

# **Request for Proposal (RFP)**

## **Network Managed Service**

Issue Date: September 15, 2022

#### 1. Introduction

US Ignite, Inc. ("US Ignite") is seeking a service provider to provide end-to-end proactive monitoring and ticketing support for the network and connected devices with troubleshooting and maintenance remotely or on-site when required for service restoration and fixing any problem. In addition, the service provider must ensure network availability, functionality, configuration, and a high level of performance.

The estimated Period of Performance is from October 2022, through September 2023. US Ignite will issue Firm Fixed Price Contract for the winning bidder.

The Bidder shall be responsible for all costs associated with the preparation and submission of its proposal, and US Ignite will in no case be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.

#### 1.1 US Ignite Overview

US Ignite is a national nonprofit, a 501(c)(3), that is accelerating the smart city movement – and creating value for an entire ecosystem – by guiding communities into the connected future, creating a path for private sector growth, and advancing technology research that's at the heart of smart city development. Why is this important? Because local governments need to improve the quality of life and ensure economic development in their communities, particularly during a time of rapid technological change. Businesses recognize the importance of the emerging market around smart communities and need to find commercial strategies that are repeatable, scalable, and sustainable. And foundations and federal agencies need to channel their institutional aims into efforts ranging from cutting-edge research to practical economic development initiatives that deliver measurable benefits. As a trusted partner, we bring this entire smart city ecosystem together, successfully pairing financial investment with technical and organizational expertise. Through the public-private partnership programs we run, US Ignite is a catalyst for communications network advancement, and for innovation in smart city services that are powered by a new generation of technologies. Read more about US Ignite programs on our website.

## 2. Scope of Work

#### 2.1 Summary of Scope of Work

Service provider shall provide end-to-end proactive monitoring and ticketing support for the network and connected devices with troubleshooting and maintenance remotely or on-site when



required for service restoration and fixing any problem. In addition, the vendor must ensure network availability, functionality, configuration, and a high level of performance.

## 2.2 Project Tasks:

The service provider shall perform the following tasks:

- 1. Monitor across all platforms and connections included in section 2.3 (RAN, Core, Microwave, Fiber, Cameras, Sensors) for 24/7/365 to detect any issue that may trigger an incident ticket
- 2. Manage different layers of services like network, I.P., servers, security, VPN, or other applications
- 3. Monitor the KPIs and performance metrics in section 2.4. Analyze the statistics to report any anomaly regarding the network performance. The vendor can add additional KPIs as needed
- 4. Report any alarms, network faults, service interruptions, or outages to US Ignite.
- 5. Determine the root cause of incidents and provide a resolution for the problem. Maintain a record of information about issues and the resolutions
- 6. Perform two preventive/routine field scheduled maintenance visits to minimize the number of faults occurring on the network equipment. The visits will be 6 & 12 months from contract execution.
- 7. Deploy a field support team to conduct on-site service if a problem cannot be resolved remotely (Tier 2 Support). The field team must be capable of fixing software and hardware issues for all platforms and related dependencies like electrical power, radio, fiber, routers, etc.

#### 2.3 CBRS Network Connectivity

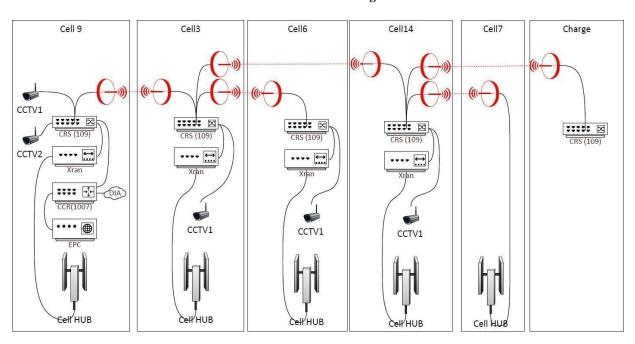
US Ignite installed, owns, and operates a dedicated, private CBRS Network on Fort Carson Army Post in support of our ongoing smart base programs on the installation. The network is located in the central cantonment area and includes five cells connected via point-to-point Bridgewave radios. Additionally, each location has JMA Wireless TEKO CellHub CBRS radio units connected to Dell X-RAN servers. Unite Private Networks (UPN) provides the internet service to the network through a fiber-optic connection at Cell 9. The network has multi-vendor equipment as the following:

- a. The network includes five nodes installed on dedicated 72-foot poles
- b. JMA Wireless Private LTE over CBRS 3.5 GHz with 20 SIM cards for devices
- c. Utilizing virtualized RAN
- d. V-RAN made it possible to deploy a fully software-based MIMO network
- e. JMA XAOS server for Radio Access Network control and monitoring
- f. Google SAS-CBRS spectrum control
- g. On-premises Athonet Evolved Packet Core (EPC)



- h. 100 Mbps Ethernet Internet Access (EIA) provided by Unite Private Network (UPN) at Cell 9
- i. MikroTik Cloud Router Switch CRS109
- j. Avigilon H5A Cameras
- k. Dell PowerEdge R740 Servers
- 1. On-site portable office space with Wi-Fi access point
- m. US Ignite is planning to add two weather stations and four sensors in two new locations
- n. US Ignite will provide the required credentials or work with the OEM to grant access to the vendor.

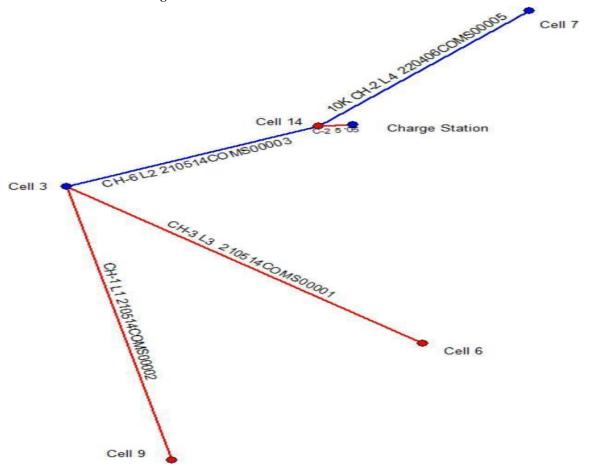
#### **Network Diagram**





Bridgewave mmWave backhaul point-to-point connectivity

## Point-to-Point Diagram



## 2.4 List of KPIs

Vendor shall monitor the following KPIs:

Table 1: List of Project KPIs		
KPI Category	KPI Name	KPI Name
Integrity	Average DL Cell Throughout	Mbps
	Average U.L. Cell Throughout	
	Average DL UE Throughput	
	Average U.L. UE Throughput	
Accessibility	Attach Success Rate	Ratio (%)
Accessibility	Service Request Success Rate	Ratio (%)
	Bearer Activation Success Rate	
	Paging Success Rate	
Retainability	Call Drop Rate	Ratio (%)
	Cell Access Success Rate	
	X2 Handover Success Rate	



Table 1: List of Project KPIs		
KPI Category	KPI Name	KPI Name
	S1 Handover Success Rate	
Network-Radio	eNB Temperature	°F or °C
	Cell Availability	Ratio (%)
	Backhaul PTP Availability	
	Average Cell RSSI	dBm
	Average Cell SINR	dB
	eNB TxPower	
Network-User	Number of Attached Users	Quantity
	Number of Connected Users	
Network-Packet Data	Packet Drop/Loss	Ratio (%)
	Packet Latency	Time in ms

## 3. Administrative Information

#### 3.1 Solicitation Timeline

Table 2: Solicitation Timeline		
Date	Deadline	
9/15/22	RFP Release	
9/22/22	Questions Due	
9/29/22	US Ignite Responses to Questions Due	
10/10/22	Proposals Due	
10/17/22	Contract Execution (Beginning of Period of Performance)	

## 3.2 Questions and Answers

All clarification questions must be submitted by September 22, 2022, no later than 8:00 PM Eastern Daylight Time (EDT). Questions must be submitted in the following format:

- 1. Section Number
- 2. Paragraph Number
- 3. Page Number
- 4. Text of passage being questioned
- 5. Question

All requests, questions, or other communications about this RFP shall be made in writing to <a href="mailto:sayed.elhamz@us-ignite.org">sayed.elhamz@us-ignite.org</a>, RFP coordinator. Communications made to other US Ignite



personnel or attempts to ask questions by phone or in person will not be allowed or recognized as valid and may disqualify the supplier. Suppliers may only rely on written statements issued by the RFP coordinator.

US Ignite will endeavor to respond to all parties no later than September 29, 2022, 8:00 PM EDT.

#### 3.3 Proposals

All proposals must be submitted by October 10, 2022, no later than 8:00 PM EDT.

Proposals (and questions) must be submitted via email to sayed.elhamz@us-ignite.org

#### **Proposals must include:**

- 3.3.1 **Cover Page**: Provide primary contact information, including name, title, phone number, email, and organization name, address, and DUNS number.
- 3.3.2 **Organizational Overview**: Provide an overview of your organization and experience performing relevant projects. No more than 5 pages.
- 3.3.3 **Project Solution Plan:** The project solution plan must provide detail information demonstrating:
  - a. Technical details and solution architecture the vendor will use to manage the network, including hardware, software, functionality, and features.
  - b. Service Level Agreement (SLA) process flow with communication, escalation paths along with different tiers of support based on the procedure, case type, and timeline (e.g., Tier1, and Tier 2).
  - c. Incidents severities level with corresponding action plan, like notification and troubleshooting process.
  - d. Monitoring platform to check network status, trouble tickets, traffic, pull reports, or other requirements.
  - e. Vendors need to work with SAS on the CBRS license renewal.
- 3.3.4 **Reporting Sample:** The vendor needs to include a weekly and monthly sample report in their response to the RFP.
- 3.3.5 **Labor Cost Proposal:** Please summarize staff labor categories and qualifications using the table 3, subject to the following considerations. No page limit.
  - a. If required by the project, US Ignite will cover the cost of providing hardware, and software.
  - b. US Ignite will reimburse travel costs and other direct costs separately in accordance with Federal and US Ignite policies.



Proposers must submit the costs encompassing all activities and deliverables described in section 2 Project Scope of Services using the Cost Proposal Table.

US Ignite intends to issue a fixed-price contract to a suitable Proposer who demonstrates the capacity to deliver the quality scope of services and is the most responsive to the requirements of the RFP. The Cost Proposal will become part of the MSA and Task Orders if an Agreement is awarded pursuant to this procurement.

Table 3: Cost Proposal				
Item	Description			
A	Labor Category	Number of Hours Estimate	Hourly Rate (in \$)	Cost (in \$)
B	Other expenses Description		Cost	
Ь				
Total Cost (A+B)				

Proposers must submit the costs for decommissioning, which must thoroughly cover all activities required to return the project site and systems included in this Project to their previous state. This decommissioning cost will not be considered part of the proposal's total cost.

Table 4: Decommissioning Cost		
Item	Description	Fixed-Price Amount
A	Decommissioning Cost (Equipment removal and disposal, restoration of site or facilities, travel, and labor, cancellation/deactivation costs)	
Total Cost		



## 3.4 Proposal Evaluation Criteria

US Ignite will select the successful bidder through a formal evaluation process. All proposals will be initially reviewed to ensure compliance with the RFP. If proposals are late or are not administratively compliant, they will be excluded from further consideration.

Proposals that meet the proposal instructions and requirements will be given a thorough and objective review. Administratively compliant proposals will be scored against the evaluation criteria listed below by a panel of evaluators, and the composite scores of those panelists will be used to rank proposers. If evaluators have questions about a proposal that may affect a proposal score to one or more of the criteria, then US Ignite has may conduct an informational interview with a proposing organization.

US Ignite will evaluate proposal using the factors as described below:

Table 5. Evaluation Criteria		
No.	Criteria Description	Weight
	<b>Location of Work</b> - preference will be granted for organizations based in	
1.	the Colorado.	20%
	Organizational Technical Experience - scores for organizational	
	experience will be evaluated based on the relevance and depth of	
2.	experience provided.	20%
	<b>Project Solution Plan</b> – will be evaluated based on the details of	
3.	information requested in section 3.3.3	30%
	Cost - Labor rates for staff of various job functions will be compared to	
	assess the best value for a given job function.	30%

## 3.5 Solicitation Administration Terms

- 1. <u>Authority to Transact Business in Colorado:</u> Each Proposer shall provide documentation, submitted with its proposal that confirms that the Proposer is authorized to conduct business in the State of Colorado.
- 2. <u>Access to the Monitoring Platform:</u> Provide access to US Ignite on the monitoring platform to check network status, trouble tickets, traffic, pull reports, or other requirements.
- 3. <u>Master Services Agreement and Task Order</u>: If US Ignite elects to make an award(s) to a Proposer(s), then US Ignite will prepare and send a Master Services Agreement (MSA) and Task Order(s) to the successful Proposer(s). No award will be finalized without a fully executed MSA. US Ignite shall require resumes and commitments for assigned staff prior to executing each Task Order.
- 4. <u>No Offer by US Ignite</u>: This RFP does not constitute an offer by US Ignite to enter into an agreement. This RFP is simply an invitation for offers from interested Proposers. No offer shall bind US Ignite.
- 5. <u>Accept and Rejection of Proposals</u>: US Ignite may reject any or all proposals in whole or in part, waive a technicality, make awards in a manner deemed in the best interest of US Ignite



and unless otherwise specified by the organization, accept any item in the proposal.

- 6. <u>Multiple Awards</u>: US Ignite reserves, at its sole discretion, the option to make awards to multiple Proposers. Multiple awards may be made on the total Scope of Services or components of the Scope of Services.
- 7. Ownership of Proposals: Each Proposal submitted to US Ignite will become the property of US Ignite, without compensation to a Proposer, for US Ignite use. US Ignite will not share proposals with any individuals or entities outside of the US Ignite review team and its key project stakeholders, given the consent of proposers prior to being shared. Proposers should mark any proprietary information within the proposal.
- 8. Limit of Insurance Coverage shall be at least:
- i. Commercial General Liability (CGL):
  - Products and completed operations, property damage, bodily injury, and personal & advertising injury with limits no less than \$1,000,000 per occurrence, and a general aggregate with limit no less than \$2,000,000.
- ii. Automobile Liability:
  - Insurance Services with limit no less than \$1,000,000 per accident for bodily injury and property damage.
- iii. Workers' Compensation insurance: Employer's Liability Insurance with limit of no less than \$1,000,000 per accident for bodily injury or disease.
- iv. Cyber Liability Insurance, with limits not less than \$2,000,000 per occurrence or claim, \$2,000,000 aggregate. Coverage shall be sufficiently broad to respond to the duties and obligations as is undertaken by Vendor in the agreement and shall include, but not be limited to, claims involving infringement of intellectual property, including but not limited to infringement of copyright, trademark, trade dress, invasion of privacy violations, information theft, damage to or destruction of electronic information, release of private information, alteration of electronic information, extortion and network security. The policy shall provide coverage for breach response costs as well as regulatory fines and penalties as well as credit monitoring expenses with limits sufficient to respond to these obligations.