

## **SVRIA Working Committee Agenda Item**

### EComm DS1 Optimization Plan

#### *Background*

EComm Phase 1 was built and began operation handling all San Jose, most Milpitas, and some County and Los Gatos radio traffic. EComm Phase 2 was built alongside the Phase 1 installation with special care taken to avoid impacting Phase 1 live traffic. Part of Phase 2 was the installation of channel banks at most EComm terminal locations. Now, to best utilize EComm bandwidth, those Phase 2 channel banks need to be integrated with the Phase 1 backbone.

#### *Project Description*

The DS1 (or T1) optimization plan involves a major reallocation of DS1 circuits. Currently, DS1s home run from EComm locations to San Jose Communications which is inefficient and creates more points of network failure. The optimization plan makes better use of DS1s to serve EComm user agencies and streamlines network architecture replacing one switching center with three hubs.

Several EComm DS1 requests have been approved and are pending. Performing these changes now, before EComm traffic grows, will help avoid network disruptions. Following the project, San Jose will update and distribute revised system configuration documentation.

The Radio and Data Technical Advisory Groups, County and San Jose communications engineering staffs, and Aviat have reviewed and support this project.

#### *Resources and Cost*

To accomplish this optimization, San Jose communication staff will reconfigure the DS1 hardware at their facility and will visit nearly every EComm terminal location to make configuration changes to the Phase 2 channel banks. As San Jose will be a major beneficiary of the optimization plan, they will provide staff time at no cost to SVRIA. This work can begin immediately and will take several weeks to accomplish.