CITY OF SPRINGFIELD, OREGON

DEVELOPMENT AND PUBLIC WORKS

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Request for Information

Advertised Date: April 9, 2021

Request for Information (RFI) Title: Street Lighting Control System

City Contact: Scott Miller, P.E., PMP; smiller@springfield-or.gov

Key Dates

Intent to Respond Deadline: April 16, 2021 – 5 PM PDT

Question Submittal Deadline: April 23, 2021 – 5 PM PDT

Response Due Date: April 30, 2021 – 5 PM PDT

General Information

No Pre-Response conference will be held for this RFI.

Interested parties shall email the following information to the City Contact above containing the RFI Title on the subject line by the Intent to Respond Deadline:

- Company Name
- Authorized Representative/Title
- Address, Email, Phone

Electronic responses will only be received as a pdf, compressed folder, and/or native format document via email to the City Contact above containing the RFI Title on the subject line by the Response Due Date unless amended by the City of Springfield. Multiple emails or link with downloadable Zip file (i.e. Dropbox) are acceptable as individual email responses cannot exceed 20MB.

This Request for Information will be provided in alternative formats for individuals with disabilities upon request.

SECTION 1 RESPONSE PREPARATION

The City of Springfield (hereinafter "City") Operations Division, Development & Public Works Department is soliciting a Request for Information (RFI) regarding Street Lighting Control Systems.

1.1 Response Submission

Respondents are required to submit responses electronically via email to the City no later than the date and time stated on the RFI cover page or as amended. The Respondent's submittal shall have the RFI title on the subject line of the email submittal to the City Contact as stated on the RFI cover page. City email size is limited to 20MB and Respondent accepts all risks of late delivery of electronic submittals. If respondents have more than one street lighting control system that address the City's needs, please provide independent submissions.

1.2 Late Responses

Responses, modifications of Responses, received after the exact hour and date specified for receipt will not be considered.

1.3 Cancellation of RFI or Postponement of Response Due Date

The City reserves the right to cancel this RFI at any time. The City may change the date and time for submitting responses prior to the date and time established for submittal.

1.4 Intent to Respond

Interested parties shall email an Intent to Respond with company information as described on the Cover Page to the City Contact containing the RFI Title on the subject line by the Intent to Respond Deadline. City responses to questions will be distributed to all registered interested parties.

1.5 Addenda

If at any time, the City changes, revises, deletes, clarifies, increases, or otherwise modifies the RFI, the City will post an Addendum to the RFI.

1.6 Questions and Interpretation of the RFI

No oral interpretations of the RFI will be made to any Respondent. All questions and any explanations must be requested in writing and directed to the City Contact containing the RFI Title on the subject line. The City will respond to questions up until the Question Submittal Deadline. City responses to questions will be distributed to all registered interested parties.

1.7 Cost of Response

The City is not liable for any costs incurred by the Respondent in the preparation and evaluation of responses submitted. This includes any costs in the submission of a response or in making necessary studies or designs for the preparation thereof.

1.8 Public Disclosure

This procurement is subject to the Oregon Public Records Law. Information submitted under this RFI shall be considered public documents unless the documents are exempt under the public disclosure laws.

If a Respondent considers any portion of its response to be protected under the law, the Respondent shall clearly mark each section as “CONFIDENTIAL” or “PROPRIETARY”.

By submitting information, the Respondent assents to this procedure and shall have no claim against the City.

SECTION 2 RFI RESPONSE REQUIREMENTS

RFI responses should present information in a straightforward and concise manner, while ensuring complete and detailed system description. Responses do not have a page limit, but it is recommended that responses do not exceed 12 numbered pages (8 ½ by 11 inch) excluding cost information and any supplemental attachments (e.g. product cutsheets). Font size shall be 11 point or larger and 1-inch margins are recommended.

The response shall be prepared in the sequential order outlined below:

A. **Company Information** (~2 pages) – provide a company overview, along with the following information:

- Company location and history
- System history, including length of time on market and approximate number of US and worldwide system deployments
- Three example deployments including deployment description, size and client contact information (name, title, email, phone)

B. **System Description** (~6 pages) – provide a system overview, along with the following information:

- System components and architecture as described in Section 4.1.
- System features and capabilities as described in Section 4.2.
- System training outline as described in Section 4.3.

C. **RFI Questions** (~4 pages) – respond to the questions listed in Section 5.1. The City recognizes responses to some of these questions may be addressed under System Description. The responder may cross-reference applicable information included under System Description versus re-stating the same information.

D. **Cost Information** – provide approximate and realistic pricing for the cost of the proposed street lighting control system. This information will be used for future budgeting purposes. Cost information will be kept CONFIDENTIAL if marked as such. See Attachment A – Example Cost Matrix.

SECTION 3 BACKGROUND INFORMATION

3.1 Background

The City of Springfield, located in the Lane County, Oregon, is separated from Eugene to the west by Interstate 5 (see Figure 1). Springfield is the second-most populous city in the Eugene-Springfield Metropolitan Statistical Area with a total population of 62,000 (approx.) and a City staff of 235 employees.

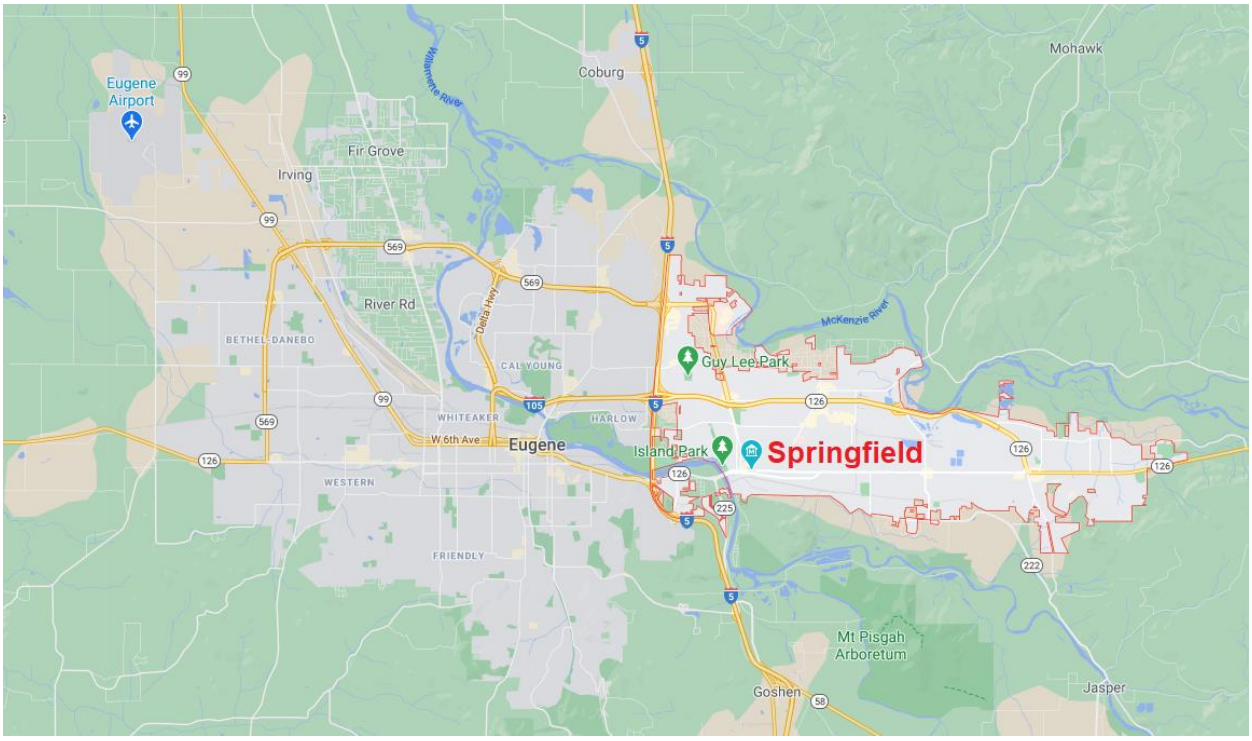

Figure 1: City of Springfield Limits (Source: Google Maps)

3.2 Existing Lighting System

The City Public Works Department operates and maintains a total of 4,458 lighting fixtures, including approximately 3,900 cobra heads (7-pin) and 700 decorative acorns on pedestal (Holophane Washington/Granville). See Figure 2 for map of existing lighting fixtures. The City owns 41 signalized intersections which are not connected to agency communications (power only). Figure 3 shows signalized intersections as well as City facilities. City facilities have access to power.

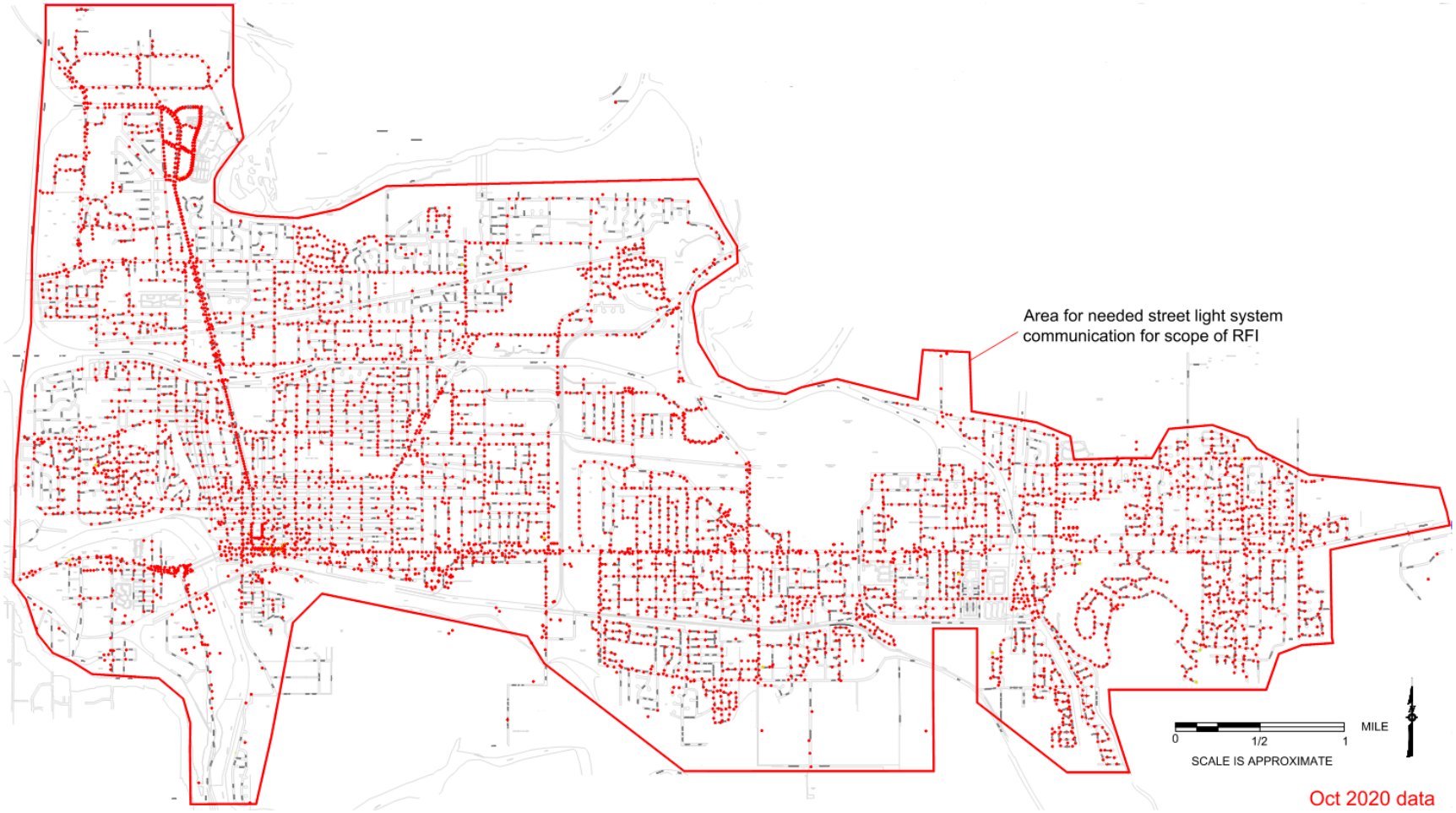

Figure 2: City Lighting Fixtures Map

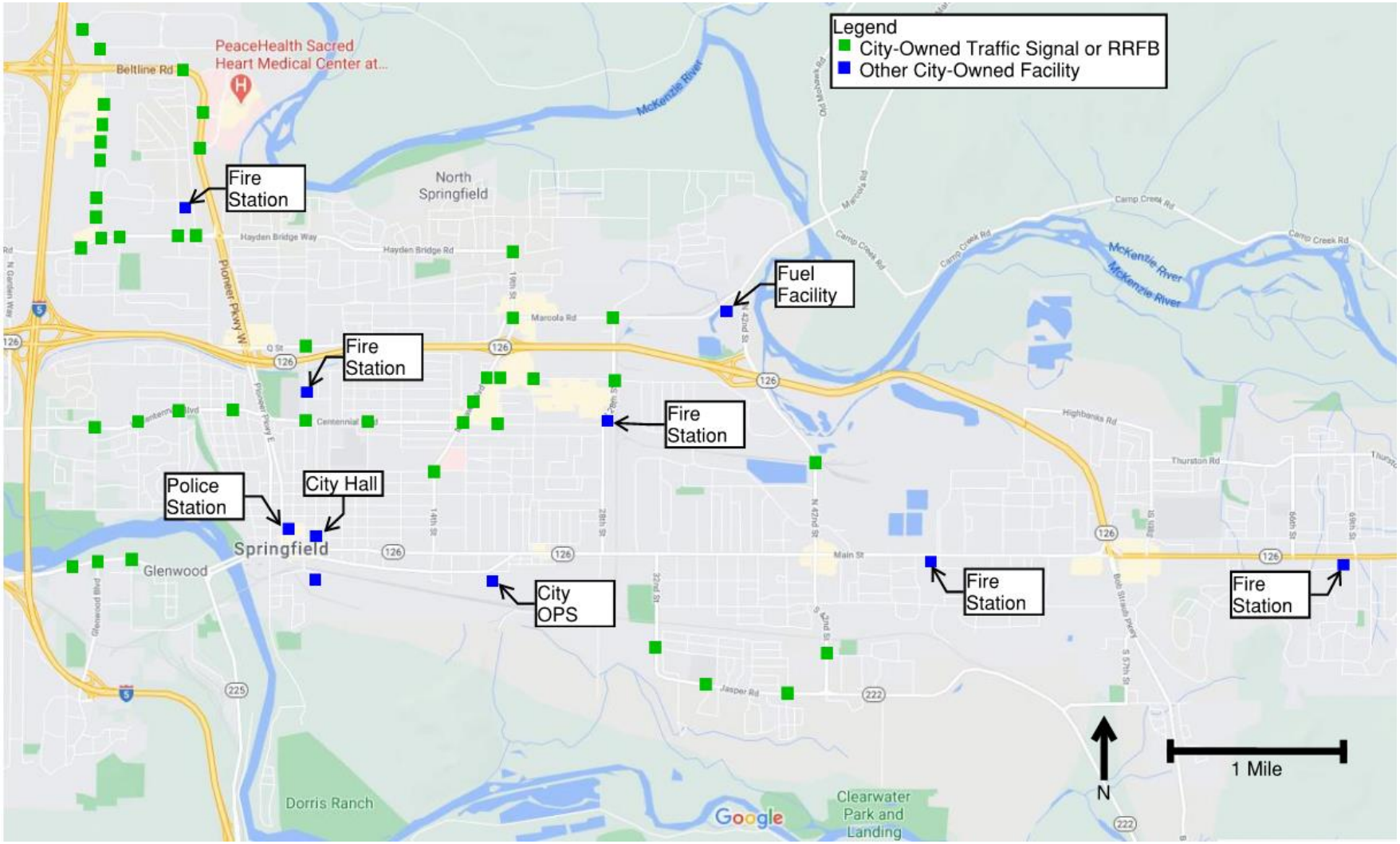

Figure 3: Potential Power and Communications Tie-in Points

The City has standardized on 7-pin connectors for LED cobra heads and Holophane Washington and Granville decorative fixtures.

The City Public Works Department has deployed the ROAM Enterprise street light control system with 1,200 nodes.

3.3 Purpose of this RFI

The City is issuing this Request for Information (RFI) as part of its research to determine what street lighting control systems are available in the market to support operations and maintenance of the City's street and pathway lighting fixtures. At this time, the City is not looking to implement Smart City solutions.

This RFI is open to any technology product company, value-added reseller, or systems integrator who believes their response would add to the City's understanding of available street lighting control systems.

SECTION 4 SYSTEM DESCRIPTION

The following provides example response structure and considerations for the system description.

4.1 System Components

Describe the major components that comprise the system, the nature and purpose of these components, and the role each plays in achieving the objectives of the street lighting control system. Components could include, but not limited to nodes, gateways, and central system. Supplemental equipment cutsheets can be included as an attachment.

4.2 System Architecture

Describe system architecture from the perspective of component communications including agency network and cloud security. If multiple system architectures are available, please distinguish between the architectures including pros/cons for each and preferred implementation environments using the City topology as a reference.

4.2 Functional Capabilities

Describe how your system achieves the following, if applicable:

A. General

i. Configurability of the system by the user via Graphical User Interface (e.g. settings, tables, screen layout, workflows, user-defined data elements, report options, etc.)

ii. System approach and compliance with agency network and third-party cloud security

iii. Data access, storage and retrieval by the system and by end users

iv. Data exchange interfaces for interchanging data bi-directionally with external applications (e.g. other utility management systems, open Application Programming Interfaces)

v. Reporting tools, to include detailed information on both historical and predictive analytics

vi. Administrative tools, including but not limited to:

a. User and group account setup, permissions, rights modification, rights revocation, user deletion, etc.

b. Network access (workstation-level configuration and control)

B. Lighting Control and Management

i. On/off

ii. Fixture grouping

iii. Dimming

iv. Trimming

v. Scheduling (e.g. time of day, day of week, special events)

vi. Grouping

vii. Applicable standards (e.g. ANSI)

C. Remote Monitoring and Reporting

i. Fixture performance

ii. Metering

iii. Energy measurement and reports

iv. GPS location

v. Localized and central data recording

D. Operations and Maintenance

i. Alerts and fault notifications including communication loss to components

ii. Polling frequency and method (i.e. push/pull)

iii. Line voltage information

iv. Maintenance/service scheduling

v. Asset management

vi. Theft prevention features

vii. Firmware upgrades

E. Additional Capabilities

Discuss how the methods, capabilities, and technologies of your proposed solution are superior to those of competitors. Specifically point out areas in which your solution is unique, and therefore provides capabilities that cannot be replicated or matched by other solutions.

4.3 Training

Describe recommended training for City staff including training approach, training environment (e.g. instructor-led, train-the-trainer, computer-based training, etc.) and brief training plan outline for initial implementation and on-going support.

SECTION 5 RFI QUESTIONS

Include in your response the following information:

5.1 Response Questions

The goal of the RFI process is to enable the City to understand what street lighting control systems are currently available in the market and answer the following questions:

A. What is the preferred communications backhaul method considering the City does not have network communications available at signalized intersections? What central system configurations are available such as on-premises (City maintained), cloud-based (City maintained), and cloud-based (Vendor maintained)?

B. What financing models are available (e.g. software-as-a-service)?

C. How are field components installed? How are nodes added into the system as the system is implemented and expands (e.g. discoverable with central system or mobile application, ID # fixture inspection, mass node upload capability)?

D. Can existing ROAM nodes and gateways be integrated into the new system (e.g. cross-compatibility)? Can existing ROAM data be transferred to the new system database?

E. Do the system nodes follow open data standards and protocols to support compatibility with other street lighting control systems? If so, please describe.

F. What remote access options are available (e.g. via web browser or mobile device)?

G. Does the system have a user-friendly and easily configurable user interface and alerts functionality?

H. How are dimming/trimming schedules created, implemented, and edited?

I. What is the strategic vision/roadmap and planned system improvements?

J. Would you be interested in providing the City a live demonstration or participate in a small pilot deployment?

SECTION 6 COST INFORMATION

Provide a cost matrix showing capital costs as well as ongoing costs for citywide deployment. Responders are encouraged to include a deployment strategy with assumptions to help justify quantities. The City recommends Responders follow a similar format to Attachment A – Example Cost Matrix. The cost matrix shall include, as applicable:

- Hardware – nodes, gateways, central server, mounts, and cabling
- Hardware Installation – equipment mounting, power connection, and communications cable
- Software – central system software
- System Implementation and Commissioning – installation and configuration of central system with nodes and gateways
- Training – equipment installation and maintenance (field) and central system training
- On-going Services – support and maintenance contracts, data and cloud services, and annual managed service agreements and licensing fees
- Other costs not listed above

The City recognizes the sensitive nature of cost estimate information. If desired, cost information can be submitted as a separate attachment following public disclosure policy detailed in Section 1.8.

Attachment A - Example Cost Matrix

Street Lighting Control System RFI
City of Springfield, OR

	Quantity	Unit	Unit Cost	Total Cost
Hardware				
Node - Type X	3900	EA	$ -	$ -
Node - Type Y	700	EA	$ -	$ -
Gateway		EA	$ -	$ -
Central Server		EA	$ -	$ -
Hardware Installation				
Node - Type X	3900	EA	$ -	$ -
Node - Type Y	700	EA	$ -	$ -
Gateway		EA	$ -	$ -
Central Server		EA	$ -	$ -
Software				
Central System	1	EA	$ -	$ -
System Implementation and Commissioning				
Central System Configuration	1	EA	$ -	$ -
Training				
Field Training		HR	$ -	$ -
Central System Training		HR	$ -	$ -
On-Going Services				
Support and Maintenance Contract	1	YR	$ -	$ -
Data and Cloud Services	1	YR	$ -	$ -
Node Licensing - Type X	3900	EA/YR	$ -	$ -
Node Licensing - Type Y	700	EA/YR	$ -	$ -
Gateway Licensing		EA/YR	$ -	$ -
Central System Licensing	1	YR	$ -	$ -