

Sonoma County Sheriff's Office - JAG Project Narrative

A. Description of the issue

Over the past several years, the Sonoma County Sheriff's Office – Telecommunications Bureau has prioritized improvements in technology and streamlining processes to work more efficiently with public safety partners: law enforcement, fire, medical, and dispatch.

The County's public safety radio communications sites are currently equipped with an analog telephone system that is over 27 years old. This system has provided technicians with voice communication capabilities necessary for maintaining the radio equipment at these sites. There are a total of 20 communication sites, each equipped with at least one telephone, which enables technicians to access vendor support services or personnel with subject matter expertise for facilitating repairs.

Although this outdated analog telephone system is still operational, its functionality will soon be compromised due to the full migration to Internet Protocol (IP) technology across the County's microwave network. The current telephone system operates exclusively on "channel bank" equipment for transporting voice calls. This channel bank equipment, also 27 years old, has been scheduled for decommissioning because the vendor no longer supports these devices or the technology behind them. It is crucial to replace the telephone system before the removal of the channel banks, as they cannot operate on the modern IP microwave network.

B. Project Design and Implementation

The Sheriff's Office does not have funding in their budget for this upgrade. If approved, the grant award will be used to cover the project in its entirety. A favorable solution would be a phone system that integrates seamlessly with the microwave network using native IP technology and employs a telephone service handoff interface through the standardized Session Initiation Protocol (SIP). The project requests the purchase of the HardConnect IP telephone system (\$12,800), funding for County ISD labor to connect to the ISD system (\$6,000), and Sheriff's Office Telecommunications Bureau (TComm) technician(s) labor to install the new equipment at the 20 public safety radio communication sites (\$12,976).

If awarded, further research into option packages is required, and the TComm team will need to engage in active discussions with HardConnect, a Bay Area service provider recommended by industry experts, to determine the most suitable solution. All purchases with grant funds will be made in compliance with the grant and County procurement policies.

C. Capabilities and Competencies

The telephone system is crucial for ensuring effective emergency repairs and routine maintenance at remote communications sites. Although technicians are equipped with cellular phones, cellular service is often unavailable at these remote locations, leaving two-way radios as their only means of external support. Additionally, during disaster situations, cellular services may also become

unavailable, making the telephone system an essential lifeline. A local site telephone provides critical connectivity when other communication options are limited or compromised.

D. Plan for Collecting the Data

The success of this request will be measured through the implementation of a new, fully functional a phone system that integrates seamlessly with the microwave network using native IP technology and employs a telephone service handoff interface through the standardized Session Initiation Protocol (SIP).