location information in the expected format
6	ESInet – ALI: Non-existing ESRK for wireless call	For a wireless call, when the PSAP operator rebids for location information using ESRK that is not loaded in ALI, then the ALI responds back with an NRF
7	ESInet – ALI: Non-existing CBN for wireline call	For a wireline call, when the PSAP operator bids for location information using CBN that is not loaded in ALI database, then the ALI responds back with an NRF
8	ESInet – ALI: Shell record for wireless call on timeout from ALI	When the PSAP operator rebids for the location information of the wireless subscriber, shell record information is returned when a timeout happens on ALI request from ALI or when there is no response for the request from ALI

2.9. PSAP Cutover Standard MOP Test Cases

The table below outlines test cases for the standard PSAP Cutover Method of Procedure (MOP). The standard PSAP Cutover MOP is maintained in a separate document. When necessary, modifications to the test plan may be made if required through technical discussions with all vendors and or during the test PSAP cutover.

Test Case # and Description	Purpose	Test Case Conditions
1. PSAP Pre-Validation Test – PSAP Functionality	Confirm PSAP functionality prior to migration.	
2. PSAP Migration Notification – Cutover Start	The PSAP is ready to start the PSAP cutover	
3. Vendor Translations – Migrating PSAP 911 Calls to Re-Route to Condition 1	Confirm vendor has configured condition 1 routing (PSAP re-route of calls) for PSAP Migration	No 911 calls are in flight prior to translations to move traffic
4. CPE Connection Move – ESInet I to ESInet II	PSAP is connections are moved from ESInet I to ESInet II	If 911 calls continue to route to migrating PSAP and cannot be redirection to condition one or an alternate, then the cutover will need to rollback
5. Comtech Performs ESInet Application PSAP Translations	Comtech Activates ESInet II PSAP translations	CPE Vendor will connect the CPE to Comtech DMARC whether it is CAMA or IP.
6. Test Call Initiated to Migrating PSAP	Test calls route to PSAP from ESInet I to ESInet II using Comtech originating RDN	

REDACTED

Test Case # and Description	Purpose	Test Case Conditions
7. Test Calls to Migrating PSAP – CPE Validates Ancillary functionality	The PSAP functionally, as denoted in PSAP Pre-Validation Worksheet, remains the same prior to final call routing translations being initiated	Translations are in place by ESInet I to route calls using Comtech PSAP RDN through ESInet II to PSAP
8. Confirm Go or No Go to ESInet II	Decision by PSAP, State of WA, Comtech and ESInet I vendor to proceed with final call routing translations for PSAP	Live 911 calls are still routing to Condition 1 Testing is for Call Path Routing Verification only ALI can appear skewed at this time Pre-Validation Worksheet is the Baseline for call tests to be performed
9. Vendor Translation – Remove Condition 1 routing for PSAP 911 Calls.	Vendor removes condition 1 translations and routes 911 calls over ISUP connections to ESInet II using Comtech PSAP RDNs Comtech is responsible for delivering call to the PSAP	All must be in agreement Any exceptions in functionality must be noted for follow – up before proceeding.
10. ALI Connections – CPE Vendor to move ALI connections from Current Provider to Comtech	ALI requests are processed through the COMTECH ALI connections to the CPE	
11. PSAP and ESInet II Continued Test Call Validation	The Pre-Validation form is used as a baseline to complete the reaming tests of all IP/CAMA connections, PRF rules, and ancillary functionality.	CPE Vendor has connected the CPE ALI connections to Comtech provided ALI Cables. Heartbeats are confirmed
12. PSAP Go Live Sign off	Testing Completed, Passed and there is verbal confirmation from all parties for migrating PSAP to remain on ESInet II	CPE is connected to ESInet II Final Translations are in place by ESInet I
13. Rollback Required	Testing has not been accepted and the Rollback MOP will be implemented	

2.10. ESInet I to ESInet II ISUP Call Flow Examples

Refer to the 3-5, 3-7 and 3-8 ISUP Call Flow Examples in the Comtech Next Generation Core Services Network to Network Interface document. As previously provided, please refer to this document for call flow examples.

2.11. ESInet II to ALI 1 Call Flow Examples

ALI Call flow examples reside in the Comtech ALI ESInet IOT and Production test document. Call flows were reviewed with Comtech, the State of Washington, CenturyLink and their vendor West during the 2/28/2017 and 3/1/2017 transition technical review meetings.

19

TRANSITION SCHEDULE

ID	Task Name	Duration	Owner	Completion Date**
1	**WA ESInet**	**881 days**		
2	**Sales to Kick off**	**208 days**		
9				
10	**ESInet-ESInet Connection and Testing**	**548 days**		
11	**Business Negotiations and Transition Plan SOW Development**	**119 days**		
12	Onsite Comtech / West / CTL / SoWA Planning Meeting	2 days		03/01/2017
13	Provide Initial Transition SOW Per Planning Meeting	16 days	Comtech & SOWA	03/23/2017
14	**Document and Finalize Transition Documentation**	**101 days**	**Comtech & CenturyLink & SoWA**	
15	Completed Transition SOW	38 days		05/16/2017
16	Completed NOC to NOC document	16 days	Comtech & CenturyLink	05/19/2017
17	**Complete ALI Agreement**	**60 days**	**Comtech & CenturyLink & SoWA**	
18	Comtech and CenturyLink ALI Agreement	30 days	Comtech & CenturyLink	
19	Comtech and SoWA ALI Amendment	30 days	Comtech & SOWA	
20	**SoWA & ESInet 1 Transition Agreement**	**190 days**	**SoWA & CenturyLink**	
21	Complete Amendment M	10 days	SoWA & CenturyLink	
22	Prepare LOA CFA for Comtech Inter-Tandem Trunks	10 days ✓	CenturyLink	
23				
24	**ESInet II to ESInet I Interconnection (Phase 0)**	**292 days**		
25	**TRANSPORT**	**227 days**		
26	TRANSPORT: Provide traffic studies of current ESInet to determine interconnection sizing	5 days	SoWA	
27	TRANSPORT: Provide Locations for Interconnection to ESInet II	5 days ✓	CenturyLink	03/08/2017
28	TRANSPORT: Provide ESInet II with LOA CFA for Circuit Orders	3 days ✓	CenturyLink	
29	Prepare West Seattle and Tukwila Locations for Comtech Inter-Tandem Trunks	90 days ✓	West	
30	TRANSPORT: Place ASR order for required DS3 and T1	7 days	Comtech	
31	TRANSPORT: DS3 / T1 Delivered	90 days		
32	**TRANSPORT: DS3 Acceptance test**	**10 days**	**Comtech & West**	
33	Notification of DS3 Testing	7 days	Comtech w CenturyLink facilities	
34	Complete Test Acceptance	3 days	Comtech w CenturyLink facilities	
35	**TRANSPORT: DS1 Acceptance test**	**10 days**	**Comtech & West**	
36	Notification of DS1 Testing	7 days	Comtech	
37	End to End DS1 Testing with West	3 days	Comtech	
38	**TELECOM**	**149 days**		
39	TELECOM: Order SS7 Connections to TNS to for ESInet I Gateway Locations: ▓▓▓ and ▓▓▓	30 days	Comtech	
40	TELECOM: Order SS7 connections to TNS for ESInet II Gateway Locations: ▓▓▓ and ▓▓▓	30 days ✓	West	
41	**TELECOM: Provide Necessary Interconnection Details defined in 2.1.1 #8**	**1 day**	**Comtech**	

**Completion Date: All future completion dates will be tracked in the project working timeline documents and not updated in this Schedule 2 or Amendment M

ID	Task Name	Duration	Owner	Completion Date **
42	TELECOM: Comtech to provide expected behavior for route advancement	1 day	Comtech	
43	TELECOM: ESInet I Provision gateway trunk groups	45 days ✓	CenturyLink/West	
44	TELECOM: ESInet II Provision gateway trunk groups	40 days	Comtech	
45	**TELECOM: ESInet I Perform COTS testing**	**21 days**	**CenturyLink/West**	
46	Notify West of COTS Testing	7 days	Comtech	
47	Perform COTS testing	14 days	Comtech and West	
48	TELECOM: Confirm acceptance of all Trunks	1 day	Comtech	
49	**TEST DATA:**	**30 days**		
50	TEST DATA: Provide VoIP Test Shell Records and ESN for Test PSAPs (Camp Murray and King County Test PSAP)	23 days	Comtech	
51	TEST DATA: Order and provide Test ESQKs for Test PSAPs	10 days	Comtech	
52	**TEST DATA: Provision test ESNs to route to ESInet II using RDNs ((e.g. King County Test PSAP / Camp Murray))**	**7 days ✓**	**West**	
53	SOWA sends in RG29 request for ESN	7 days	SoWA	
54	**Build Profile for Test PSAP**	**7 days ✓**	**West**	
55	SOWA sends in RG29 request for PSAP Profile build	7 days	SoWA	
56	TEST DATA: Provide VoIP and/or Wireless Test Shell Records and ESNs for any PSAPs requiring additional test trunks ▓▓▓▓ ▓▓▓▓ for transition PSAP testing.	20 days	Comtech	
57	TEST DATA: Order and provide VoIP ESQKs and/or Wireless ESRKs for any PSAPs requiring additional test trunks ▓▓▓ ▓▓▓ for transition PSAP testing.	20 days	Comtech	
58	TEST DATA: Build TEST PSAP for PSAPs requiring additional test trunks ▓▓▓ ▓▓▓ for transition PSAP testing.	30 days	Comtech	
59	**ALI TEST, IOT, INTERCONNECT**	**99 days**		
60	**Provide Requested ALI Response format to West**	**10 days**	**Comtech**	
61	Build Response format	10 days ✓	West	
62	**ALI 1 TEST INTERCONNECT: Configure ALI 1 Port(s) on ESInet I**	**10 days ✓**	**West**	
63	Notification and exchange information	5 days	Comtech	
64	Port Configuration	10 days ✓	West	
65	**ALI 1 TEST INTERCONNECT: Update BGP Route Maps**	**10 days ✓**	**West**	
66	Notification and exchange information	5 days	Comtech	
67	Make BGP Route update	10 days ✓	West	
68	**ALI 1 TEST INTERCONNECT: ESInet I ALI Update Firewall Rules**	**10 days ✓**	**West**	
69	Notification and exchange information	5 days	Comtech	
70	Update Firewall Rules	10 days	Comtech	

**Completion Date: All future completion dates will be tracked in the project working timeline documents and not updated in this Schedule 2 or Amendment M

ID	Task Name	Duration	Owner	Completion Date **
71	ALI 1 TEST INTERCONNECT: ESInet II Update Firewall Rules	15 days	Comtech	
72	ALI 1 TEST INTERCONNECT: Configure and Turn up Connection from ESInet II to ALI 1	3 days	Comtech	
73	ALI 1 TEST INTERCONNECT: Configure and Turn up Connection from ALI 1 to ESInet II	3 days ✓	West	
74	ALI 1 TEST IOT: Conduct Technical Team Review of Comtech ESInet II to ALI 1 IOT ATP	7 days	Comtech	
75	ALI 1 TEST DATA: Provision ALI 1 Test Data Records to execute ALI ATP	5 days	Comtech	
76	**ALI 1 TEST IOT: Execute test cases for Comtech ESInet II to ALI 1 IOT ATP**	**14 days**	**Comtech**	
77	ALI RESPONSE DATA: Provide normalized NENA 04-001 ALI Request/Response	14 days ✓	West	
78	ALI RESPONSE DATA: Utilize normalized NENA 04-001 ALI Response	14 days	Comtech	
79	ALI 1 TEST IOT: Provide ALI 1 Support for Comtech ESInet II to ALI 1 TEST IOT ATP	14 days ✓	West	
80	ALI 1 TEST IOT: Sign off on ESInet II to ALI 1 IOT complete	1 day	Comtech	
81	**ALI 1 PRODUCTION INTERCONNECT: Augment existing Comtech and West T1**	**60 days**	**Comtech**	
82	Place Augment Order	45 days		
83	Notification for testing	5 days		
84	Complete circuit testing and acceptance	10 days		
85	ALI 1 PRODUCTION INTERCONNECT: Update Current West ALI Cisco Router Port Speeds in ▬	14 days ✓	West	
86	ALI 1 PRODUCTION INTERCONNECT: Configure ALI 1 Ports for Comtech Production ESInet II	10 days ✓	West	
87	**EXECUTE ATP**	**182 days**		
88	TEST PSAP: Confirm Provisioning corresponding respective ESInet I and ALI I Details for ▬ Test PSAP location.	3 days ✓	west	
89	TEST PSAP: Confirm Provision corresponding respective ESInet II and ALI I Details for ▬ ▬ Test PSAP location.	3 days	Comtech	
90	**EXECUTE ACCEPTANCE TEST PLAN: Conduct Technical Team Review of Comtech Acceptance Test Plan**	**7 days**		
91	Notification	7 days	Comtech	
92	Review ATP	2 days		
93	EXECUTE ACCEPTANCE TEST PLAN: ESInet II to ESInet I w/ ALI 1	20 days	Comtech	
94	**EXECUTE ACCEPTANCE TEST PLAN: Provide ATP support**	**34 days**		
95	Notification for Testing Resource	15 days	Comtech	
96	Resource available for Testing	20 days ✓	West	
97	**PSAP Method of Procedure Cutover Review**	**146 days**		

**Completion Date: All future completion dates will be tracked in the project working timeline documents and not updated in this Schedule 2 or Amendment M

ID	Task Name	Duration	Owner	Completion Date **
98	**STANDARD PSAP CUTOVER MOP: Create, maintain and distribute**	**146 days**		
99	Comtech Standard PSAP MOP	30 days	Comtech	
100	**CenturyLink West Standard MOP**	**146 days**		
101	West Create MOP	30 days ✓	West	
102	PSAP cutover MOP Review	1 day	Comtech	
103	▓▓▓ **test PSAP Cutover using MOP**	**31 days**		
104	Notification of Test PSAP Cutover	30 days	Comtech	
105	Perform Cutover	1 day	Comtech with all Vendors	
106	State of Washington Acceptance of ATP Network Infrastructure Test	15 days	SoWA	
107				
108	PSAP Cutovers (Phase 0) See Below	254 days		
109				
110	**ALI Transition (Phase 2)**	**465 days**		
111	**ALI DATA: Provide the State of Washington with most current the ALI and MSAG data per required format request on date specified.**	**10 days**	**SoWA**	
112	Notification for EXTRACT for ALI Database Extract for SoWA	10 days		
113	ALI DATA: Provide ALI record's data structure for each Type Class of Service (Wireless Wireline VoIP) in current ALI. This data needs to be provided in the NENA 2.1 512 format.	7 days ✓	West	
114	ALI CUTOVER: Notify Carriers of ALI Cutover and Dual Provisioning Dates	1 day	Comtech	
115	Carrier ALI Training / User Provisioning	90 days	Comtech	
116	PSAP ALI Training / User Provisioning	90 days	Comtech	
117	**ALI CUTOVER: Implement ALI Cutover**	**9 days**	**Comtech**	
118	ALI CUTOVER: ESInet II routes PSAP 04-001 ALI Requests from West ALI to ALI 2	9 days	Comtech	
119	ALI CUTOVER: Remove RDN routing and implement delivery of 911	10 days		
120	ALI CUTOVER: Dual Provisioning End Notification	20 days	Comtech	
121	ALI CUTOVER: ALI 1 Execute Rollback, if Required	1 day ✓	West	
122	ALI CUTOVER: ALI 2 Execute Rollback, if Required	1 day	Comtech	
123	**ALI CUTOVER COMPLETE: Confirmation Sent to ALI 1**	**6 days**	**SoWA**	
124	West ALI confirms there is no more traffic on the ALI links	3 days ✓	West	
125	State Notifies West ALI to stop ALI services	2 days	SoWA	
126	Notification to remove ports for West ALI	3 days	SoWA/Comtech	
127				
128				
129	**Carrier Conversion (Phase 3)**	**777 days**		
130	CARRIER NOTIFICATION: Network Notification Letter of Authority provide to Carriers	1 day	Sent on 10-7-16	10/7/2016
131	CARRIER ESINET II TRANSITION: Provide Network interconnection details and process to connect to ESInet	235 days	Comtech	
132	CARRIER ESINET II TRANSITION: Manage Carrier Cutovers	120 days		

**Completion Date: All future completion dates will be tracked in the project working timeline documents and not updated in this Schedule 2 or Amendment M

ID	Task Name	Duration	Owner	Completion Date **
133	CARRIER ESINET II TRANSITION: Notify Customer Carrier Transition to ESInet is complete	1 day	Comtech	
134	Comtech confirms no more traffic are on the Inter Tandem Trunks	2 days	Comtech	
135	Notification to West of Carrier Migration Complete	1 day	SoWA	
136				
137	**PSAPS (Phase 1)**	**635 days**		
138	PSAP CUTOVER SCHEDULE: Create, maintain and distribute	10 days	Comtech	
139	**PSAP REVIEW: Review PSAP cutover schedule with CenturyLink and Vendors**	**8 days**		
140	Notification of Review	7 days	Comtech	
141	Review schedule	1 day		
142	**PSAP 1**	**64 days**		
143	Notfication of Cutover	1 day		
144	Comtech Provide PSAP Routing destination for the night of cut to CenturyLink for each PSAP migration 30 days in advance of PSAP cut over.	1 day	Comtech	
145	PSAP CUTOVER PRE-VALIDATION: ESInet II performs internal managed workflow for PSAP Cutover (including but not limited to, scripts complete, Network Equipment Validation, Initial translations compiled)	5 days	Comtech	
146	PSAP CUTOVER PRE-VALIDATION: ESInet I performs internal managed workflow for PSAP Cutover (including but not limited to, scripts complete, Network Equipment Validation, Initial translations compiled)	5 days	✓West	
147	PSAP CUTOVER: Host and Provide Conference Bridge for cutovers	1 day	Comtech	
148	PSAP CUTOVER: Confirm respective ESInet II cutover personnel	5 days	Comtech	
149	PSAP CUTOVER: Confirm respective ESInet I cutover personnel	5 days	✓CenturyLink / West	
150	PSAP CUTOVER: PSAP Pre-Test Validation Completed	1 day	Comtech	
151	PSAP CUTOVER: ESInet I Execute PSAP Cutover	1 day	✓CenturyLink / West	
152	PSAP CUTOVER: ESInet II Execute PSAP Cutover	1 day	Comtech	
153	PSAP CUTOVER: Sign off and Acceptance of Cutover	1 day	SoWA	
154	PSAP CUTOVER: Execute ESInet I Rollback MOP (if Required)	0 days	✓West	
155	PSAP CUTOVER: Execute ESInet II Rollback MOP (if Required)	0 days	Comtech	
156	PSAP GO-LIVE: Send Go live to CenturyLink, West, State of WA, PSAP	3 days	Comtech	
157	PSAP ESINET I EQUIPMENT and CIRCUITS: Notification to remove ESInet I Network Equipment and Circuits at PSAP.	30 days	SoWA	
158	PSAP 2	92 days		

**Completion Date: All future completion dates will be tracked in the project working timeline documents and not updated in this Schedule 2 or Amendment M

ID	Task Name	Duration	Owner	Completion Date **
159	PSAP 3	92 days		
160	PSAP 4	92 days		
161	PSAP 5	92 days		
162	PSAP 6	92 days		
163	PSAP 7	92 days		
164	PSAP 8	92 days		
165	PSAP 9	92 days		
166	PSAP 10	92 days		
167	PSAP 11	92 days		
168	ESInet Software upgrade 1.2	16 days		
169	PSAP 12	92 days		
170	PSAP 13	92 days		
171	PSAP 14	92 days		
172	PSAP 15	92 days		
173	PSAP 16	92 days		
174	PSAP 17	92 days		
175	PSAP 18	92 days		
176	PSAP 19	92 days		
177	PSAP 20	92 days		
178	PSAP 21	92 days		
179	PSAP 22	92 days		
180	PSAP 23	92 days		
181	PSAP 24	92 days		
182	PSAP 25	92 days		
183	PSAP 26	92 days		
184	PSAP 27	92 days		
185	PSAP 28	92 days		
186	PSAP 29	92 days		
187	PSAP 30	92 days		
188	PSAP 31	92 days		
189	PSAP 32	92 days		
190	PSAP 33	92 days		
191	PSAP 34	92 days		
192	PSAP 35	92 days		
193	PSAP 36	92 days		
194	PSAP 37	92 days		
195	PSAP 38	92 days		
196	PSAP 39	92 days		
197	PSAP 40	92 days		
198	PSAP 41	92 days		
199	PSAP 42	92 days		
200	PSAP 43	92 days		
201	PSAP 44	92 days		
202	PSAP 45	92 days		
203	PSAP 46	92 days		
204	PSAP 47	92 days		
205	PSAP 48	92 days		
206	PSAP 49	92 days		
207	PSAP 50	92 days		
208	PSAP 51	92 days		
209	PSAP 52	92 days		
210	PSAP 53	92 days		
211	PSAP 54	92 days		
212	PSAP 55	92 days		
213	PSAP 56	92 days		

**Completion Date: All future completion dates will be tracked in the project working timeline documents and not updated in this Schedule 2 or Amendment M

OMR# N37976/16235

Century Link, E09-196M

TRANSITION SCHEDULE

ID	Task Name	Duration	Owner	Completion Date **
214	PSAP 57	92 days		
215	PSAP 58	92 days		
216	PSAP 59	92 days		
217	PSAP 60	92 days		
218	PSAP 61	92 days		
219	PSAP 62	92 days		
220	PSAP 63	92 days		
221	PSAP 64	92 days		
222	PSAP 65	92 days		
223	PSAP 66	92 days		
224	PSAP 67	92 days		
225	PSAP 68	92 days		

**Completion Date: All future completion dates will be tracked in the project working timeline documents and not updated in this Schedule 2 or Amendment M

TRANSITION SERVICES FEES

Schedule 3 to Amendment M
CenturyLink Transition Fees

No.	Name	Description of Transition Services	Time & Materials Fee/Fixed Fee/Not to Exceed Amount	Exceptions and Notes	Payment Terms
1.	Network Provisioning/ Testing	SOW 2.1-2.5.1	Not-to-Exceed Fees: • SOW 2.1.3.2 – 4 hours of professional services total (at $200/hour) • SOW 2.1.3.1 – 4 Units total (at $600/Unit). A "Unit" is a single port/profile for Comtech ALI connectivity • SOW 2.1.1-2.3.2 – 10 hours of professional services total (at $90/hour) to provide database information and records. Time & Materials Fee: • SOW 2.1-2.3 – 20 hours of professional services total (at $200/hour) to prepare the systems and procedures for testing of the system integrations. • SOW 2.2.4 – 22 hours of professional services total (at $90/hour) to develop and collaborate on transition documentation for Test MOP's.	CenturyLink will provide timesheets to the State on a monthly basis and will provide a running total of the number of hours that have been expended for each item relative to the total number of hours described in the column to the left.	CenturyLink will invoice the State monthly in arrears based on the hours consumed for the services rendered, subject to the Not-to-Exceed Fee limitations.

16309

-1 of 5-

Schedule 3 to Amendment M
CenturyLink Transition Fees

No.	Name	Description of Transition Services	Time & Materials Fee/Fixed Fee/Not to Exceed Amount	Exceptions and Notes	Payment Terms
1.	Network Provisioning/ Testing	SOW 2.1-2.5.1	• SOW 2.1.5 – 178 hours of professional services total (at $200/hour) for the testing and configurations of the integration in Comtech's transition plan. • SOW 2.5.1 – 2,000 hours total of non-technical service support (at $90/hour) to provide metrics, management support, tracking, billing etc.		
2.	Gateway Setup Fee	SOW 2.1.1	Fixed Fee – $230,000	None	CenturyLink will invoice the State for the one time Fixed Fee when the circuits between ESInet I to ESInet II have been provisioned and accepted by Comtech, which acceptance shall not be unreasonably delayed.
3.	Monthly Gateway Fee	SOW 2.5	Fixed Fee - $10,000/month	None	CenturyLink will invoice the State monthly in arrears for the Fixed Fee, commencing on the date that the circuits between ESInet I to ESInet II have been provisioned and accepted by

16309

Schedule 3 to Amendment M
CenturyLink Transition Fees

No.	Name	Description of Transition Services	Time & Materials Fee/Fixed Fee/Not to Exceed Amount	Exceptions and Notes	Payment Terms
3.	Monthly Gateway Fee				Comtech, which acceptance shall not be unreasonably delayed, and ending on a date specified by the State in writing.
4.	68 PSAP Migrations	SOW 2.2	Time & Materials Fee: • SOW 2.2 – 272 hours total (for cutting over all 68 PSAP's at an average rate of 4 hours per PSAP) Two technical resources at $450/hour + one non-technical resource at $90/hour to support the migrations. • SOW 2.5.1 – 1,728 hours of non-technical service support (at $90/hour) to provide metrics, management support, tracking, billing etc.	CenturyLink will provide timesheets to the State on a monthly basis and will provide a running total of the number of hours that have been expended for each item relative to the total number of hours described in the column to the left.	CenturyLink will invoice the State monthly in arrears based on the hours consumed for the services rendered.
5.	ALI Migration	SOW 2.3	Time & Materials Fee: • SOW 2.5.1 – 200 hours of support total ($90/hour) to provide metrics, management support, tracking, and billing	CenturyLink will provide timesheets to the State on a monthly basis and will provide a running total of the number of hours that have been expended for each item relative to the	CenturyLink will invoice the State monthly in arrears on the hours consumed for the services rendered, subject to the Not-to-Exceed Fee limitations.

16309

-3 of 5-

Schedule 3 to Amendment M
CenturyLink Transition Fees

No.	Name	Description of Transition Services	Time & Materials Fee/Fixed Fee/Not to Exceed Amount	Exceptions and Notes	Payment Terms
5.	ALI Migration	SOW 2.3	associated with this phase of the Comtech transition plan. Not-to-Exceed Fees: • SOW 2.3.1 - 8 hours of support total ($90/hour) to roll back ALI if needed after 1st PSAP attempt.	total number of hours described in the column to the left.	
6.	Carrier Migration	SOW 2.4	Time & Materials Fee: SOW 2.5.1 – 1,000 hours of support total (at $90/hour) to provide metrics, management support, tracking, and billing associated with this phase of the Comtech transition plan.	CenturyLink will provide timesheets to the State on a monthly basis and will provide a running total of the number of hours that have been expended for each item relative to the total number of hours described in the column to the left.	CenturyLink will invoice the State monthly in arrears on the hours consumed for the services rendered.
7.		SOW 2.6	None	None	None

16309

REDACTED

Schedule 3 to Amendment M
CenturyLink Transition Fees

Fixed Fee – CenturyLink will invoice the State for the applicable fixed fee, irrespective of the hours, services, equipment or other items consumed by CenturyLink in providing such item.

Time & Materials Fees - CenturyLink will invoice the State for actual hours incurred in performing the applicable services and the applicable rates. For example, if a particularly component of transition services is subject to Time & Materials Fees of 4 hours, CenturyLink will charge the State for the actual number of hours to complete the service. If CenturyLink must provide 6 hours of service to complete the applicable service, it will invoice the State for 6 hours at the applicable rates. If CenturyLink completes the applicable task in 3 hours, it will only invoice the State for 3 hours of service at the applicable rates.

Not-to-Exceed Fees – CenturyLink will invoice the State for actual hours incurred in performing the applicable services and the applicable rates, however CenturyLink will not invoice the State for hours (or associated rates) exceeding the applicable cap. For example, if a particularly component of transition services is subject to Not-to-Exceed fee of 4 hours, CenturyLink will charge the State for the actual number of hours to complete the service, not to exceed 4 hours. If CenturyLink must provide 6 hours of service to complete the applicable service, it will only invoice the State for 4 hours. If CenturyLink completes the applicable task in 3 hours, it will only invoice the State for 3 hours of service at the applicable rates.

With respect to Not-to-Exceed Fees, if CenturyLink is required to commit additional effort or experience excessive delays due to non-CenturyLink responsibilities in the SOW failing to be met, delays due to Customer readiness, physical building access, network credentials attainment, local or remote network access, hardware/software/system incompatibility issues, or any other issues outside the control of CenturyLink, additional charges may apply, provided, however, that 1) CenturyLink will not charge MIL for any hours expended because of re-work or corrections required to the extent due to CenturyLink errors or negligence and 2) CenturyLink will not apply any additional charges or perform services exceeding the total number of estimated hours related to the applicable Not-to-Exceed Fee without a formal written change order signed by the State. Should a change order be required, CenturyLink will advise MIL immediately so as to provide time for MIL to seek additional appropriations or other sources of funding, if necessary.

Travel and Out-of-Pocket Expenses – The State will not be liable to reimburse CenturyLink for any travel or out-of-pocket expenses related to its provision of any of the services in Amendment M.

16309   -5 of 5-