



Memorandum

TO: HONORABLE MAYOR
AND CITY COUNCIL

FROM: Robert L. Davis
Jennifer Maguire

SUBJECT: ECOMM MICROWAVE SYSTEM

DATE: November 19, 2007

Approved

Ray Wine

Date

11/20/07

COUNCIL DISTRICT: City-Wide

SUBJECT: APPROVAL OF THE FOURTH AMENDMENT TO THE AGREEMENT WITH HARRIS STRATEX NETWORKS TO FURNISH AND INSTALL THE ECOMM MICROWAVE INTEROPERABLE COMMUNICATIONS SYSTEM; AUTHORIZATION TO ENTER INTO SITE LICENSES FOR THE INSTALLATION OF THE EQUIPMENT; AUTHORIZATION TO ENTER INTO AGREEMENTS WITH PARTICIPATING LOCAL AGENCIES FOR THE MAINTENANCE OF THE SYSTEM; AND ADOPTION OF AMENDMENTS TO THE APPROPRIATION ORDINANCE

RECOMMENDATION

It is recommended the City Council approve the following actions:

1. Adoption of a resolution authorizing the City Manager to:
 - a. Execute the Fourth Amendment to the Agreement with Harris Stratex Networks Operating Corporation (Harris Stratex) to furnish the equipment system and installation services for the ECOMM microwave interoperability communications project, including the first year of warranty and maintenance services; to increase the maximum compensation from \$277,365 to \$7,777,118; and to extend the term of the Agreement from December 31, 2007, to December 31, 2008, with an option to increase the compensation by \$1,982,985, including a contingency of \$700,000, for additional services if funds are appropriated;
 - b. Issue change orders within the amount of the approved contract contingency funding.

2. Adoption of the following amendments to the Annual Appropriation Ordinance and Funding Sources Resolution in the General Fund for Fiscal Year 2007-08:
 - a. Increase the City-wide appropriation to the Police Department for the 2006 Super Urban Area Security Initiative (SUASI) Interoperable Communications Grant in the amount of \$3,000,000;
 - b. Increase the Earned Revenue Estimate from the Federal Government by \$3,000,000;
 - c. Decrease the Simulcast Sites Appropriation in the Construction Tax and Property Conveyance (C&C) Tax Fund: Communications Purposes by \$500,000; and
 - d. Establish an appropriation in the C&C Tax Fund: Communications Purposes in the amount of \$500,000 for the COPS 2003-2004 Interoperable Communications Grant.
3. Adoption of a Resolution authorizing the City Manager to negotiate and execute site license agreements between the City of San Jose and certain other Silicon Valley Regional Interoperability Project (SVRIP) member jurisdictions, providing for the installation of ECOMM microwave equipment at each site.
4. Adoption of a resolution authorizing the City Manager to negotiate and execute a Memorandum of Understanding between the City of San Jose and the State of California providing for the installation of ECOMM microwave equipment at the CAL FIRE Morgan Hill site.

OUTCOME

1. Approval of a Fourth Amendment will allow Harris Stratex Networks Operating Corporation (Harris Stratex) to furnish and install the complete ECOMM microwave equipment system.
2. Approval of the appropriation of \$3,000,000 in 2006 SUASI funds and the \$500,000 from the C&C Tax Fund: Communications Purposes will provide partial funding for the Fourth Amendment.
3. An additional \$2,000,000 is anticipated in 2007 SUASI grant funds and expected to be available in January 2008. This recommendation will allow the City Manager to issue the Notice to Proceed to Harris Stratex once funding has been awarded.

EXECUTIVE SUMMARY

Current Microwave Capabilities

The City currently operates seven microwave radio links, which carry dispatch traffic for Police, Fire and Emergency Medical services. This system is a 20-year old Motorola analog system, which is no longer supported by Motorola, Inc. and is difficult to maintain. Santa Clara County

operates eight digital microwave links of a type different from the City's. The remaining county public safety agencies dispatch their emergency services from local 9-1-1 call centers. These systems are currently isolated from one another. If a dispatcher in Campbell wants to inquire about availability of resources or obtain records data from an agency in Los Altos, Mountain View, or Sunnyvale, currently the dispatcher must pick up a telephone and call. This is not only a slow process, it is limited by the availability of phone lines during an emergency; and further limited to communicating to one person at a time, as there is no direct high-speed connection.

ECOMM's Enhanced Microwave Capabilities

The ECOMM microwave system will replace the City's existing analog links with new digital microwave equipment. The system will also connect the City's own microwave system with seventeen other jurisdictions throughout Santa Clara County, linking their emergency dispatch (9-1-1) centers together. The 23 ECOMM microwave sites will extend from Gilroy in the south to Palo Alto in the north. In the future, it is anticipated new interoperable communications systems will be deployed, which will be transported via the ECOMM microwave equipment. These systems will provide direct communications between agencies to share dispatch services, record databases, and voice traffic. This sharing of information and voice traffic will allow public safety first responders to improve local incident response times and better manage large regional incidents.

Future ECOMM Enhancements

ECOMM is part of a regional microwave radio network being deployed by the Super Urban Area Security Initiative (SUASI) around the San Francisco Bay Area, east to Sacramento, and south to Monterey. Eventually, ECOMM will allow the members of the Silicon Valley Regional Interoperability Project (SVRIP) to share emergency service resources with other agencies throughout Central California. Similar regional microwave deployments are underway in San Diego and Los Angeles Counties.

ECOMM Project Status

The ECOMM system design is complete and is ready to be deployed. An Initial Study was prepared pursuant to CEQA and an Environmental Assessment was prepared pursuant to NEPA. Based on the Initial Study, the Director of Planning has circulated for public review and adopted a Mitigated Negative Declaration. Based on the Environmental Assessment, the United States Department of Justice has circulated, for public review, and adopted a Finding of No Significant Impact (FONSI). This report recommends authorization of the procurement of the entire system at this time, including equipment and installation services, along with authorization to enter into lease agreements with the other ECOMM site owners to install the ECOMM microwave equipment at their communication sites.

The ECOMM project is being updated to include a Simulcast Sites project that was originally a separate project in the Communication CIP. This project will purchase and install equipment to make radio sites simulcast-ready and improve the transmitter coverage. This project is closely related to tasks originally planned as part of the ECOMM project, so including it in the scope of the ECOMM project is appropriate. Additionally, the funding for this portion of the overall

project, which is being provided by the C&C Tax Fund: Communications Purposes, will provide necessary matching funds in order to qualify for the full COPS grant award.

BACKGROUND

City of San Jose was a founding member of the SVRIP, established by the Santa Clara County City Managers Association to develop a regional public safety communications network throughout Santa Clara County. The ECOMM microwave radio network is SVRIP's initial project. Jurisdictions participating in the project include the cities of Campbell, Cupertino, Gilroy, Los Altos, Milpitas, Monte Sereno, Morgan Hill, Mountain View, Palo Alto, San Jose, Santa Clara, Saratoga, Sunnyvale, the towns of Los Altos Hills and Los Gatos, the South Santa Clara County Fire District, the County of Santa Clara, San Jose State University and the Santa Clara Valley Water District. In 2002, the SVRIP members signed a Joint Funding Agreement (JFA) to fund a county-wide system design. The City of San Jose was awarded a \$4.9 million COPS Office technology grant in 2003 to deploy ECOMM. On July 31, 2006, the City of San Jose entered into an Agreement with Harris to provide an Engineering Study of the 23 ECOMM sites to complete a system design. On January 23, 2007, San Jose entered into an Agreement with Environmental Science Associates (ESA) to provide NEPA and CEQA environmental services for the ECOMM project. On September 17, 2007, the Super Urban Area Security Initiative (SUASI) Board allocated \$3 million to ECOMM from funds remaining in the 2006 SUASI grant. An Initial Study was prepared pursuant to CEQA and an Environmental Assessment was prepared pursuant to NEPA. Based on the Initial Study, the Director of Planning has circulated for public review and adopted a Mitigated Negative Declaration. Based on the Environmental Assessment, the United States Department of Justice has circulated for public review and adopted a Finding of No Significant Impact (FONSI).

ANALYSIS

On June 29, 2004, the City Council approved the selection of Harris Stratex as the sole-source vendor to furnish and install the ECOMM microwave network. The first phase of Harris Stratex engagement was to conduct an Engineering Study to create an installation design for each site, following ECOMM's Design Objectives. This study eliminated much of the technical risk involved in deploying this complex telecommunications network. All ECOMM site owners have approved installation designs except Campbell and Los Altos, who require use permits approved at public hearings; and Los Gatos, who is changing their site design. Each site design will be an Exhibit to that site's ECOMM lease agreement. The equipment and services quotes based on this Engineering Study commit Harris Stratex to furnish and install the designed system at a fixed price. Only changes in scope requested by the City of San Jose, or non-standard sub-surface soil conditions discovered during construction would allow project change orders. Harris Stratex will comply with the public bidding requirements set forth in Section 1217 of the City Charter for subcontracting the public works portion of this project. The project includes a contingency budget to provide for such changes.

The next stage of work to be performed under the Fourth Amendment scope of work is for Harris Stratex to:

- Manufacture, wire and test the complete integrated ECOMM microwave network in their factory by May 1, 2008;
- Complete local site improvements, such as new towers and shelters by June 30, 2008;
- Install the ECOMM electronics equipment by September 30, 2008;
- Perform final Field Acceptance Tests by November 30, 2008; and
- This Agreement will be subject to the City's Prevailing Wage Policy.

The sources of funds for the work include SUASI funding, 2003 COPS Grant, and C&C Tax Fund: Communications Purposes. SUASI funding in the amount of \$3 million has been awarded from the 2006 SUASI Grant and \$2 million is anticipated from the 2007 SUASI Grant. The 2007 SUASI funding will be awarded in January 2008.

Harris Stratex has completed the Engineering Study at a cost of \$277,365. Approval of the Fourth Amendment adds Phase 1 of the project for the purchase of equipment and initial installation at a cost of \$7,499,753; and Phase 2 of project for the remaining installations of \$1,282,985 and project contingency of \$700,000 for a total Phase 2 cost of \$1,982,985. Harris Stratex cannot commence Phase 2 of the Agreement without a formal Notice to Proceed. If funding is not awarded, the City will not issue the Notice to Proceed and will continue to look for funding to complete the project. Funding for the \$4.9 million COPS Interoperable Communications Grant has been extended to January 31, 2009.

The first year maintenance of ECOMM by Harris Stratex is included in this Fourth Contract Amendment. The maintenance services include remote monitoring of ECOMM via the network management system, semi-annual on-site preventive maintenance, software maintenance as upgrades become available, extended warranty on all components (3 years) and 24x7 on-site repairs with a 4-hour dispatch time, for failures that affect communications.

As a member of SVRIP, City of San Jose is negotiating a separate Maintenance Agreement with SVRIP to contribute to funding the annual maintenance of ECOMM. This obligation would commence with the second year of maintenance. The City Manager, as part of the Santa Clara County City Managers Association, is developing an agreement to be executed by each of the SVRIP participating agencies to ensure that they will make their respective contributions.

EVALUATION AND FOLLOW-UP

For the county-wide region, ECOMM will provide the transport medium over which new interoperable communications systems will be carried. Those interoperable systems include the CAD-to-CAD, RMS-to-RMS, and P.25 voice systems under development by City of San Jose and the SVRIP. Those future interoperable systems will directly affect call response times for

public safety services. ECOMM will provide the necessary infrastructure to transport these new systems, but by itself it is not sufficient to change measurable response times. It is anticipated that ECOMM will be completed in December 2008. For the City's own microwave network, ECOMM will increase the quantity of individual voice circuits from 600 to 2016.

Staff will return to Council in February 2008 to request appropriation of \$2,000,000 following the award of 2007 SUASI funding. Following this expected appropriation, the City Manager will issue a Notice to Proceed for the Phase 2 work.

A separate maintenance agreement with Harris Corporation will be brought back to Council for approval; as well as a Memorandum of Understanding outlining cost sharing measures with participating cities.

POLICY ALTERNATIVES

Not applicable.

PUBLIC OUTREACH/INTEREST

- Criteria 1:** Requires Council action on the use of public funds equal to \$1 million or greater.
(Required: Website Posting)

Website posting

ECOMM's combined environmental study, including the CEQA Initial Study/ Mitigated Negative Declaration and the NEPA Environmental Assessment was posted on the City of San Jose's Planning, Building and Code Enforcement website, at the County Recorder's Office, at local branch libraries, and at the agencies listed below. The notice ran for 30 days from October 4, 2007 to November 2, 2007.

Governmental agencies

The combined CEQA/NEPA study was posted to all eighteen SVRIP participating agencies, the State Clearinghouse, Bay Area Air Quality Management District, CA Dept. of Fish and Game, Santa Clara Valley Water District, Regional Water Quality Control Board, CA Toxic Substances Control, Santa Clara Valley Transportation Authority, County Roads and Airports, Airport Land Use Commission, South Santa Clara County Fire District, County Parks and Recreation, Santa Clara County Planning Dept., Association of Bay Area Governments, and San Jose State University.

The Santa Clara County City Managers Association is informed monthly about ECOMM project progress via their representatives on the SVRIP Steering Committee.

Public Hearings

The ECOMM installation design was approved at City of Mountain View on September 25, 2007, and will be presented at public hearings at City of Campbell on November 19, 2007, and City of Los Altos in the next 1-2 months, to obtain approvals for new antenna structures.

Newspaper Announcement

An announcement of the CEQA/NEPA document availability was published in the San Jose Mercury on Thursday October 4, 2007.

- Criteria 2:** Adoption of a new or revised policy that may have implications for public health, safety, quality of life, or financial/economic vitality of the City. **(Required: E-mail and Website Posting)**

Not applicable.

- Criteria 3:** Consideration of proposed changes to service delivery, programs, staffing that may have impacts to community services and have been identified by staff, Council or a Community group that requires special outreach. **(Required: E-mail, Website Posting, Community Meetings, Notice in appropriate newspapers)**

Not applicable.

COORDINATION

This memorandum has been coordinated with the City Manager's Office; the City Attorney's Office; the General Services Department; and the Planning, Building and Code Enforcement Department.

FISCAL/POLICY ALIGNMENT

This action is consistent with the following General Budget Principles:

We must focus on protecting our vital core city services for both the short- and long-term.

We must continue to streamline, innovate, and simplify our operations so that we can deliver services at a higher quality level and with better flexibility.

COST SUMMARY/IMPLICATIONS

1. AMOUNT OF RECOMMENDATION/COST OF PROJECT: \$10,004,165

Cost Summary Table:

Engineering Study	277,365
Phase I: Equipment & initial installations	7,499,753
Total HARRIS Agreement:	\$7,777,118
Phase II: Remaining installations & Project Contingency	\$1,982,985
Engineering Contingency	41,748
Environmental Studies	202,314
ECOMM Project Total:	\$10,004,165

2. SOURCE OF FUNDING:

2003 COPS Interoperable Communications Grant
 2006 SUASI Interoperable Communications Grant
 2007 SUASI Interoperable Communications Grant
 C&C Tax Fund: Communications Purposes

3. FISCAL IMPACT:

The \$10 million cost of ECOMM Project will be paid through \$5 million in SUASI grants, and a \$4.9 million COPS grant including matching funds from a \$500,000 budget transfer from the General Services Department. Funding for the \$4.9 million COPS Interoperable Communications Grant has been extended to January 31, 2009.

Matching Funds: The 2003 COPS grant requires \$298,042 in matching funds to obtain the balance of the grant. General Services has agreed to transfer \$500,000 of funds appropriated to the Radio Communications CIP budget, planned for purchase of Motorola channel banks for a future simulcast radio project. These Motorola channel banks will instead be provided by Harris Stratex as part of the ECOMM equipment system, in place of the generic channel banks originally proposed for ECOMM. Those generic channel banks would have otherwise been scrapped when the Motorola simulcast channel banks were delivered. Transferring these funds to ECOMM avoids this waste of equipment as well as completes the COPS match. No matching funds are required under the terms of the SUASI grant.

BUDGET REFERENCE

<i>Fund #</i>	<i>Appn #</i>	<i>Appropriation Name</i>	<i>Total Appn</i>	<i>2007-2008 Adopted Budget Page</i>	<i>Last Budget Action (Date, Ord. No.)</i>
001	6073	COPS 2003-2004 Interoperable Communications Grant	\$4,817,718	V-1224	10/16/07 Ord. No. 28143
001	3486	2006 Super UASI Police	\$ 329,100	IX-15	10/16/07 Ord. No. 28143
397	6108	Simulcast Sites	\$500,000	V-1224	6/19/07

CEQA/NEPA

Mitigated Negative Declaration, File No. PP07-055.

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ROBERT L. DAVIS
Chief of Police



JENNIFER MAGUIRE
Acting Budget Director

For questions please contact Captain Chris Moore, Bureau of Technical Services, at 408-277-5176.

RLD:LP

I hereby certify that there will be available for appropriation in the General Fund in the Fiscal Year 2007-2008 moneys in excess of those heretofore appropriated there from, said excess being at least \$3,000,000.



JENNIFER MAGUIRE
Acting Budget Director