PIMA COUNTY WIRELESS INTEGRATED NETWORK (PCWIN)
EXECUTIVE MANAGEMENT COMMITTEE

Pima County Sheriff’s Department
Administration Building, 3rd Floor
1750 E. Benson Highway
Thursday, October 28, 2010
9:00 a.m.

SUMMARY OF MEETING

Note: The following is a summary of what transpired at the October 28, 2010 EMC meeting. Cassette tape and materials provided are available upon request.

I. Call to Order: Captain Paul Wilson, Alternate Chairman, 9:00 a.m.

Roll Call: Catherine Hanna, Pima County Sheriff’s Department

Members Present

Captain Paul Wilson, Pima County Sheriff’s Department (Alternate)
Chief Doug Chappell, Drexel Heights Fire District
Chief Anthony Daykin, University of Arizona Police Department
Division Chief Pat Quinn, Tucson Fire Department (Alternate)
Deputy Chief Larry Stevens, Oro Valley Police Department (Alternate)
Lieutenant Charles Hangartner, Tohono O’odham Police Department (Alternate)
Mr. Jeff Guthrie, Pima County OEM & Homeland Security

Members Absent

Sheriff Clarence Dupnik, Pima County Sheriff’s Department
Chief Patrick Kelly, Tucson Fire Department
Chief Roberto Villaseñor, Tucson Police Department
Chief Joseph Delgado, Tohono O’odham Police Department
Chief Daniel Sharp, Oro Valley Police Department
Chief Jeff Piechura, Northwest Fire District
Mr. Mike Hein, Pima County OEM & Homeland Security

Guests

Assistant Chief Mike Brandt, Northwest Fire District
Mr. Tony Aeilts, Tucson Police Department Communications

Others Present

John Bowers, Motorola
Frank Brady, RACES
Gary Bynum, Drexel Height Fire District
Andy Clark, GITA
Carl Drescher, City of Tucson
Joe Jakoby, City of Tucson IT

Robert Padilla, PC Finance & Risk Management
Paul Panzica, PC IT
Paul Punske, Motorola
Mike Sacco, Pima County Sheriff’s Department
Bob Sommerfeld, U of A PD
II. Approval of Minutes
Captain Paul Wilson, Pima County Sheriff’s Department

Captain Wilson proposes approval of the minutes for the July 22, 2010, Executive Management Committee (EMC) meeting. Chief Chappell moves to approve the minutes and Lieutenant Hangartner seconds the motion. Motion unanimously carries.

*Materials provided: EMC summary dated July 22, 2010.*

III. Committee Appointment
Captain Paul Wilson, Pima County Sheriff’s Department

Chief Jeff Piechura, of the Northwest Fire District, asks the Committee to support a recommendation to the Board of Supervisors to appoint Assistant Chief Mike Brandt as first alternate on the Executive Management Committee, replacing retired Assistant Chief Jayme Kahle.

**Motion**

Chief Chappell motions to accept Northwest Fire Districts’ committee appointment. Division Chief Quinn seconds the motion. Motion unanimously carries.

Ms. Hanna will prepare the necessary paperwork for Board of Supervisor consideration.

IV. Radio System Project Status Report
Captain Paul Wilson, Pima County Sheriff’s Department

Staff has completed the detailed design for the radio system; this, being contingent upon Staff’s ability to acquire access to the sites incorporated into the design, and the ability of the microwave vendor to get connectivity into those sites.

Motorola has created a change request, which identifies the design and cost changes that have occurred during the detailed design phase. Captain Wilson reviews the changes with the Committee.

**Questions**

A question regarding the removal of the Pima West site was posed. Pima West was added to the original specification as a mobile coverage site, and required the vendors to propose a solution to provide coverage. It was removed because the site is located on a National Wildlife Refuge, and the County wouldn’t have been able to obtain permission to build in that location. And it was determined by end users that coverage in the wilderness area was not critical.
V. AECOM RaCE Coverage Evaluator Testing Proposal
Captain Paul Wilson, Pima County Sheriff’s Department

In our RFP and Motorola’s contract, Staff included a provision permitting PCWIN to utilize third party testing for coverage acceptance testing. Staff presents the Committee with a proposal from AECOM for recommendation and approval.

Proposal

The specifications required Delivered Audio Quality (DAQ) coverage testing. DAQ testing involves an evaluation of audio quality from a test point in each coverage test grid. Traditionally, the test is conducted with two teams of evaluators. Inbound and outbound test transmissions are made at each test point. The evaluators score the quality of the received audio. The process is labor intensive and the testing process is slow. Motorola proposed testing with this traditional method.

AECOM has developed a computerized, automated testing process that can produce more objective results in a much shorter period of time.

AECOM’s RaCE tool provides an automated coverage evaluation using understandability as the basic metric. AECOM will objectively test the system the way we will use it, with the human voice. With RaCE, AECOM consistently evaluates new or existing radio systems, including trunked, conventional, P25 digital, proprietary digital, analog, or anything that may come along in the future. RaCE is non-invasive to the system and only requires two (2) radios with access to microphone, speaker and PTT leads.

RaCE Capabilities

- Vendor independent, 3rd party testing
- Uses actual voice communications
- Compatible with any vendor, technology or frequency band
- Objective testing – no human vote
- Calibrated by telecommunicators
- Repeatable
- Verifies both talk out & talk back
- Non-invasive testing
- End-to-end evaluation
- Test reporting options include voice (DAQ), system access, signal level (RSSI) & Bit Error Rate (BER)
- Continuous visual status feedback
- Automated location tracking via GPS
Captain Wilson reviews the cost breakdown of each proposal from AECOM and Motorola. Estimated cost for Motorola’s testing is $479,741.46. Estimated cost for AECOM is $524,972; a difference of $45,230.54. Both estimates are inclusive of internal costs for labor and vehicles. Benefits which justify AECOM’s cost:

- 3rd party testing
- Automated, not subjective
- Recordings to be used for future reference
- Data for each test point is catalogued
- Less manpower

Recommendation

PCWIN Staff requested a proposal from AECOM and evaluated the RaCE tool capabilities. Following evaluations from representatives of the City of Tucson and County, Staff recommends that coverage testing be performed by AECOM. Motorola will provide a change order to the coverage testing acceptance test process procedure, allowing AECOM to conduct the test.

Discussion

When testing, the computer rates the transmission by a scale of 1-5. Staff specifications call for a minimum of 3.1 to pass the test. Chief Daykin would like to see human verification if the rating hovers a 3.1, to validate the test. Captain Wilson advise implementation staff of a need for oversight.

Motorola has used AECOM for testing in the past to collect data for scoring purposes, but has not used RaCE testing for acceptance.

Division Chief Quinn believes this is money well spent. It will give Staff specific document to refer to should variables be questioned.

Motion

Captain Wilson proposes a motion to approve the third party coverage acceptance testing by AECOM, including direction to Staff to inquire about human oversight in the testing process. Chief Daykin motions to approve; Division Chief Quinn seconds the motion. Motion unanimously carries.


VI. Microwave System Project Status Report
Paul Panzica, Pima County Information Technology

Flash testing and path studies are complete for all of the microwave sites. These tests and studies resulted in changes to the microwave design. Space diversity links have been added to Keystone, Sheriff’s Department, and Public Safety Training Academy.
The microwave link, intended to supply the Tucson International Airport will be moved to the Jail dispatch facility.

Due to the sensitive nature of Tumamoc, Staff removed microwave from that site, which broke the north and south connectivity in the simulcast. The City of Tucson’s Catalina site was chosen as an alternative solution to fill the gap. The City will contribute a microwave dish and a Harris link to Catalina and Walker Road. Additionally, all spur sites were connected via hot standby microwave.

To alleviate risk, Staff moved quickly on Keystone, and applied for the 6 and 11 Ghz PCN’s to complete DDR. Staff received approval and is ahead of schedule.

DDR presentations were conducted in September. Staff is on the second round of clarifications, and has made significant progress thanks to NIC and Ceragon’s assistance.

In regards to the Tohono O’odham equipment, the Alcatel equipment was configured as an Ethernet OC3, which was inadequate with PCWIN’s specifications. Staff assessed the equipment, reviewed risks, cost and maintenance, and made a recommendation to utilize the Ceragon equipment over the Alcatel equipment. The increased cost was $13,000.

Cerro Colorado is designed as a solar-only site. Power limitations prevent a design including hot standby radios.

Captain Wilson reminds the Committee that cost increases are likely due to the recent site changes.

VII. **Contracts/Agreements Status Report**  
**Captain Paul Wilson, Pima County Sheriff’s Department**  
**Dr. John Moffatt, Pima County Office of Strategic Technology Planning**

**Contract – Frequency Sharing Agreement with COT**

This agreement sets forth the terms and conditions for contributions of spectrum from the City of Tucson and Pima County to the PCWIN radio system. When executed, the agreement will assure availability of spectrum to meet the needs of the system users for a minimum of 20-years.

As reported in July, City and County staff sought additional changes to the IGA. The latest changes were sent to the City for approval on August 23rd. County is awaiting feedback.

**City of Tucson Master Site Sharing Agreement**

The final Master Site Sharing Agreement was transmitted to the City in June. It has been undergoing legal review since. County has not been provided any feedback.
City of Tucson Thomas Price Service Center Renovation Reimbursement Agreement

This agreement sets forth the terms and conditions for County to reimburse the City of Tucson for renovations to the Thomas Price Service Center dispatch facilities.

In June, County completed preparation of a draft IGA for the TOPSC renovation project and submitted for City of Tucson review and approval. On about July 28th, a revised agreement was returned by the City. Since, there have been two meetings between the jurisdictions and exchange of information via e-mail.

On October 18, 2010, the County submitted a final IGA for the City’s approval. The City has requested another meeting to reach understanding and agreement on sections relating to design, construction, schedules and payments.

The City of Tucson and County representatives will meet to discuss these agreements on November 5th.

City/County Network Sharing Agreement – Site Specific Agreement

The City of Tucson and Pima County have a previously executed network sharing agreement that will be used as a vehicle to authorize network sharing to support the PCWIN project. Both parties are aware of a need to develop a Site Specific Agreement to support PCWIN requirements, but work has not yet commenced on the agreement.

Site Acquisition Agreements

Dr. Moffatt reminds the Committee that finalizing site agreements is critical. Changing sites will ultimately change the microwave design, in addition to, changing the simulcast design for Motorola.

Pima County Real Property and Cultural Resources representatives are negotiating with agencies and site owners for these agreements, ensuring appropriate review and approval throughout the process.

A number of these agreements have been worked out, but only three (3) have been approved.

Dr. Moffatt reviews the PCWIN Site Development Status Sheet with the Committee.

Haystack Mountain & Confidence Peak (TEP Sites)

TEP is showing signs of reluctance to permit PCWIN to co-locate on their site. Staff stresses that this is a public safety issue and should not allow unrelated issues to interfere in moving the project forward.

Staff may prepare a letter, on the Committee’s behalf, asking TEP to get past unrelated problems with Pima County, and move forward with the permitting process. Signatures from the Committee members will be requested.
Golder Ranch Fire District

Site construction will begin in January 2011.

JOC Contracting

Vendor quote packages have been received for Drexel Heights (Eagle Nest), Oro Valley Police Department, Geasa-Marana Library, and Rincon Valley Fire District.

As agreements go through the approval process, Staff will release the contracts to the vendors.

Captain Wilson and Dr. Moffatt will meet with several communities throughout southern Arizona to update people on the PCWIN project. Ms. Hanna will send community meeting notices to the EMC and agency executives.

Materials provided: PCWIN Site Development Status Sheet, dated October 25, 2010.

VIII. PECOC Project Status Report
Captain Paul Wilson, Pima County Sheriff’s Department

The 100% design document phase is complete. Comments were forwarded to Durrant, who will propose solutions on how to handle issues raised by Staff. A Notice To Proceed letter, to proceed with construction documents, is anticipated.

Durrant has prepared a new cost estimate for construction, which will show increases. Cindy Sylvester feels that she has enough contingency funds, which will offset those increases, and keep us within budget.

PECOC Policy Development Ad-Hoc Committee

A Policy Development Committee has been assembled to research, create, and write policies and procedures for the PECOC facility. Committee members meet weekly or bi-weekly, establishing day-to-day policies specific to PECOC building operations. Individual agencies will create their own standard operating procedures.

This Committee involves representatives from PCWIN full-time tenants, as well as, the back-up tenants for input.

IX. County Fire Dispatch
Chief Doug Chappell, Drexel Heights Fire District

Chief Jeff Piechura has requested that the Drexel Heights Fire District take the lead in implementing the County Dispatch District Center at PECOC.

Drexel Heights Fire District has assumed management lead for County Fire Dispatch, and is 50% complete with the process. Mr. Steven Campbell, Drexel Heights Communications Manager, is tasked as the project manager, and will lead in the development and future management of County Fire Dispatch for PECOC.
Drexel expects an upgrade to their CAD system in January 2011, which will be used for the County Fire Dispatch.

An IGA between the Northwest Fire District and the Drexel Heights Fire District was previously created to establish the roles of County Fire Dispatch. Since Drexel is now leading the implementation effort, Northwest Fire has agreed to that change in an IGA amendment. There is no indication that dispatching plans have changed.

Staff expresses their appreciation to Northwest Fire and Drexel Heights Fire for their assistance and leadership throughout this process. Captain Wilson supports this decision, and appreciates their commitment.

Materials provided: Email from Chief Jeff Piechura, of the Northwest Fire District, dated October 8, 2010.

X. Support Staff
Dr. John Moffatt, Pima County Office of Strategic Technology Planning

Three (3) additional staff members will be added to the PCWIN support office:

The Sheriff’s Department has assigned Ms. Marla Carmona, Program Specialist, to assist with financial accounting and other administrative tasks.

The Information Technology Department will hire and assign a Network Engineer to assist with network engineering tasks.

The Information Technology Department will hire and assign a Project Manager to replace Mr. David Smith, who was responsible for the master schedule. This position will continue to be funded by the PCWIN project.

XI. Grant Updates
Lieutenant Mike Sacco, Pima County Sheriff’s Department

FY08 Public Safety Interoperable Communications Grant

The $3.3M will be allocated for radio, network and equipment.

2009 State Homeland Security Grant Program

This $385,971 grant award will be used for two (2) microwave links. Staff was recently granted an extension on this grant.

FY09 UASI

This $1.72M grant award has been reprogrammed to purchase fixed radio network equipment. Staff received an extension and given the approval to reprogram those funds.
Drexel Heights Fire District - Assistance to Firefighters Grant Program

Drexel Heights Fire District was awarded $827,843.00 to purchase 301 mobile radios and 39 control stations to support the PCWIN project. A local match of $206,960.00 will be made from Pima County bond funds. An enabling IGA has been approved by the Drexel Heights Fire District Board and will be approved by the Board of Supervisors on November 2nd. Equipment will be ordered in time to guarantee delivery on time for grant compliance. Upon installation, ownership of the equipment will be conveyed to Pima County to be managed with county bond purchased assets.


Pima County was awarded Technical Assistance services from the U.S. Department of Homeland Security, Office of Emergency Communications. Contractors from SAIC will complete an Existing Governance Structures Assessment and prepare a Final Assessment Report. Dr. Jennifer Hendry submitted a first draft of her report last week.

2010 Interoperable Emergency Communications Grant – PCWIN Governance Support and Operational Procedures

Grant award for $156,000 to hire a consultant to re-write applicable documents to accurately describe current PCWIN governance, in addition to writing standard operating procedures.


XII. New Business, Captain Paul Wilson, Pima County Sheriff’s Department

Captain Wilson refers to the Committee for New Business.

The next meeting will include Committee discussion on the PCWIN Governance, and follow up discussion on narrow-bandning.

XIII. Call to the Public

Captain Wilson asks if anyone in the audience would like to address the Committee. He receives no response.
XIV. Date-Time-Location of Next Meeting(s)

Thursday, December 16, 2010, at 9:00 AM  
Pima County Sheriff’s Department  
Administration Building, 3rd Floor, Sheriff’s Operations Center  
1750 E. Benson Highway, Tucson

XV. Adjournment

Captain Wilson asks for a motion for adjournment. Chief Chappell moves to adjourn the meeting. Chief Daykin seconds the motion. Motion is unanimously carries.

Meeting adjourns at 10:30 a.m.

Minutes prepared by: Catherine Hanna