

## DEPARTMENT OF PUBLIC WORKS

People serving people.

Robert Beaumont

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DIRECTOR

May 9, 2012

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Marin County Emergency Operations Facility Project Re:

Dear Directors:

The intent of this report is to provide a high level prospective that outlines the impact of the Marin County Sheriff's department Emergency Operations Facility (EOF) console upgrade on the existing MERA radio system.

## Background:

The Marin County Sheriff's dispatch center will be moving to the new EOF at 1600 Los Gamos Road in San Rafael. The existing Sheriff's dispatch center at the Marin County Civic Center has ten Motorola "Gold Elite" radio console positions which have been in service for over a decade. New Gold Elite radio consoles are no longer available and the existing Gold Elite radio consoles cannot be moved to the EOF for both logistical and technical reasons. Motorola has replaced the Gold Elite series of radio consoles with the digital MCC-7500 series radio consoles. Functionally, the Gold Elite and the MCC-7500 series radio consoles are equivalent, but the system interface is drastically different. The industry change to digital radio consoles necessitates replacement of the MERA trunking system main control computers. There is no other manufacturer who can interface the existing MERA system to new digital consoles and retain full functionality.

## **Funding:**

The EOF project is underway with an anticipated completion date of April 2014. The Sheriff's Department owns their own radio dispatch consoles so they are not a MERA responsibility. Funding for the radio console portion of the project is available through the overall EOF project. Funding for upgrade and replacement of the MERA trunking system main control computers is available through the EOF project and UASI grants to Marin County. MERA is not expected to incur any project related installation costs. There will be the need to review the existing County Service Level Agreement (SLA) because during the transition there will exist two MERA trunking system main control computer systems. All new equipment will be under warranty, but will still require normal preventative maintenance.

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## **MERA System Impact:**

Replacement of the Sheriff's Department radio consoles for the new EOF will require replacement of the MERA system control computers, installation of interface hardware at the MERA master site at the Civic Center, upgrading of firmware at each remote mountaintop site along with the upgrade of software and system support electronics in all existing Gold Elite radio consoles. These radio consoles are located at:

Civic Center – 10 radio consoles
San Rafael Police – 4 radio consoles
Twin Cities/San Anselmo Police – 4 radio consoles
Woodacre – 3 radio consoles
Novato Police – 3 radio consoles
Sheriff Backup Dispatch – 2 positions
Fairfax Police – 1 radio console
Marin County Jail – 1 radio console
Radio Shop – 1 radio console
Master Site – 1 radio console

MERA system downtime, in the form of site trunking operation and dispatch center radio console outages (use backup control stations), will need to happen as the system components are upgraded. Anticipated system downtime could be as much as 24 hours per occurrence.

During site trunking operation mobile and portable radios within a zone (East, West, Sonoma, Bodega and Bolinas areas) will be able to communicate with other mobiles and portables within their zone but will not be able to communicate across zones. I.e. a radio on East Zone in San Rafael will not be able to talk to a radio in West Marin on the West system. This will be particularly cumbersome to dispatch centers that have radios in multiple zones, such as Sheriff or County Fire. A more detailed review of the required system outages will be available following completion of the system cutover plan which will be delivered as part of the detailed system design process scheduled for mid-2012. Mobile and portable radios will not need to be reprogrammed.

All fire station alerting control radios (portable in the gray box) will need to be reprogrammed and tested. It is anticipated that reprogramming of the fire station alerting radios will require a two hour outage of each individual fire station. During this time, the individual fire station would receive its alerting via their portable radio or station radios.

Following the required updates to the MERA system, the MERA system will have updated Motorola control computers which will support the latest Motorola P25 technology currently being considered as the next generation system. The new series of control computers will be supported by Motorola for the foreseeable future. If desired, additional MCC-7500 console positions could be added or Gold Elite positions replaced without any substantial system controller upgrades required.

Very truly yours,

Craig Tackabery
MERA Operations Officer