

**Request for Proposal
(Sample Language)**

For a

Fire Station Alerting System



PROJECT BACKGROUND AND DESCRIPTION

The **[Agency Name]** ("Agency") is seeking bids for the purchase and installation of hardware, software and implementation services for a turnkey fire station alerting system (the "System").

There are currently **[Number of Stations]** fire stations in the Agency system.

The desired System shall interface with the Agency's existing CAD and radio systems, and will communicate using TCP/IP over the Fire Department's WAN.

The desired System allows the stacking and simultaneous alerting of response units, speeding up deployment of the first responders.

This project shall be completed in a manner commensurate with the intended application.

APPLICABLE STANDARDS AND PUBLICATIONS

The contractor shall provide all equipment, materials, station installation and supervision to provide a turnkey fire station alerting system.

All applicable national, state and local electrical and/or building codes shall be followed.

The System shall be compliant with the 2013 edition of the National Fire Protection Association (NFPA) Standard 1221 and 1710, as applicable.

REQUIREMENTS

General

The System shall be designed specifically for use as a station alerting system.

The System shall use a single point of power/Power over Ethernet (POE) infrastructure that optimizes the most common and inexpensive CAT5e/CAT6 cabling, allowing repurposing of the Agency's existing cable structure where available, and minimizing labor costs by using low-voltage contractors for installation.

The contractor shall ensure that all components of the System are supported by an uninterruptible power supply.

The System shall be designed to be network friendly by distributing quick alerting messages using low-bandwidth (typically 30-50 kb).

The System shall be able to handle a minimum of 100 individual fire stations and facilities, and is modular in design to allow for future expansion and upgrades.

The System shall have "heart-friendly" features such as escalating audio and subdued lighting at night. Contractor shall highlight the "heart-friendly" features of the System.

The System shall be "Made in USA" compliant.



CAD Interface and Manual Alerting

The Contractor shall be responsible for fully implementing a CAD Interface to **[CAD Manufacturer]** CAD system.

The System shall be controlled directly from the Agency's CAD system via a **[TCP/IP or Serial]** connection. The CAD system presently exists at the **[CAD System Location]**.

The System interface to the CAD system shall support dispatch alerts and non-emergency alerts.

The System shall be capable of alerting by Group, Station or Unit.

The System shall provide a means of notifying dispatchers that all components are operating properly; self-diagnosis, system health check (per NFPA 1221).

For each dispatch alert message received from CAD, the System shall send a response over the CAD TCP/IP connection indicating the success or failure of each dispatched station, unit or group for the given alert.

This System shall be capable of providing manual non-emergency messages to units, stations or groups of stations.

Alerts at stations shall start not more than one second after the alerting system receives a dispatch alert from the CAD system.

A visual indication shall be provided to dispatchers to indicate if the system is and its components are properly operating.

A manual alerting application shall be provided for dispatcher use to alert stations, units or groups in the event the CAD system is not available.

Alerting Circuits

The primary dispatch circuits shall be monitored and a prompt warning shall be provided in the event that a situation that will impact reliability occurs, as per NFPA 1221.

The primary alerting circuit shall be over the Agency's Wide Area Network.

The proposed system shall be capable of multiple secondary redundant alerting using Two-tone sequential or DTMF paging, contact closure input, audible sound detection, telephone line ring detection, VoIP/SIP.

Dispatch Alerting - General

The System shall provide, at each station, capability to control functions for each of the following: audible tones, lighting, relay activation, and printer interface.

The System shall provide a zoning capability such that portions of a station can be alerted without alerting the entire station. The System shall provide a minimum of 4 separate alerting zones per station. Describe how zoning is managed in the System both centrally and at the station. Indicate if the System will allow certain rooms or areas to be able to be alerted individually and if there is an option to select the notifications that will be received for that area.

The System shall have the ability to provide a means to silence all station speakers manually, with the System allowing the silenced speakers to be overridden by the receipt of a call for service.



Dispatch Alerting – Audible

The fire station alerting system shall provide an audible escalating alert tone that clearly identifies to the units and the type of call that is being dispatched. The alert tone shall immediately precede the dispatch announcement (per NFPA 1221). The System must support the use of at least four customized tones so that different tones can be used to indicate the type of call during the alert notification.

Will Fully Comply _____ Will Not Fully Comply _____

The fire station alerting system shall provide an audible alert over the speaker system of the station.

Will Fully Comply _____ Will Not Fully Comply _____

The fire station alerting system shall have its own internal audio amplifiers with full remote volume control capability.

Will Fully Comply _____ Will Not Fully Comply _____

The fire station alerting system shall be compatible with commercially available P.A. amplifiers supporting consumer audio line level (-10dbm) 600 ohm differential inputs.

Will Fully Comply _____ Will Not Fully Comply _____

The fire station alerting system shall provide the ability to play building overhead paging through a connection to the station telephone system.

Will Fully Comply _____ Will Not Fully Comply _____

The fire station alerting system shall have the capability to register VOIP extensions with SIP-based PBX systems, and then configured to alert on ring and/or auto answer to play call audio over the station's speaker network.

Will Fully Comply _____ Will Not Fully Comply _____

The fire alerting system shall provide the ability to mute in building paging during dispatch alerts.

Will Fully Comply _____ Will Not Fully Comply _____

This fire station alerting system shall include a radio interface for redundant dispatching and on-air dispatching. Each dispatched run shall be broadcast over both the alerting network and over the dispatch radio channel.

Will Fully Comply _____ Will Not Fully Comply _____

The radio interface shall be equipped to detect channel traffic and wait until the channel is free to begin automated dispatching.

Will Fully Comply _____ Will Not Fully Comply _____

Dispatch Alerting - Automated Voice

The fire station alerting system shall have the capability, for any incident, to create voice dispatch alerts that announce simultaneously in multiple stations.

Will Fully Comply _____ Will Not Fully Comply _____

Dispatch information shall allow live dispatcher voice in addition to the automated voice announcement.

Will Fully Comply _____ Will Not Fully Comply _____

Automated voice announcements supported shall include: dispatch announcements, announcements of move-ups, and non-emergency messages.

Will Fully Comply _____ Will Not Fully Comply _____

The automated voice dispatch announcement will include, as a minimum, detailed dispatch information, including apparatus to respond, incident type, street address, and common place name. [Modify to suit local needs]



Will Fully Comply _____ Will Not Fully Comply _____

Automated voice dispatch announcements shall immediately follow the audible alert tone as per NFPA 1221.

Will Fully Comply _____ Will Not Fully Comply _____

The fire station alerting system shall provide local system administrators a "DIY" ability to edit the pronunciation of street names, unit types, and other names and words without manufacturer involvement.

Will Fully Comply _____ Will Not Fully Comply _____

The fire station alerting system shall have the ability to produce automated voice alerts on servers located at the dispatch center, and at fire stations through the station controllers in case of a slow network.

Will Fully Comply _____ Will Not Fully Comply _____

Dispatch Alerting - Relay Controls and Inputs

The fire station alerting system shall provide multiple relay contacts at each station for the purpose of controlling external switched functions. At a minimum, the contacts shall be able to be energized for a configurable period of time upon receipt of a CAD dispatch message. The outputs shall be configurable as normally open or normally closed contact closures. Additionally, the system shall easily expand the number of relay contacts. The vendor should explain how their system works with contacts, including quantity and expandability.

Will Fully Comply _____ Will Not Fully Comply _____

The fire station alerting system shall provide multiple isolated DC inputs for the purpose of monitoring status of external actions and functions.

Will Fully Comply _____ Will Not Fully Comply _____

Dispatch Alerting - Printing

The fire station alerting system shall be capable of providing a dispatch printout with the same information that is announced upon receipt of a CAD dispatch announcement. The printout must also include user comments if this information is provided to the system over the CAD interface.

Will Fully Comply _____ Will Not Fully Comply _____

The System shall be compatible with current printers (describe printer model) and expandable to laser printers.

Will Fully Comply _____ Will Not Fully Comply _____

The fire station alerting system shall support simultaneous printing and audible alerting.

Will Fully Comply _____ Will Not Fully Comply _____

Dispatch Alerting - Visuals

The fire station alerting system should include provisions to display the dispatch information at the station. Devices to be used for display should include LED message signs, color indicator with at least eight color options that can be assigned to units to indicate units assigned to a dispatch, strobe lights for high volume areas, and CEC (consumer electronic control) and HDMI connections to allow displays on TVs, monitors, projectors and video walls.

Will Fully Comply _____ Will Not Fully Comply _____



The fire station alerting system should have the ability to display alerting information such as assigned units, incident nature, street address, and unit status. Vendors should describe display capabilities and discuss what information is typically displayed, as well as what information might possibly be displayed. Discuss any limits on numbers, types or sizes of displays.

Will Fully Comply_____ Will Not Fully Comply_____

The fire station alerting system should include multiple turnout timer capability, which will count up in one-second increments upon the receipt of a call. Vendor may propose to have this as a separate timer, or as an integral part of the display. Please indicate in the proposal the number of turnout timers that are supported.

Will Fully Comply_____ Will Not Fully Comply_____

The fire station alerting system shall include lighting that is designed to have little impact on the building occupant's night vision when a call is received. This will include red LED lights in the ceiling in the bunkroom area that are bright enough to light the area around the member's bed and provide a safe amount of light to make their way to the apparatus bay.

Will Fully Comply_____ Will Not Fully Comply_____

Dispatch Alerting – Remote/Redundant

The fire station alerting system shall have the capability to alert authorized personnel using a mobile application that interfaces with customer's CAD system, enabling simultaneous alerts to smartphones or tablets. Alerts should include dispatch announcements using the same tones played in stations, administrative alerts, IT support notifications and application update notifications. The mobile application should also have the ability to show incident locations using the smartphone's built-in mapping capabilities, and enable users to save and search prior notifications.

Will Fully Comply_____ Will Not Fully Comply_____

The fire station alerting system shall have the capability to remotely alert personnel by generating an alert that can send an email to server via SMTP or ESMTTP. This email can be directed to a paging or cell phone system to deliver pages or SMS messages. Messages can be sent when specific Groups, Stations or Units are alerted, or when configured key words are found in the dispatch message. Event messages are delivered when the event occurs and when the event clears.

Will Fully Comply_____ Will Not Fully Comply_____

Configuration and Software Updates

The fire station alerting system shall be centrally managed. Both the Vendor and the Customer's system specialists shall have full control access. Updates to station software shall be sent from the communications center.

Will Fully Comply_____ Will Not Fully Comply_____

Authorized administrators shall be able to control, configure and update the fire station alerting system on a browser from any web-enable device. In addition, manual alerting shall be available from a browser from any web-enabled device.

Will Fully Comply_____ Will Not Fully Comply_____

System Monitoring

Each component in this fire station alerting system shall be monitored for online and offline status. This includes all computers, network connections, audio amplifiers and message display units.

Will Fully Comply_____ Will Not Fully Comply_____



This fire station alerting system shall be capable of remotely alerting support staff of critical events that occur within the alerting system via visual, email/pager, SMS text or a smartphone app. Each method shall be individually enabled or disabled via a configuration application.

Will Fully Comply_____ Will Not Fully Comply_____

Error and status logs shall be generated for all traffic between the CAD system and any controllers, between any controllers and the fire stations, and between all network components in the fire stations.

Will Fully Comply_____ Will Not Fully Comply_____

Error and status logs shall be available to the customer's system specialists via a log viewer application.

Will Fully Comply_____ Will Not Fully Comply_____

Remote system monitoring from a client application residing on the network (and having appropriate permissions) shall be supported.

Will Fully Comply_____ Will Not Fully Comply_____

System status information shall be displayed in the fire communication center on a dedicated workstation.

Will Fully Comply_____ Will Not Fully Comply_____

Installation

The **[Agency Name]** shall be permitted to participate and assist in the installation of this system. Customer technical personnel will be in the presence of each installation, system activation and cutover.

Will Fully Comply_____ Will Not Fully Comply_____

Warranties and Support Agreements

Describe warranty provided as well as length of warranty.

Describe extended yearly warranties available and their cost.

Specify your twenty-four hour a day, seven days a week software support capabilities.

Specify your eight hours a day, five days a week software support capabilities. Specify in pricing sheet, pricing for single year support and for five-year support.

Training

Operator training shall be provided to the dispatchers and their supervisors. The training schedule shall be completed on site as coordinated with the **[Coordinator]**. Vendors should describe their approach to provide the most effective training method/process that would allow dispatchers and supervisors to successfully operate the system.

Will Fully Comply_____ Will Not Fully Comply_____

System maintenance, programming and trouble shooting training shall be provided for the customer's technical staff.

Will Fully Comply_____ Will Not Fully Comply_____



The contractor shall provide a site visit by one of their engineers or system implementers prior to placing any equipment orders to ensure an understanding of what the customer is seeking to accomplish.

Will Fully Comply _____ Will Not Fully Comply _____

Miscellaneous

The contractor shall provide **[number]** spare sets of station equipment, including the parts not specifically itemized in this document.

Will Fully Comply _____ Will Not Fully Comply _____

The server provided as part of this fire station alerting system shall be provisioned with auto fail-over, in the event that the primary server fails.

Will Fully Comply _____ Will Not Fully Comply _____

Experience

Provide the number of years that the Vendor has been in existence; describe the services the Vendor specialize in, and the primary markets served.

Describe the functions to be performed by each key personnel, and identify the Vendor's Project Manager.

Provide résumés describing the relevant experience on previous similar projects, qualifications, and other vital information of all key personnel and subcontractors who will be assigned to this project.

Provide detailed descriptions of three (3) contracts which the Vendor has either ongoing or completed within the past five (5) years that best demonstrate the Vendor's experience with services similar in scope to those requested herein. Where possible, list and describe those projects performed for government clients or similar size private entities (excluding any work performed for the Customer).

The description should, at a minimum, identify for each contract:

- a. client,
- b. contract number and/or title,
- c. total dollar value of the contract,
- d. dates covering the term of the contract,
- e. client contact person, title, email, and phone number,
- f. statement of whether Proposer was the prime contractor or subcontractor,
- g. description of technology/System Implementation,
- h. description of work, and
- i. results of the project.

PRICING

Provide pricing per station and for the complete project. Separate software and equipment costs, installation, training, and maintenance.