

Cities of Mountain View, Los Altos & Palo Alto 9-1-1 Customer Premise Equipment  
August 12, 2014

RFI Respondents:

The cities of Los Altos, Mountain View and Palo Alto issue this RFI to solicit information on a networked 9-1-1 solution that is Next Generation 9-1-1 (“NG9-1-1”) capable. The current California State CPE funding process allocates funding by individual agency. Respondents to the RFI should propose a solution that meets the criteria set forth in the document and two models for cost allocation. The first model will include all project costs for the three agencies together; the second model will allocate costs on a per-agency basis. Procurement will be in accordance with State of California Public Safety Communications Office (“PSCO”) 9-1-1 CPE procurement policies and subject to PSCO review and approval.

It is strongly recommended that respondents schedule site visits at the three PSAP’s involved, as well as meetings with the PSAP stakeholders, whether together or individually, to ensure they grasp the scope of the project, its requirements, and to confirm the configuration details for each PSAP prior to developing quotations and a Statement of Work, etc.

RFI should be submitted by **September 19, 2014**.

Three (3) copies of the responses with pricing information should be submitted to:

Charles Cullen

Palo Alto Police Department

275 Forest Ave

Palo Alto, CA 94301

Questions regarding the RFI can be directed to Mr. Cullen via email or phone

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## 1.0 Project Description

The Cities of Los Altos, Mountain View, and Palo Alto seek to replace their existing 9-1-1 telephone systems, also referred to as “Customer Premise Equipment” (CPE). These systems are used in the Cities’ 9-1-1 PSAPs for the processing of incoming 9-1-1 and 7-Digit emergency telephone calls, as well as handling other administrative and allied-agency telephone traffic.

Mountain View and Palo Alto dispatch resources for law enforcement, fire/ rescue/EMS, as well as local government and public utilities, while Los Altos dispatches for the Los Altos Police Department.

All three Cities have independently sought and received their “pre-authorization” for 9-1-1 CPE procurement from the State of California, 9-1-1 Emergency Communications Office.

The Cities are seeking replacement of their existing 9-1-1 CPE with state-of-the-art hardware and software that will provide their public safety dispatchers with the tools they need to answer and process calls for service in a rapid and efficient manner. In addition, the Cities are keenly aware of the coming changes in the 9-1-1 industry with respect to “Next Generation 9-1-1” (NG9-1-1) and are desirous of working with vendors that will provide solutions with maximum flexibility and forward compatibility as these NG9-1-1 technologies are implemented in the state.

All three cities currently accept and process wireline, wireless (Phase I/Phase II), VoIP, and telematics calls to 9-1-1.

The three cities, located in the heart of the Silicon Valley in Santa Clara County, have joined together in a “virtual consolidation” model, in which all three cities will share common public safety system(s). This acquisition is one of three phases in the virtual consolidation project that will ultimately combine the public safety information technology platforms, as well as E9-1-1 telephony and two-way radio infrastructure amongst the three Cities. The Cities recently completed the implementation of a shared Computer Aided Dispatch System (CAD). The system operates over a microwave network. A shared police Records Management System (RMS) will be completed in the coming year.

CPE replacement with a common solution for all three cities is the 2<sup>nd</sup> phase of the virtual consolidation project. Essential to the cities’ goals in this area is the ability for the cities to share emergency call workload, when required. The cities intend to operate their respective PSAPs autonomously during normal daily operations, however will require the capability to redirect calls based on a combination of static business rules, and on-demand changes to call handling based on changing circumstances and activity levels.

In addition, the Cities desire to position themselves to be on the leading edge of next-generation 9-1-1 technologies, so that they are prepared to process 9-1-1 calls from “non-

traditional” sources, such as Internet telephony, voice-over-IP (VoIP), telematics providers, and wireless devices such as phones, PDA’s, and other devices. **Proposals that include hardware, software, and services that advance the Cities toward this goal will be favored.**

The ideal solution will include the following features and functionality:

- 1) Shared redundant solution for three cities.
- 2) Configurable business rules for load sharing, switchover, failover etc.
- 3) “Forward compatibility” with NGEN 9-1-1
- 4) MIS system that captures all incoming communications including text, video and digital photos
- 5) Presence at the Central Office that provides true broadband connectivity to the CPE
- 6) Integrated solution that supports text, video, digital photos as part of the core product
- 7) Ability to interface with outside systems such as alarm companies, internal alarms and sensors and other devices.
- 8) Five years of software and hardware maintenance including hardware and software upgrades.

In accordance with the State of California Public Safety Communications Office (“PSCO”) 9-1-1 CPE procurement policy, the vendor selected shall incorporate these specifications into a detailed “Statement of Work” (SOW), as well as the development of a detailed list of equipment, software, and services to be purchased. The SOW, list of equipment, software, and services, as well as each City’s purchase order will be subject to review and approval by each of the three Cities, as well as the State of California PSCO 9-1-1 personnel. **The Cities also reserve the right to have these documents reviewed by the manufacturer(s) of the proposed system hardware and software in order to validate the accuracy, suitability, and appropriateness of the proposed system. Proposals (including network costs, 5 year maintenance and software upgrades) that exceed the State CPE procurement policy funding guidelines will not be considered.**

## 2.0 Existing 9-1-1 CPE Configuration

### 2.1 Current Configuration Descriptions

In all three Cities, the existing 9-1-1 CPE systems include not only 9-1-1 trunks, but also many “measured business” (1MB) lines, Centrex lines, analog trunk lines from internal (VoIP) non-PSAP phone systems, “tip and ring” intercom-type lines, and dedicated ringdown circuits to allied agencies. It is incumbent on the vendors responding to this request to ensure that all administrative, intercom, and other types of connections currently terminated in the existing CPE solutions are assessed and included in their responses.

#### City of Los Altos

The City of Los Altos currently utilizes two (2) 9-1-1 CPE positions, one at each of the City’s two dispatch console positions in its Emergency Communications Center (ECC). All CPE workstations are configured identically. The ECC is located on the main floor of the police building, at 1 N. San Antonio Rd., Los Altos, CA 94041. The existing 9-1-1 CPE “back room” equipment is located in a dedicated 9-1-1/telco equipment room in the basement of the police building. The existing CPE installation utilizes dedicated cabling (CAT5, UTP, and others) that run from the dispatch control room through the false ceiling and down to the 9-1-1/telco equipment room. The minimum point of entry (MPOE) for the building is located just above the basement level directly on the main floor. The building is served by fiber and copper cabling from the incumbent local exchange carrier (AT&T).

#### City of Mountain View

The City of Mountain View currently utilizes five (5) 9-1-1 CPE positions, one at each of the City’s five dispatch console positions in its Emergency Communications Center (ECC). All CPE workstations are configured identically. The ECC is located in the lower floor of the joint Police/Fire Administration building, at 1000 Villa St, Mountain View CA 94041. The existing 9-1-1 CPE “back room” equipment is located in a dedicated 9-1-1/radio/telco equipment room near the ECC, approximately 25 feet from the main dispatch control room. The existing CPE installation utilizes dedicated cabling (CAT5, UTP, and others) that run from the dispatch control room through the false ceiling and laterally to the 9-1-1/radio/telco equipment room. The minimum point of entry (MPOE) for the building is located approximately 60 feet east of the ECC, on the same floor. The building is served by copper cabling from the incumbent local exchange carrier (AT&T). The City recently converted its business telephone (non-PSAP) phone system to ShoreTel VoIP.

City of Palo Alto

The City of Palo Alto currently utilizes six (6) 9-1-1 CPE positions, one at each of the City's five dispatch console positions in its Emergency Communications Center (ECC) and one in an adjacent area. All CPE workstations are configured identically. The ECC is located on the A-Level of the Police Station at 275 Forest Ave, Palo Alto CA, 94301. The existing 9-1-1 CPE "back room" equipment is located in a dedicated 9-1-1/radio/telco equipment room near the ECC, adjacent to the main dispatch control room. The existing CPE installation utilizes dedicated cabling (CAT5, UTP, and others) that run from the dispatch control room through a raise wall with raceways and a trough in the floor and to the 9-1-1/radio/telco equipment room. The minimum point of entry (MPOE) for the building is located approximately 75 feet west of the ECC, on the same floor. The building is served by copper cabling from the local exchange carrier (AT&T) and the City recently switched to an Avaya VoIP phone system for its internal phone system.

## 2.2 Existing/Proposed System Loading

Current statistics - All are for calendar year 2013

City of Los Altos

<u>Incoming:</u>	<u>22,195</u>
9-1-1 calls:	6,298
7-digit emergency line calls:	3,944
Administrative line calls (after hours):	3,081
Ringdown/Intercom line calls:	1,608
Other incoming calls:	7,264
<u>Outgoing:</u>	<u>11,283</u>
Grand total:	33,478

City of Mountain View

<u>Incoming:</u>	<u>80,949</u>
9-1-1 calls:	22,845
7-digit emergency line calls:	6,924
Administrative line calls:	43,847
Ringdown/Intercom line calls:	3,454
Other incoming calls:	3,879

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Outgoing: 37,162

Grand total: 118,111

City of Palo Alto

Incoming: 138,492

9-1-1 calls: 35,995

7-digit emergency line calls: 9,524

Administrative line calls: 80,542

Ring down/Intercom line calls: 12,383

Other incoming calls: 48

Outgoing: 44,265

Grand total: 182,757

### **3.0 Desired System Configuration**

#### **3.1. Telephone Network Interface Equipment**

The Cities will consider proposals that provide a common networked solution including hosted and cloud solutions. Redundancy and disaster recovery will be essential components of the selected system. Requirements include but are not limited to:

- Load sharing
- Configurable business rules including static and on demand changes to call handling routing
- I3 next generation 9-1-1 compliant
- Portable user profiles - ability for Users to logon at any workstation at all three centers
- Flexible open architecture
- Alarm notification in the event of failures
- No single point of failure

#### **3.2 User Interface**

The User Interface is a critical component of the system and will be evaluated to ensure the end user experience is equal to or an enhancement of the current environment. In addition to standard telephony features factors to be considered include:

- Configurable user profiles
- Administrator control
- Ease of call handling
- One button transfer
- Distinctive ring tones
- Dynamic conferencing
- ALI rebid capabilities
- Text messaging functionality
- Admin line/ call group appearance
- Ability to automatically forward business lines
- Ability to add an automated message to administrative lines
- Embedded phone directory- ease of use
- Fully integrated call and radio playback
- Remote deployment capabilities

### **3.3 Telephone “Management Information” System (MIS)**

The Cities will likely rely on the State of California provided “eCATS” platform for call statistics and management reporting. However, vendors are encouraged to propose or provide similar management information reporting modules that are included as part of the proposed CPE. Vendors shall clearly articulate any extra or optional costs (one time and recurring) associated with these optional modules or subsystems.

### **3.4 Logging Recorders**

The logging recorder interface must be fully compatible with the digital recorders utilized by all three cities. Currently those recorders are:

- Los Altos – EXACOM
- Mountain View – NICE
- Palo Alto – Voice Print

The cities will consider as an option proposed new digital recorder(s).

The City of Mountain View is desirous of replacing its existing NICE “Call Focus III” logging recorder system as part of the CPE replacement project. Vendors that are capable of offering mission critical public safety audio logging recording solutions, including installation and integration services are encouraged to propose a replacement audio logging system for the Mountain View 9-1-1 PSAP. The Mountain View audio logging solution will require the following basic list of requirements. Note that this is not an all-inclusive list, and the exact configuration/specification will require additional detail to be provided as part of the procurement process:

- A minimum of 48 “channel” (talk path) capability
- Analog input recording
- VoIP (Shoretel) recording
- Motorola P25 Phase II trunked radio system recording
- 1 year recording retention (online and nearline storage combined)
- Mission critical redundancy
- RAID 5 or better storage with hot spare drives
- Advanced monitoring/alarm capabilities
- Extended service/hardware maintenance for 5 years, ideally to coincide with CPE maintenance period

### **3.5 Interface to Intergraph CAD**

A reliable and flexible interface to the Cities' shared Intergraph (I/CAD Version 9.2.0 MR3) system is required. The interface to Intergraph CAD system will be required to be implemented as a TCP/IP connection as opposed to a serial spill.

### **4.0 Training**

The City is intent upon obtaining training for its 9-1-1 PSAP system administration personnel, as well as (if necessary) PSAP "agents" (public safety dispatchers).

Vendors should propose a complete suite of system administration classes, including, but not limited to "advanced" administrator training courses for all proposed systems or modules. . Unless stated otherwise, it is assumed that the proposed training is to be conducted at the respective City PSAP facilities.

### **5.0 System Support and Maintenance**

As set forth in the State's Master Purchase Agreement, 1104-014, the system and all components shall include a one-year parts and labor warranty. The proposal shall also include the costs for extended warranty maintenance and support for four (4) additional years, for a total of five years. System Support and Maintenance will include all software and hardware upgrades over the term of the contract. Describe how support and maintenance will be provided; including response times, managed service, remote diagnostics, etc.