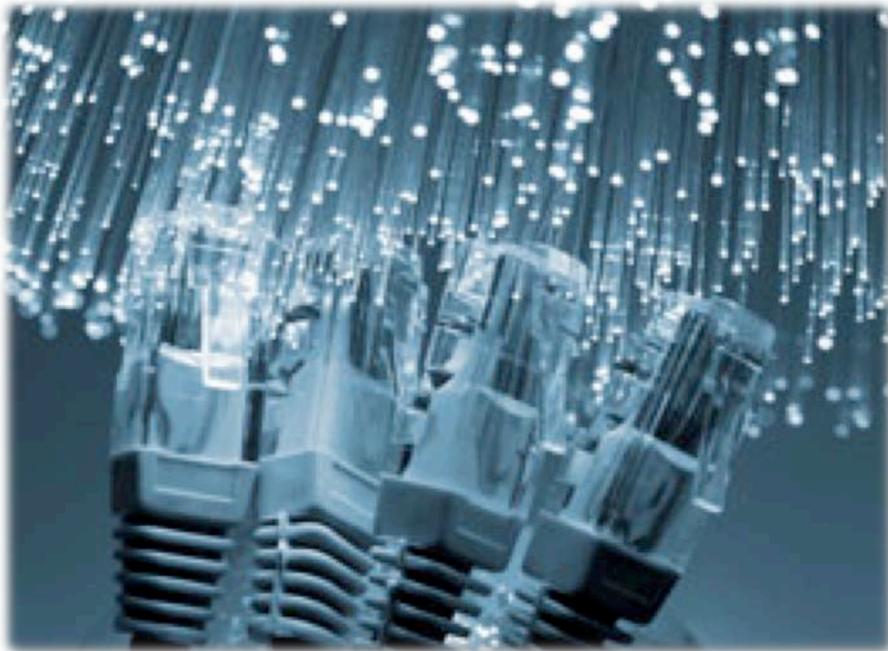




State of Alabama

Quarterly Report #1

Original Date: July 15, 2010



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Suggested Outline for Quarterly Reports of the Waiver Recipients to the FCC
Paragraph 64 of the *Waiver Order* requires the Petitioners to file, in consultation with the PSST, a quarterly status report with the FCC Public Safety and Homeland Security Bureau.

The first Quarterly Report is due July 19, 2010.

The *Waiver Order* requires Quarterly Reports to address Petitioners' progress in three areas: (1) planning; (2) funding; and (3) deployment. It includes a high-level outline of the substantive information that should be included for each category. The FCC's language and specific requirements are bolded; additional suggested items/language are in italics – see below.

If a Petitioner believes such information is confidential or proprietary, Petitioners may submit this information under a request for confidential treatment. The *Waiver Order* refers to 47 C.F.R. § 0.459; we have attached a copy of that for your reference.

I. Planning

Expected timing for development and issuance of any RFI/RFP

A. Expected timing for RFI/RFP

1. The State of Alabama will issue an RFP no later than October 31st of 2010 based on anticipated funding of the BTOP Public Safety proposal ADECA ASAP! Currently in due diligence with NTIA.

II. Funding

Status of efforts to obtain funding for planning and/or deployment, including budgeting, assessments, grants or other means

Currently the state is in due diligence with NTIA for the ADECA ASAP! Proposal but we have not received closure on the process. The Funding request is just over \$102M and would fund a complete state wide public safety Network including infrastructure as well as a complete deployment of eNobe LTE based radios.

III. Deployment

Status of equipment development and purchase, including number of devices and users

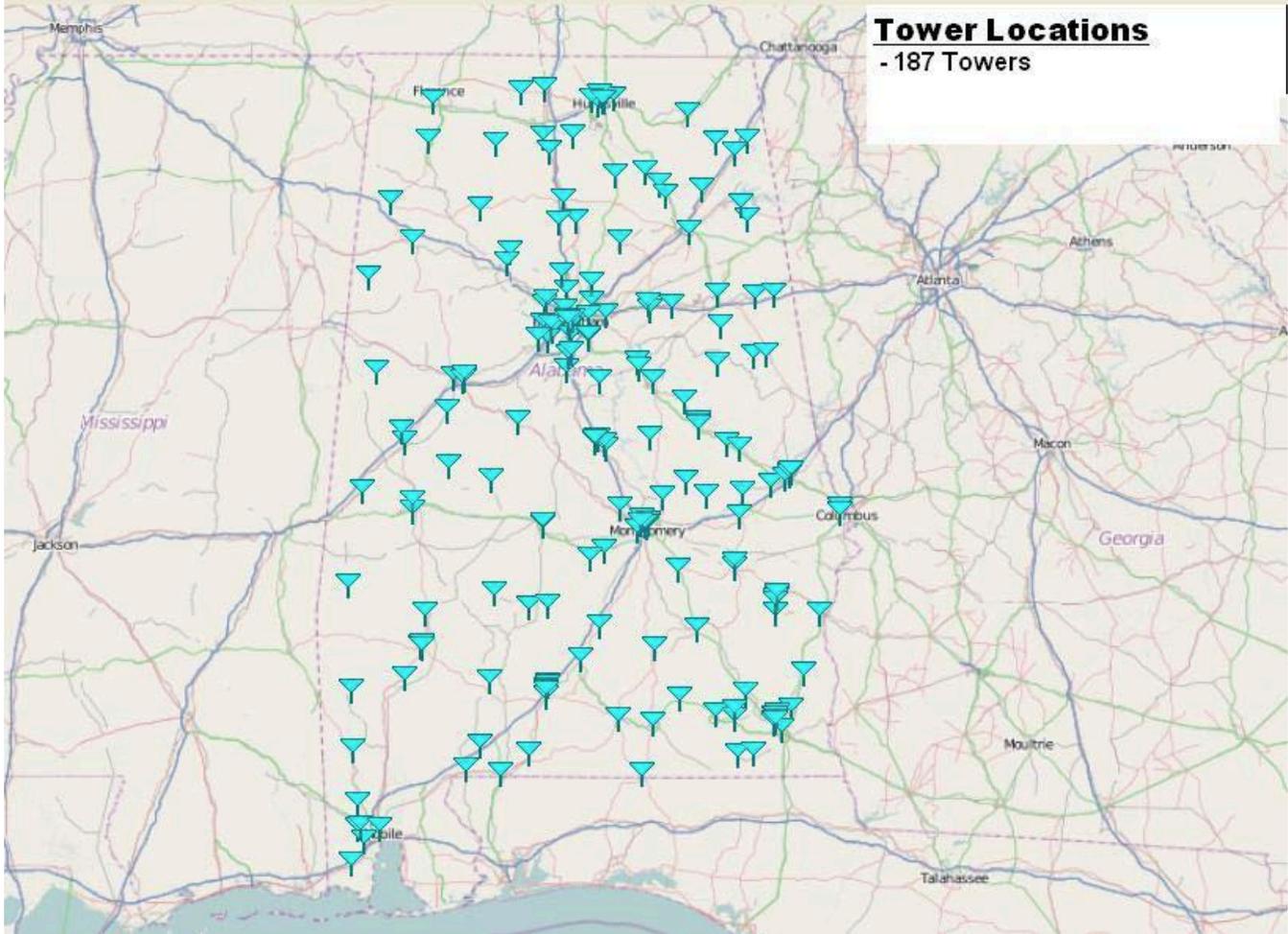
A. Identify any completed efforts at equipment development

B. Describe any equipment purchases, including types, numbers of devices and who will be the proposed users

Site development, including use of existing towers

A. How many sites currently exist in the Project area?

We currently have 187 towers identified based on EXISTING towers available in the State of Alabama. We therefore have right of way issues resolved. A summary tower location analysis is provided below:



B. How many new sites may be needed and will such new builds require additional time for permitting which could delay deployment?

None

C. Are there any rights of way issues related to the sites which could pose jurisdictional issues and result in delays?

No

D. What is the status of site acquisition or development (e.g. number of sites completed and ready for equipment deployment, number in progress, number not yet started)?

The towers locations were provided by several state vendors but the actual acquisition of the towers will not occur until BTOP funding is secured.

Deployments and upgrades (commencement and completion), including site information and location

A. Expected construction/deployment timeline

See below:

Build out Timeline

- Substantiate the ability to reach the milestones by the quarters indicated.

Time Period	Quarter	Milestones	Support for Reasonableness/Data Points
Year 0 (Jun 2010 – May 2011)	-	<ul style="list-style-type: none"> • Design & Analysis Phase • SOW <ul style="list-style-type: none"> • SOW Creation. • Receive review comments • SOW Validation and Sing off. • Order Equipment <ul style="list-style-type: none"> • Price out BOM to Alabama State Authorities. • BOM finalization. • PO release from Alabama State Authorities. • Ordering equipment from SAI, Cisco, Motorola, HP, KDL, ISP, Tools OEMs • Network Planning, Design & Security Design for the State wide Network <ul style="list-style-type: none"> • Information capturing, Analysis and requirements understanding. • Design Phase signoff. • Network planning, RF Planning, Capacity Planning and security implementation plan, cost/efforts estimation. • Discuss with Equipment suppliers, ISP's, DHS, State Agencies and other vendors. • Develop Network Architecture and agree with the State Authorities and State Agencies for public Safety and Security. • RF Network Design • Site Planning, Site surveys and Site Selection. • Resource Planning for Overall Network Implementation, commissioning and Operations. • Detailed Network Design consists of two parts <ol style="list-style-type: none"> 1. Public Broadband Network (80% of the traffic capacity). 2. Public Safety and Security Network for the State (20% of the traffic capacity dedicated). • Public Network Design. • Public safety Network Design. • Equipment Delivery at site 	<ul style="list-style-type: none"> • As per Project Plan

		<ul style="list-style-type: none"> • Tracking equipment delivery • Identification of store/Place for receiving the equipment at MDC • Inventory Verification as per order • Pre implementation (Staging, Configuration, Logistics and Documentation) <ul style="list-style-type: none"> • The overall Network Architecture and Configuration provides detailed component level breakdown. • Customer Requirement Document Creation • Active components (Complete Network infrastructure) Requirements for procurement. • Passive components (Racks, Network, Power Cables, Data Cables) • Component Installation Report preparation • Low Level network design & Security Architecture • Develop Documents & Network diagrams • Build of IP Schema and VLANs information • Review of Design documents and Validation with State Authorities. • Changes in the Low Level Design • Network High level Design and Low level Design Requirements Finalization and Approval from state Authorities. • Base config gen-generation of configuration templates & testing for the Core Network. • Design phase signoff 	
<p>Year 1 (Jun 2011- May 2012)</p>	<p>Qtr. 1 (Jun 2011- Aug 2011)</p>	<ul style="list-style-type: none"> • Implementation Phase 1 (Core Optical Network for 8 Locations) • Core Fiber Optic backbone Network design and implementation • Utilize the Max possible extent of existing Fiber and enable deployment of Core Backbone Nodes. • Network Installation and Configuration <ul style="list-style-type: none"> • Rack Mounting of Network Devices • Normal Standing up (Network Implementation-Cabling & Network Build) • Implement Phase sign off 	<ul style="list-style-type: none"> • As per Project Plan
	<p>Qtr. 2</p>	<ul style="list-style-type: none"> • Implementation Phase 1 (1- 8 Core Locations) 	<ul style="list-style-type: none"> • As per Project Plan

	<p>(Sept 2011- Nov 2011)</p>	<ul style="list-style-type: none"> • Core Optical Backbone Network Implementation plan • Installation of Fiber optical Equipment • Configuration of Switches, Routers. • Integration of the interconnecting links • Fine Tuning Configuration • Performing ATP • Documentation Handoff to steady state • Security Installation and Configuration <ul style="list-style-type: none"> • Policy Designing and Documentation • IPS policy Discussion and base line finalization and documentation • Firewall/IPS Static Parameters - Design and Documentation • Designing and Documenting the Acceptance Test Plan • Device Mounting and Power On test • Firewall/IPS Static parameter configuration • Configuring the Policies on the Firewall and applying to interfaces • "Configuring Base line Policies on the IDS, enabling the monitoring mode" • Fine Tuning the firewall policies • Fine Tuning IPS policies • Performing ATP • Documentation • Network Operation Centre <ul style="list-style-type: none"> • Service Implementation Phase • Implementation & testing of NOC Connectivity • NNM Server built up • Capturing of network resources in NNM • Network Management system Installation (NMS) • Asset creating in Service Desk • Implementing the monitoring consoles • Test call routing to NOC • Process and Team Planning phase(Parallel with System Requirement phase) • "Define team structure, roles, responsibility and shift roster" • Team Training (Parallel with System Requirement Phase) <ul style="list-style-type: none"> • Overall Core backbone Network • Interfaces LAN, WAN and Wireless. • Performance Monitoring and Maintenance Tools. 	
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		<ul style="list-style-type: none"> • Processes and Procedures. • Services Testing Phase <ul style="list-style-type: none"> • Initial Core Network trial Run • Network Commissioning • Performance Review / Acceptance testing / Fine Tuning and SME Service enabling. • Implementation Phase 2 (1 to 8 Aggregation Sites) <ul style="list-style-type: none"> • Optical Backbone Core Network Aggregation sites establishment. • Rack Mounting of Network Devices • Normal Standing up (Network Implementation-Cabling & Network Build) • Configuration of Switches, Routers • Integration of the interconnecting links • Fine Tuning Configuration • Performing ATP • Documentation Handoff to steady state 	
	<p>Qtr. 3 (Dec 2011 – Feb 2012)</p>	<ul style="list-style-type: none"> • Implementation Phase 2 (1 to 4 Aggregation Locations) <ul style="list-style-type: none"> • Wireless Aggregation Network Design and Implementation. • Wireless Backhaul Network Establishment for remote rural nodes. • Aggregation of Wireless traffic through Switches and Routers in the Core Network • Deployment of LTE 700 MHz D-Block Radios. • Instillation of LTE Radio management Equipment. • Establishment of MME, SAE, and PDN gateways for the public safety network. • Aggregation Nodes 1-4 Installation and Configuration <ul style="list-style-type: none"> • Radio Network Installation and configuration for 30 Towers. • IP Security implementation for IPV4 and IPV6. • Firewall/IPS Static Parameters - Design and Documentation • Designing and Documenting the Acceptance Test Plan • Device Mounting and Power On test • Firewall/IPS Static parameter configuration • Configuring the Policies on the 	<ul style="list-style-type: none"> • As per Project Plan

		<ul style="list-style-type: none"> • Firewall and applying to interfaces • "Configuring Base line Policies on the IDS, enabling the monitoring mode" • Fine Tuning the firewall policies • Fine Tuning IPS policies 	
	<p>Qtr. 4 (Mar 2012 – May 2012)</p>	<ul style="list-style-type: none"> • Radio Network Performance optimization. • Implementation Phase (5 to 8 Aggregation Locations) <ul style="list-style-type: none"> • Wireless Aggregation Network Design and Implementation. • Wireless Backhaul Network Establishment for remote rural nodes. • Aggregation of Wireless traffic through Switches and Routers in the Core Network • Deployment of LTE 700 MHz D-Block Radios. • Instillation of LTE Radio management Equipment. • Establishment of MME, SAE, and PDN gateways for the public safety network. • Aggregation Nodes 5 to 8 Installation and Configuration <ul style="list-style-type: none"> • Radio Network Installation and configuration for 30 Towers. • IP Security implementation for IPV4 and IPV6. • Firewall/IPS Static Parameters - Design and Documentation • Designing and Documenting the Acceptance Test Plan • Device Mounting and Power On test • Firewall/IPS Static parameter configuration • Configuring the Policies on the Firewall and applying to interfaces • "Configuring Base line Policies on the IDS, enabling the monitoring mode" • Fine Tuning the firewall policies • Fine Tuning IPS policies • Radio Network Performance optimization. 	<ul style="list-style-type: none"> • As per Project Plan
<p>Year 2</p>	<p>Qtr. 1 (</p>	<ul style="list-style-type: none"> • Implementation Phase 3 (9 to 12 	<ul style="list-style-type: none"> • As per Project Plan

(June 2012 – May 2013)	Jun 2012 – Aug 2012)	<p>Aggregation Locations)</p> <ul style="list-style-type: none"> • Wireless Aggregation Network Design and Implementation. • Wireless Backhaul Network Establishment for remote rural nodes. • Aggregation of Wireless traffic through Switches and Routers in the Core Network • Deployment of LTE 700 MHz D-Block Radios. • Instillation of LTE Radio management Equipment. • Establishment of MME, SAE, and PDN gateways for the public safety network. <p>• Aggregation Nodes 9 - 12 Installation and Configuration</p> <ul style="list-style-type: none"> • Radio Network Installation and configuration for 30 Towers. • IP Security implementation for IPV4 and IPV6. • Firewall/IPS Static Parameters - Design and Documentation • Designing and Documenting the Acceptance Test Plan • Device Mounting and Power On test • Firewall/IPS Static parameter configuration • Configuring the Policies on the Firewall and applying to interfaces • "Configuring Base line Policies on the IDS, enabling the monitoring mode" • Fine Tuning the firewall policies • Fine Tuning IPS policies • Radio Network Performance optimization. 	<ul style="list-style-type: none"> • As per Project Plan
	Qtr. 2 (Sept 2012 – Nov 2012)	<p>• Implementation Phase 3 (Aggregation node 13 to 16)</p> <ul style="list-style-type: none"> • Wireless Aggregation Network Design and Implementation. • Wireless Backhaul Network Establishment for remote rural nodes. • Aggregation of Wireless traffic through Switches and Routers in the Core Network • Deployment of LTE 700 MHz D-Block Radios. • Instillation of LTE Radio 	<ul style="list-style-type: none"> • As per Project Plan

		<ul style="list-style-type: none"> management Equipment. • Establishment of MME, SAE, and PDN gateways for the public safety network. • Aggregation Nodes 13-16 Installation and Configuration <ul style="list-style-type: none"> • Radio Network Installation and configuration for 30 Towers. • IP Security implementation for IPV4 and IPV6. • Firewall/IPS Static Parameters - Design and Documentation • Designing and Documenting the Acceptance Test Plan • Device Mounting and Power On test • Firewall/IPS Static parameter configuration • Configuring the Policies on the Firewall and applying to interfaces • "Configuring Base line Policies on the IDS, enabling the monitoring mode" • Fine Tuning the firewall policies • Fine Tuning IPS policies • Radio Network Performance optimization. 	
	<p>Qtr. 3 (Dec 2012 – Feb 2013)</p>	<ul style="list-style-type: none"> • Implementation Phase 3 (Aggregation node 17 to 20) <ul style="list-style-type: none"> • Wireless Aggregation Network Design and Implementation. • Wireless Backhaul Network Establishment for remote rural nodes. • Aggregation of Wireless traffic through Switches and Routers in the Core Network • Deployment of LTE 700 MHz D-Block Radios. • Instillation of LTE Radio management Equipment. • Establishment of MME, SAE, and PDN gateways for the public safety network. • Aggregation Nodes 17-20 Installation and Configuration <ul style="list-style-type: none"> • Radio Network Installation and configuration for 30 Towers. • IP Security implementation for IPV4 and IPV6. • Firewall/IPS Static Parameters - Design and Documentation 	<ul style="list-style-type: none"> • As per Project Plan

		<ul style="list-style-type: none"> • Designing and Documenting the Acceptance Test Plan • Device Mounting and Power On test • Firewall/IPS Static parameter configuration • Configuring the Policies on the Firewall and applying to interfaces • Configuring Base line Policies on the IDS, enabling the monitoring mode • Fine Tuning the firewall policies • Fine Tuning IPS policies • Radio Network Performance optimization. 	
	<p>Qtr. 4 (Mar 2013 – May 2013)</p>	<ul style="list-style-type: none"> • Implementation Phase 3 (Aggregation node 21 to 24) <ul style="list-style-type: none"> • Wireless Aggregation Network Design and Implementation. • Wireless Backhaul Network Establishment for remote rural nodes. • Aggregation of Wireless traffic through Switches and Routers in the Core Network • Deployment of LTE 700 MHz D-Block Radios. • Instillation of LTE Radio management Equipment. • Establishment of MME, SAE, and PDN gateways for the public safety network. • Aggregation Nodes 21-24 Installation and Configuration <ul style="list-style-type: none"> • Radio Network Installation and configuration for 30 Towers. • IP Security implementation for IPV4 and IPV6. • Firewall/IPS Static Parameters - Design and Documentation • Designing and Documenting the Acceptance Test Plan • Device Mounting and Power On test • Firewall/IPS Static parameter configuration • Configuring the Policies on the Firewall and applying to interfaces • Configuring Base line Policies on the IDS, enabling the monitoring mode • Fine Tuning the firewall policies • Fine Tuning IPS policies • Radio Network Performance 	<ul style="list-style-type: none"> • As per Project Plan

		optimization.	
Year 3 (Jun 2013 – May 2014)	Qtr. 1 (Jun 2013 – Aug 2013)	<ul style="list-style-type: none"> • Implementation Phase (4 Secondary Locations) <ul style="list-style-type: none"> • Rack Mounting of Network Devices and Cabling • "Configuration of Switches, Routers" • Fine Tuning ATP and Signoff • Rack Mounting of Network Devices and Cabling • "Configuration of Switches, Routers" • Rack Mounting of Network Devices and Cabling • "Configuration of Switches, Routers" • Security Installation and Configuration <ul style="list-style-type: none"> • Policy Designing and Documentation • IPS policy Discussion and base line finalization and documentation • Firewall/IPS Static Parameters - Design and Documentation • Designing and Documenting the Acceptance Test Plan • Device Mounting and Power On test • Firewall/IPS Static parameter configuration • Configuring the Policies on the Firewall and applying to interfaces • "Configuring Base line Policies on the IDS, enabling the monitoring mode" • Fine Tuning the firewall policies • Fine Tuning IPS policies • Performing ATP • Documentation • Fine Tuning ATP and Signoff 	<ul style="list-style-type: none"> • As per Project Plan
	Qtr. 2 (Sept 2013 – Nov 2013)	<ul style="list-style-type: none"> • Implementation Phase (8 Secondary Locations) <ul style="list-style-type: none"> • Rack Mounting of Network Devices and Cabling • "Configuration of Switches, Routers" • Fine Tuning ATP and Signoff • Rack Mounting of Network Devices and Cabling • "Configuration of Switches, Routers" • Rack Mounting of Network Devices and Cabling • "Configuration of Switches, Routers" • Security Installation and Configuration 	<ul style="list-style-type: none"> • As per Project Plan

		<ul style="list-style-type: none"> • Policy Designing and Documentation • IPS policy Discussion and base line finalization and documentation • Firewall/IPS Static Parameters - Design and Documentation • Designing and Documenting the Acceptance Test Plan • Device Mounting and Power On test • Firewall/IPS Static parameter configuration • Configuring the Policies on the Firewall and applying to interfaces • "Configuring Base line Policies on the IDS, enabling the monitoring mode" • Fine Tuning the firewall policies • Fine Tuning IPS policies • Performing ATP • Documentation • Fine Tuning ATP and Signoff 	
	<p>Qtr. 3 (Dec 2013 – Feb 2014)</p>	<ul style="list-style-type: none"> • Implementation Phase (12 Secondary Locations) <ul style="list-style-type: none"> • Rack Mounting of Network Devices and Cabling • "Configuration of Switches, Routers" • Fine Tuning ATP and Signoff • Rack Mounting of Network Devices and Cabling • "Configuration of Switches, Routers" • Rack Mounting of Network Devices and Cabling • "Configuration of Switches, Routers" • Security Installation and Configuration <ul style="list-style-type: none"> • Policy Designing and Documentation • IPS policy Discussion and base line finalization and documentation • Firewall/IPS Static Parameters - Design and Documentation • Designing and Documenting the Acceptance Test Plan • Device Mounting and Power On test • Firewall/IPS Static parameter configuration • Configuring the Policies on the Firewall and applying to interfaces • "Configuring Base line Policies on the IDS, enabling the monitoring mode" • Fine Tuning the firewall policies • Fine Tuning IPS policies • Performing ATP • Documentation 	<ul style="list-style-type: none"> • As per Project Plan

		<ul style="list-style-type: none"> • Fine Tuning ATP and Signoff 	
	<p>Qtr. 4 (Mar 2014 – May 2014)</p>	<ul style="list-style-type: none"> • Implementation Phase (16 Secondary Locations) <ul style="list-style-type: none"> • Rack Mounting of Network Devices and Cabling • "Configuration of Switches, Routers" • Fine Tuning ATP and Signoff • Rack Mounting of Network Devices and Cabling • "Configuration of Switches, Routers" • Rack Mounting of Network Devices and Cabling • "Configuration of Switches, Routers" • Security Installation and Configuration <ul style="list-style-type: none"> • Policy Designing and Documentation • IPS policy Discussion and base line finalization and documentation • Firewall/IPS Static Parameters - Design and Documentation • Designing and Documenting the Acceptance Test Plan • Device Mounting and Power On test • Firewall/IPS Static parameter configuration • Configuring the Policies on the Firewall and applying to interfaces • "Configuring Base line Policies on the IDS, enabling the monitoring mode" • Fine Tuning the firewall policies • Fine Tuning IPS policies • Performing ATP • Documentation • Fine Tuning ATP and Signoff 	<ul style="list-style-type: none"> • As per Project Plan

***B. Interoperability Showing (Confirm submittal of copy to FCC and PSST)
Provided to PSST***

C. Confirm access to all public safety entities in your geographic area (Order para. 54)

A letter of confirmation will be provided by the tower vendor and senior analyst from Alabama Public Safety post funding award.