

000251

REQUEST FOR COUNCIL ACTION
CITY OF SAN DIEGO

1. CERTIFICATE NUMBER
(FOR AUDITOR'S USE)

105
10/23

TO: CITY ATTORNEY

2. FROM (ORIGINATING DEPARTMENT): POLICE DEPARTMENT

3. DATE: July 11, 2007

4. SUBJECT: COPS 2007 COMMUNITY POLICING DEVELOPMENT GRANT:
Redundant CLETS Message Switch Computer Systems

5. PRIMARY CONTACT (NAME, PHONE & MAIL STA.):
DONNA J. WARLICK 531-2221

6. SECONDARY CONTACT (NAME, PHONE & MAIL STA.):
KIMBERLY GLENN 531-2415

7. CHECK BOX IF REPORT TO COUNCIL IS ATTACHED

8. COMPLETE FOR ACCOUNTING PURPOSES

FUND				
DEPT.				
ORGANIZATION				
OBJECT ACCOUNT				
JOB ORDER				
C.I.P. NUMBER				
AMOUNT	\$500,000			

9. Additional information / estimated cost:
The Office of Community Oriented Policing (COPS) has solicited proposals, under a 2007 Community Policing Development program, to expand law enforcement technology programs. SDPD and the San Diego Sheriff propose a collaborative plan requesting \$500,000 in grant funds to interconnect their message switch systems to provide full redundancy and fail-over to the 5,000 users and 64 agencies in the region. There is no requirement for matching funds, nor to continue program operations or expenditures after grant funding has been depleted.

10. ROUTING AND APPROVALS

ROUTE (#)	APPROVING AUTHORITY	APPROVAL SIGNATURE	DATE SIGNED	ROUTE (#)	APPROVING AUTHORITY	APPROVAL SIGNATURE	DATE SIGNED
1	ORIGINATING DEPARTMENT	<i>[Signature]</i>	7/17/07	8	CHIEF OPERATING OFFICER	<i>[Signature]</i>	8-28-07
2	ENVIRONMENTAL ANALYSIS	<i>[Signature]</i>	8/3/07	9	ORIGINATING DEPARTMENT	<i>[Signature]</i>	9-28-07
3	BOCOP	EXEMPT		10	CITY ATTORNEY	<i>[Signature]</i>	9/6/07
4	LIAISON OFFICE	<i>[Signature]</i>	8/8/07				
5	FINANCIAL MGMT.	<i>[Signature]</i>	8/9/07				
6	AUDITOR	<i>[Signature]</i>	08/20/07				
7	DEPUTY CHIEF OPERATING OFFICER	<i>[Signature]</i>	8/28/07				

DOCKET COORD: LO/100 COUNCIL LIAISON: [Signature]

COUNCIL PRESIDENT SPOB CONSENT ADOPTION

[Signature] REFER TO: _____ COUNCIL DATE: 10/23/07

11. PREPARATION OF: RESOLUTION(S) ORDINANCE(S) AGREEMENT(S) DEED(S)

- Authorize the Mayor or his representative to apply for, accept and expend the grant proposal.
- Authorize the Auditor and Comptroller to accept, appropriate and expend \$500,000 in grant funds, when the grant is officially authorized by USDOJ/COPS.
- Authorize the Chief of Police to administer and operate this program.

11A. STAFF RECOMMENDATIONS:
AUTHORIZE THE ACTIONS IN BOX 11.

12. SPECIAL CONDITIONS:

COUNCIL DISTRICT(S): ALL

COMMUNITY AREA(S): ALL

ENVIRONMENTAL IMPACT: This activity is not a "project" and therefore is exempt from CEQA pursuant to the state guidelines section 15060 (c) (7).
3

HOUSING IMPACT: NONE

OTHER ISSUES: PLEASE SEND A COPY OF THE FINALIZED RESOLUTION TO DONNA WARLICK, MS 704A

000253

EXECUTIVE SUMMARY SHEET
CITY OF SAN DIEGO

DATE ISSUED: July 11, 2007

REPORT NO:

ATTENTION:

ORIGINATING DEPARTMENT: POLICE DEPARTMENT

SUBJECT: **COPS 2007 COMMUNITY POLICING
DEVELOPMENT GRANT: Redundant CLETS Message
Switch Computer Systems**

COUNCIL DISTRICT(S): ALL

CONTACT/PHONE NUMBER: DONNA J. WARLICK 531-2221

REQUESTED ACTION:

1. Authorize the Mayor or his representative to apply for, accept and expend the grant proposal.
2. Authorize the Auditor and Comptroller to accept, appropriate and expend \$500,000 in grant funds, when the grant is officially authorized by USDOJ/COPS.
3. Authorize the Chief of Police to administer and operate this program.

STAFF RECOMMENDATION: Authorize the requested actions.

EXECUTIVE SUMMARY:

The U.S. Department of Justice (USDOJ), Office of Community Oriented Policing Services (COPS) has published a solicitation for 2007 Community Policing Development: Technology. The San Diego Police Department has designed a project, in collaboration with the San Diego Sheriff's Office.

The objective of this project is to allow the San Diego Sheriff and San Diego Police Departments to interconnect their Message Switch Computer (MSC) systems to provide full redundancy and fail-over to the 64 agencies and 5,000 users in the region. Should there be a failure of computer systems or California Law Enforcement Telecommunications System (CLETS) lines at the San Diego Sheriff's secure data center, the regional CLETS traffic would be handled by the SDPD system and *vice versa*.

This type of redundant system is critical to ensure that law enforcement personnel are able to run inquiries such as vehicle checks, wanted/missing persons, firearms, restraining orders, registrants, property inquiries and others in the event of a system failure. The development of this redundant system would significantly increase the reliability and efficiency of these critical information systems that are used to run approximately one million inquiries each month. This will be the first redundant system connecting to CLETS in the state.

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This proposal requests \$500,000 for the purchase of technology equipment, software, consultants and Ethernet circuit costs for this 18-month program. The San Diego Sheriff's Department has committed voluntary matching resources of \$238,228.

FISCAL CONSIDERATIONS: None. There is no cash match requirement, and no requirement to continue grant activities or expenditures after grant funds are depleted.

PREVIOUS COUNCIL and/or COMMITTEE ACTION: NA

COMMUNITY PARTICIPATION AND PUBLIC OUTREACH EFFORTS: NA

KEY STAKEHOLDERS AND PROJECTED IMPACTS: Enforcement Support Agency, Inc (ESA) is anticipated to provide consulting services.



William M. Lansdowne
Chief of Police
Originating Department



Jill Olen
Deputy Chief Operating Officer
Public Safety/Homeland Security

RESOLUTION NUMBER R-_____

DATE OF FINAL PASSAGE _____

WHEREAS, the U.S. Department of Justice (DOJ), Office of Community Oriented Policing Services (COPS), has solicited proposals for Community Policing Development: Technology; and

WHEREAS, City of San Diego Police Department (SDPD) wishes to apply for, accept and expend grant funds for a collaborative program with the San Diego Sheriff's Department under this solicitation; and

WHEREAS, the project involves allowing SDPD and the Sheriff to interconnect their Message Switch Computer systems to provide full redundancy and fail-over to the 64 agencies and 5000 users in our region; and

WHEREAS, the redundant system allows law enforcement personnel to continue to use access and information systems such as vehicle checks in the event of a system failure; and

WHEREAS, the Sheriff is providing an additional \$238,228 as a voluntary match; NOW THEREFORE,

BE IT RESOLVED, by the Council of the City of San Diego, that the Mayor or his designee, including the Chief of Police be, and is hereby authorized and empowered, for and on behalf of the City of San Diego, to submit an application for, accept, expend and manage the grant funds and program for the purposes stated in the attached application.

BE IT FURTHER RESOLVED, that this authority includes the execution of all aspects of fund and program operation, including any amendments, extensions, augmentations, or renewals from the U.S. Department of Justice for identical or closely related purposes; and to certify that the City will comply with all applicable statutory or regulatory requirements.

BE IT FURTHER RESOLVED, that the Auditor and Comptroller are authorized to accept, appropriate and expend these funds if grant funding is secured.

BE IT FURTHER RESOLVED, that this authorization shall be valid for a period of up to five years, provided funding for this purpose is made available by the U.S. Department of Justice.

BE IT FURTHER RESOLVED that any resources received hereunder shall be used to supplement and not to supplant expenditures controlled by this body.

APPROVED: MICHAEL J. AGUIRRE, City Attorney

By Mary T. Duesca
Mary T. Duesca
Deputy City Attorney

MTN:lb
09/17/2007
Or.Dept: Police
R-2008-223

I hereby certify that the foregoing Resolution was passed by the Council of the City of San Diego, at this meeting of _____.

ELIZABETH S. MALAND
City Clerk

By _____
Deputy City Clerk

Approved: _____
(date)

JERRY SANDERS, Mayor

Vetoed: _____
(date)

JERRY SANDERS, Mayor

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CITY CLERK COPY
DO NOT KEEP

THE CITY OF SAN DIEGO POLICE DEPARTMENT - CA03711

OFFICE OF COMMUNITY ORIENTED POLICING SERVICES

COMMUNITY POLICING DEVELOPMENT 2007 GRANT PROGRAM (CPD 2007)

TECHNOLOGY: Redundant CLETS Message Switch Computer Systems



PROJECT DESCRIPTION (NARRATIVE)

A. Problem Identification, Justification and Use of Federal Funds

The San Diego Users Network (SUN) is the interface between users in the County of San Diego and the California Department of Justice (DOJ) system known as CLETS (California Law Enforcement Telecommunications System). Through DOJ and CLETS, users get to access the National Crime Information Center (NCIC) and National Law Enforcement Telecommunications System (NLETS) and other sources of federal and international justice data. SUN, known by the California Department of Justice (DOJ) as a Message Switch Computer (MSC), serves as an access point from which the San Diego County Sheriff's Department (SD Sheriff) and all other law and justice users in the County can access CLETS. This MSC computer controls communications lines to DOJ/CLETS and stores a journal for 3 years of all inquiries, updates and responses. To DOJ, the Sheriff is the County Control Agency, and the other agencies that

use CLETS via the Sheriff's MSC are known as Client Agencies. We have 64 client agencies in San Diego County.

In 1988, Computer Aided Dispatch (CAD) systems started connecting to SUN in order to automate common queries such as running plates or wanted persons. These early CAD interfaces used a 1970s era IBM proprietary text networking protocol that used phone lines called SNA terminal emulation. This interface capability connects dispatch systems and mobile computers directly to CLETS. In 1997 – 1998, a new and more modern interface was developed using IBM's MQ Series.

In early 2003, DOJ CLETS published a new requirement that all systems accessing CLETS via "untrusted" networks, defined as networks that are used by both law enforcement and non-law enforcement personnel, were required to implement 128-bit encryption. The County network, with its wide variety of non-law and justice users, was judged to be non-trusted. In addition, the County mainframe system was also identified as an untrusted network.

In response, the SD Sheriff's Data Services Division spent a year defining business requirements, developing specifications, designing a new system, and selecting a vendor to upgrade the system. They were subsequently awarded the 2003 COPS Technology Grant and a Law Enforcement Entitlement Grant to build a new system. After a long search and side-by-side comparison of many vendors, Enforcement Support Agency (ESA) was selected as the vendor. Their experience in providing a very similar system to the San Diego Police Department (SDPD) was a primary factor in choosing them as a vendor.

The new system, known as eSUN, was developed between May 26, 2004 and January 2005. Carlsbad's CAD system that uses an IBM MQ interface was brought live on-line to eSUN in February 2005. Today, we have the following CAD systems connected to eSUN:

- Carlsbad Police Department
- San Diego Community College District PD
- Harbor Police
- Oceanside Police Department
- National City Police Department
- El Cajon Police Department
- Sheriff Computer Aided Dispatch (CAD)
- Sheriff Jail Information Management System
- ARJIS Global Query (a regional Joint Powers Agency)

In April 2007, SDPD completed the migration of their CAD system from SUN to their own ESA provided system. The following agencies that have CAD systems are still in development and will be connected to eSUN when they are ready:

- Coronado Police Department
- USMC Miramar Provost Marshal (PM)
- USMC Camp Pendleton PM

eSUNWeb is an important component of eSUN that replaces the user – terminal interface on SUN for users to run queries and perform updates. eSUNWeb requires the SD Sheriff's Department to provide access to the Client Agencies via a private Internet-style network known as an "extranet". The eSUN team and others from the SD Sheriff's Data Services Division developed this extranet, known as SDLaw, which came online on November 8, 2007. eSUNWeb inquiry-only version, developed between May 2004 and December 2005, was brought on-line in January 2006. In April 2007, the SD Sheriff's Department accepted the final deliverable of

eSUNWeb that included all inquiries and updates. All 64 regional client agencies use eSUNWeb.

Today, the SD Sheriff's Department operates the eSUN Message Switch Computer (MSC) for the benefit of the CLETS client agencies in the region. There are 64 client agencies that utilize this MSC for all CLETS access. Each month, this system runs approximately 1 million inquiries and updates pertaining to vehicle checks, wanted/missing persons, firearms, restraining orders, registrants, property inquiries, and more. The eSUN system supports over 560 different types of inquiries and update transactions. CLETS administrative and unsolicited messages are also switched through eSUN and delivered to secure printers throughout the region. In all, there are currently over 5000 eSUN users that are spread across 64 regional law enforcement agencies.

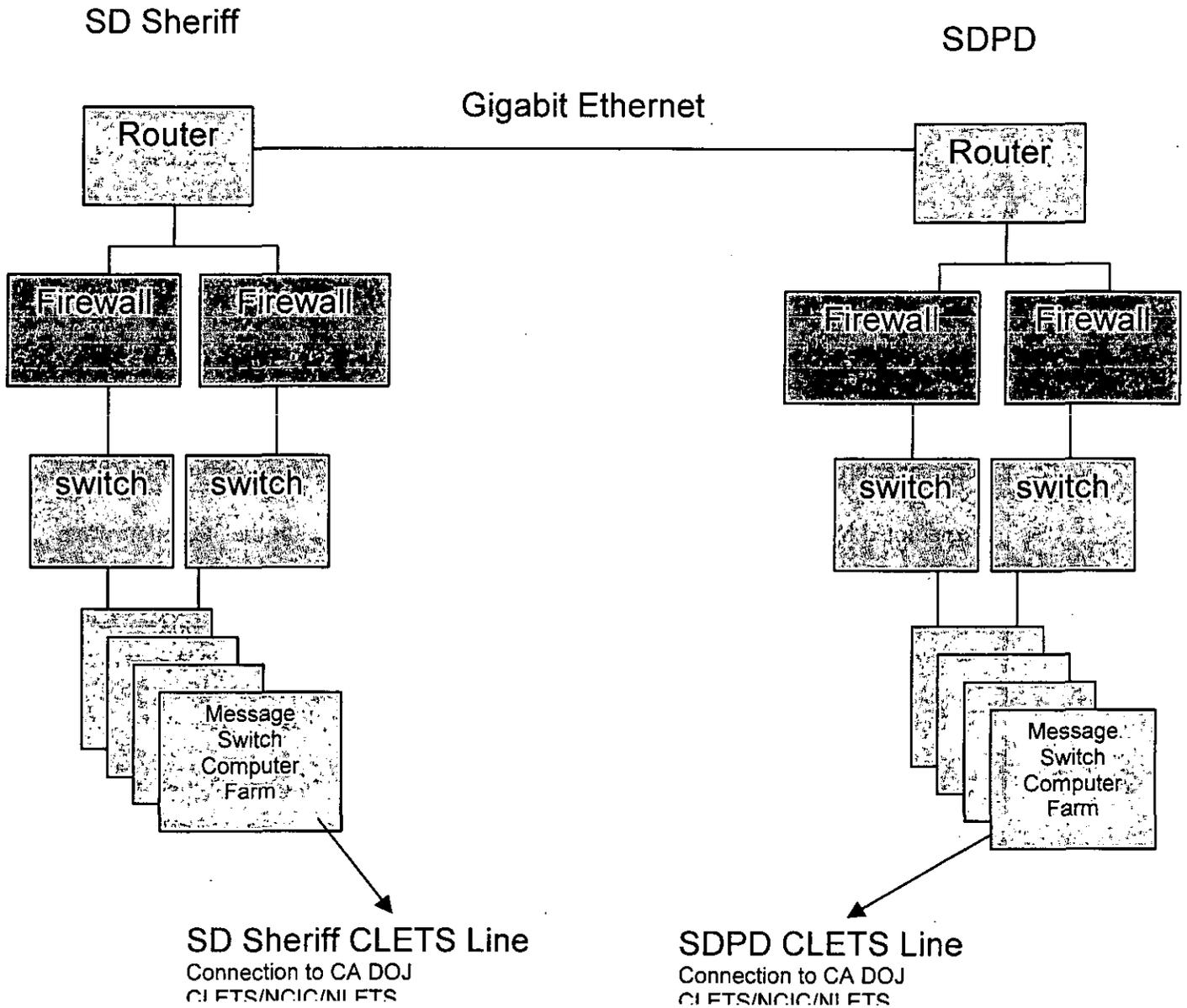
Although the SD Sheriff's Department is usually designated as the County Control Agency and provides CLETS service to agencies in California, it is common for very large city police departments to request their own, independent CLETS line from the California DOJ and operate it at their own expense. As an example, the San Diego Police Department (SDPD) requested their own line and became independent of the SD Sheriff's MSC in April 2007.

B. Narrative of Project

The purpose of this grant request is to allow SD Sheriff and SDPD to interconnect their Message Switch Computer (MSC) systems in order to provide full redundancy and fail-over to the 5000 users and 64 agencies in the region. Should there be a failure of computer systems or CLETS lines at the SD Sheriff secure data center, the regional CLETS traffic will be handled by

the SDPD system, and visa-versa. This would be the *first* redundant system connecting to CLETS in the state. The concept is illustrated in Figure 1, below.

Figure 1 Redundant CLETS MSC Farms



C. Management and Implementation Plan

The implementation and management of this project will be shared by the collaborative efforts of the San Diego Police Department and the San Diego County Sheriff's Department.

The following are key individuals that will be involved in the management of the project:

- *Dan Newland/San Diego Police Department Information Systems Administrator:* Dan earned a bachelor's degree in Business Administration from the College of Notre Dame. Dan has 15 years of public safety experience and 35 years of progressive IT management experience. He is currently responsible for IT operations, procurement, IT budgets, and wireless systems. He also currently manages the regional 3Cs Communications Command and Control public safety interoperability project. Please see the attached résumé for additional experience and qualifications.
- *James Baumgart/ San Diego Sheriff's Department SDLaw/eSUN Program Manager:* James earned a bachelor's degree in Computational Methods in Physics from the Harvey Mudd College. He has 30 years of experience in all aspects of systems engineering and computer programming. He is a member of the Technical Working Group for CLETS (appointed by the Attorney General), Applications Committee for the 3Cs microwave data network and chairman of the Security subcommittee of the ARJIS Technical Working Group. As the eSUN Program Manager, James led the team that developed both the Sheriff's SDLaw extranet and the eSUN/CLETS application that were deployed to 64 regional Client Agencies. Please see the attached résumé for additional experience and qualifications.
- *Contractual Positions:* There will also be contractual positions that will be filled according to federal and City requirements. The contractor will make the necessary MSS changes to provide for the redundant interagency routing of messages. They will also ensure proper replication of the journal data across the two farms to support inter-agency

journaling and impose security access rules to prohibit unauthorized access to the systems.

The following steps outline the scope of work for this project and provide the technical specifications for creating the redundant system:

1. SDPD and SD Sheriff will collaborate to extend the Sheriff's Gigabit Ethernet Wide Area Network (WAN) to SDPD's secure data center for interconnection of the MSS Farms.
2. SDPD and SD Sheriff will upgrade firewalls, as necessary, to support this new interface.
3. SDPD will install IBM Websphere MQ Series software and configure it to join the SD Sheriff's secure MQ Cluster for redundant CAD interface capabilities.
4. SDPD and SD Sheriff will collaborate and work with the California Department of Justice CLETS administrative unit to table all regional CLETS mnemonics on both lines. This will allow *both* lines to send inquires/updates to DOJ and receive responses. The updated MSS software will ensure delivery to the original party.
5. Under normal circumstances, the Message Switch Computer farms will communicate and balance the load between the two lines.
6. In the event of a failure of a critical service at either farm, the remaining farm will automatically assume all CLETS traffic.
7. SDPD and SD Sheriff will collaborate to create a CLETS test environment to develop and test the redundant message routing, load balancing, and failover.

8. SDPD and SD Sheriff shall contract with the vendor to modify the MSS software for redundant, interagency routing of messages.
9. As an important part of the CLETS MSC functionality is journaling and auditing, all inquires/updates and responses are stored in a journal database for 3 years. Audits may be performed in cases of reported misuse of data or to support investigations or cases. SDPD and SD Sheriff shall contract with the vendor for replication of the journal data across the two farms to support inter-agency journaling and to impose security access rules on the journal data that prohibit unauthorized access.
10. SDPD and SD Sheriff shall reconfigure firewalls to support new traffic and new connections across the gigabit Ethernet line.
11. SDPD will utilize the new gigabit Ethernet line for other traffic between SD Sheriff and SDPD such as mugshots, case file transfer and others.

Implementation Timeline:

Months 1-3: Process Grant Award Documents

Route Grant Award for City Council approval

Form Joint Regional Project Mgmt Team

Months 4-6: Submit Quarterly Report

Assign Technical Staff

Develop Detail Project Plan

Months 7-9: Submit Quarterly Report

Finalize and Contract Message Switch Customization Development

Order Equipment, Receive and Install Equipment

Months 8-12: Submit Quarterly Report

- Complete Fail-over and Performance Acceptance Testing
- Implement Production Support Staffing/Support Tools

Month 13-15: Submit Quarterly Report

- Implement New Service Level Agreements
- Production Implementation of All Network Components and Existing Systems
 - Regional Desktop Applications
 - Dispatch Systems and Patrol Applications

Month 16-18: Submit Quarterly Report

- Implementation of new regional applications supported through message switch
 - Field SDLaw based E-Sun, E-Mugs, and E-Jims
 - Regional E-Watch...Publish and Subscribe System
 - Regional Emergency Management AVL Tracking

D. Evaluation Plan/Effectiveness of Program

The SDPD and SD Sheriff's Department will work in tandem to identify performance measures in order to evaluate the effectiveness of the new redundant system. In doing so, they will develop benchmarks and service level agreements to measure quantifiable key performance indicators such as system uptime and reliability. The resulting performance data will provide vital information to the project managers regarding the reliability, effectiveness and efficiency of the upgraded communications infrastructure. They will also provide insight to management that will help to determine if any modifications to the system are necessary.

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E. Vitae and Resumes of Key Project Personnel: Attached

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THE CITY OF SAN DIEGO POLICE DEPARTMENT - CA03711

**OFFICE OF COMMUNITY ORIENTED POLICING SERVICES
COMMUNITY POLICING DEVELOPMENT 2007 GRANT PROGRAM (CPD 2007)**

TECHNOLOGY: Redundant CLETS Message Switch Computer Systems

BUDGET NARRATIVE

The nature of this project is such that the equipment and technology-related items requested below must be implemented in the environments of both the San Diego Police Department (SDPD) and the County of San Diego Sheriff's Department (SD Sheriff). In order to enable the SDPD and SD Sheriff's Message Switch Computer (MSC) systems to connect with each other, routers and firewall upgrades must be purchased and installed. In addition, it is necessary to install a gigabit Ethernet line to each agency's router to allow traffic to flow back and forth between the two agencies. The total one-time costs of this required equipment is \$114,000 and the recurring circuit costs are \$180,000. The budget also includes the one-time costs for the purchase of IBM Websphere MQ software (totaling \$6,000) that will be installed on the SDPD side. The final requested item is \$200,000 to cover the consultant costs for making MSS changes to provide for the redundant interagency routing of messages.

ALLOWABLE COSTS:

A. Personnel: None Requested

B. Equipment and Technology:

	<i>SDPD</i>	<i>SD Sheriff</i>	TOTAL
<u>Equipment</u>			
Routers	\$10,000	\$10,000	\$20,000
Firewall Upgrades	\$19,000	\$25,000	\$44,000
Gigabit Ethernet Installation	\$25,000	\$25,000	\$50,000
Annual Gigabit Ethernet Circuit Cost	\$90,000	\$90,000	\$180,000

C. Supplies:

	<i>SDPD</i>	<i>SD Sheriff</i>	TOTAL
<u>Websphere Software</u>			
IBM Websphere MQ (SDPD Node)	\$6,000	\$0	\$6,000

D. Travel: None Requested**E. Contracts/Consultants:**

	<i>SDPD</i>	<i>SD Sheriff</i>	TOTAL
<u>Consulting Services for MSS Changes</u>			
Enforcement Support Agency	\$100,000	\$100,000	\$200,000

F. Other Costs: None Requested**G. Indirect Costs: None Requested****IN-KIND VOLUNTARY MATCH:**

In addition to the Federal Requested Funds, there is an In Kind-Voluntary Match totaling \$238,228. The breakdown of this voluntary match is as follows:

	<i>SDPD</i>	<i>SD Sheriff</i>	TOTAL
<u>Permanent Staff Labor</u>			
IT Engineer 200 hours @ \$56.67/hr		\$11,334	\$11,334
Senior IT Engineer 200 hours @ 68.24/hr		\$13,648	\$13,648
Supv IT Engineer 100 hours @ 82.46/hr		\$ 8,246	\$ 8,246
<u>Other</u>			
Annual Contract with ESA		\$205,000	\$205,000

TOTAL FEDERAL FUNDS REQUESTED: \$500,000

TOTAL VOLUNTARY MATCH: \$238,228