PIMA COUNTY WIRELESS INTEGRATED NETWORK
(PCWIN)
EXECUTIVE MANAGEMENT COMMITTEE

Pima County Sheriff’s Department
Administration Building, 3rd Floor
1750 E. Benson Highway
Thursday, October 27, 2011
9:00 a.m.

SUMMARY OF MEETING

Note: The following is a summary of what transpired at the October 27, 2011 EMC meeting. Cassette tape and materials provided are available upon request.

I. Call to Order: Captain Paul Wilson, Alternate Chairman, 9:22 a.m.

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

Members Present

Captain Paul Wilson, Pima County Sheriff’s Department (Alternate)
Chief Anthony Daykin, University of Arizona Police Department
Chief Jim Critchley Tucson Fire Department
Division Chief Gary Bynum, Drexel Heights Fire District (Alternate)
Mr. Tony Aeilts, Tucson Police Department (Alternate)
Commander Jason Larter, Oro Valley Police Department (Alternate)
Mr. Mike Hein, Office of Emergency Management & Homeland Security

Members Absent

Sheriff Clarence Dupnik, Pima County Sheriff’s 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
Chief Doug Chappell, Drexel Heights Fire District

Others Present

Stella Bay, Pima Community College PD
John Bowers, Motorola
Carl Drescher, Town of Marana
Jeff Inorio, South Tucson PD
Joe Jakoby, City of Tucson

Jim Long, Northwest Fire District
Joseph Martinez, Tohono O’odham Nation IT
Robert Padilla, PC Finance & Risk Mgmt
Karl Ryan, PCWIN Staff Office
Mike Sacco, PC Sheriff’s Department
II. Approval of Minutes
Captain Paul Wilson, Pima County Sheriff’s Department

Captain Wilson proposes approval of the minutes for the August 25, 2011, Executive Management Committee (EMC) meeting. Division Chief Bynum moves to approve the minutes and Chief Daykin seconds the motion. Motion unanimously carries.


III. PECOC Project Status Report
Mr. John Fralc, Pima County Facilities Management – Construction Project Manager

A notice to proceed for facility construction was issued on August 22nd. A 365-day duration time placed substantial completion at August 20, 2012, although Sundt has accelerated their schedule to show substantial completion on June 4, 2012. Mr. Fralc reminds the Committee that this construction is a remodel; several unforeseen conditions can occur and delay work along the way.

The contractor has processed 70 requests for information (RFI). Submittals are being processed, where the architects specify certain products and equipment, and the contractor is obligated to put together product data where the architecture engineering team can review and approve. Mr. Fralc expects approximately 75 submittals throughout construction.

Interior and exterior demolition is nearly complete. Mr. Fralc expresses that the building has “good bones” and praises the selection of this building. The earth pad for the buildings addition is being processed and the interior footings have been excavated.

Note: Captain Wilson provides photographs of the facilities construction to the Committee.

Mechanical, plumbing, and the electrical layout will begin within the next two (2) weeks. Mr. Fralc is working with the surrounding community to assist with traffic circulation, and any other questions or concerns that come up.

Contractors were asked to interface with the PCWIN schedule. Sundt submitted eight (8) milestones to Karl Ryan (PCWIN Staff) who updated the schedule.

Mr. Fralc is impressed with Sundt; organized and talented work crew with a state-of-the-art vision for the facility. Sundt has a project superintendent, project engineer, and a project manager assigned to this project and come with impressive credentials.

Pima County Facilities Management will place a site trailer on-site, as construction activities will increase, requiring Mr. Fralc to be on-site more often. Several iterations of the design documents were generated throughout planning. Mr. Fralc will work with the contractors, via a contractor’s installed matrix, where they will coordinate owner furnished items and contractor-installed items to ensure items are not left out.
The County has hired a commissioning specialist to review all the submittals, ensure compliance with the contract documents, and that systems are installed correctly once the submittals are approved. Before the building is turned over to the County, the specialist will ensure the systems operate correctly.

### IV. PECOC Open House

**Dr. John Moffatt, Pima County Strategic Planning Office**

Tonight, PCWIN Staff will host an open house meeting to provide the public some information about the antenna tower structure at PECOC.

On May 2, 2011, Staff hosted an open house to inform the public about the PECOC facility, and at that time, expressed the need for a tower, but the height wasn’t decided upon.

The new tower will be 125 feet, equipped with two (2) microwave links to support the PCWIN infrastructure, standard console antennas, and include approximately 20 RACES antennas. The architects provided a perspective of the facility, and the Sheriff’s Department ID Unit added the antennas to show the public what the visual impact would look like.

The open house will have the site plans, vegetation, and CMU block samples to show the color scheme. Staff was criticized for not communicating with the community, so additional steps are being taken to notify the community of project activities. With Sundt’s schedule, it accelerates equipment installation and requires the tower to be built by Spring 2012. Public notification is very important; continuing efforts will be made to include the County’s new Communications Department. They will assist with newsletters and submit press releases on the pima.gov website.

There have been a number of actions done to mitigate the visual impact of the tower:

- Original tower specified has been substituted with a model that has a narrower footprint
- Tower will be a neutral color to reduce visibility against the backdrop of a blue sky
- Microwave dish covers will be a neutral color to reduce visibility against the backdrop of a blue sky
- Tower is placed behind a screen wall near the north east corner of the facility to shield street-level views of the base from 22nd Street and the residential neighborhoods
- Trees along the west, north and south sides of the property were retained to minimize visual impact to neighbors
- Tower location was selected to be as far away from the residential neighborhoods as possible
- All antennas shall be leg mounted rather than group mounted on multiple sector frame mounts
- Tower will not be lighted
The FAA gave their approval to the tower. Davis Monthan planners also reviewed the tower design. The DM planners came back with no concerns regarding the tower and its placement.

V. TOPSC Project Status Report  
Mr. Tony Aeilts, Tucson Police Department Communications

The City of Tucson began the planning and design process with the architectural firm (WSM). Meetings continue and the renovation project is moving forward.

VI. Radio System Project Status Report  
Mr. Karl Ryan, PCWIN Staff Office

A notice to proceed had been issued to five (5) of the City of Tucson sites for tower construction; however, a Stop Work Order was issued once the FCC found that the County was not in compliance with their requirements.

This past week, a Resume Work Order was given to two (2) of the City sites; Thomas Price Service Center (TOPSC) and Fire Station 17, as the FCC was satisfied with the County’s compliance. Resume Work Orders for Swan Road and Public Safety Training Academy are anticipated next week.

Over the past month, Staff released bids and awarded three (3) additional sites to International Towers; Keystone Mountain, Haystack Mountain, Beacon Hill. Staff is working with AECOM to finalize the SOW’s for Colorado Peak, Mildred Peak, and PECOC. Bids are expected to be released by November 11th with awards anticipated in December.

Staff is working with Motorola on radio and FCC filing for the licenses, which will be finalized within two (2) weeks. Motorola is working with another contractor to compile that application for the FCC license for radios. Staff anticipates submitting the application in January 2012.

Site Acquisition Update

Staff has submitted the necessary material for Confidence Peak to the Bureau of Land Management (BLM), although they didn’t have enough time to review the County’s documentation during their last meeting. The next review will be December 7th, and the County looks to receive approval for Confidence Peak to begin the bid process.

TEP is the County’s partner and lease holder of Confidence; they support the County and have assisted in moving the approval process.

Dr. Moffatt asks the Committee to begin thinking about the cutover date of November 2013. Several components on the project will begin their implementation and move forward quickly. He praises Karl Ryan in managing the schedule and appreciates John Bowers’ (Motorola) contributions to the PCWIN project.
Staff recently identified a conflict on Mount Bigelow, at the KUAT site, which may make the KUAT tower and building unusable for the project. Staff contacted KGUN-TV (another property owner on the site), who graciously agreed to consult with the County on sharing space on their tower and in their building.

The conflict had to do with radio output power, which conflicted with Motorola and KUAT antennas. Staff will meet with KGUN and move forward with the site.

*NOTE: Captain Wilson continues with Item XI.*

**XI. FCC Regulatory Issues**  
**Dr. John Moffatt, Pima County Strategic Planning Office**

Staff proceeded under the false assumption that we were in compliance with the FCC radio filings. NEPA studies and various cultural studies had to be done as part of the development prior to turning dirt. Staff issued a Stop Work Notice on the seven (7) sites in development until the appropriate documentation and filings were completed.

The Tumamoc Hill site requires an environmental assessment, which delays the overall project schedule. Staff is working with the FCC to gain access on the site to conduct work without disturbing the ground. Ms. Linda Mayro, of Pima County Cultural Resources, has been in contact with a number of agencies who must concur and sign off on the assessment before work can begin.

**Cost Impact**

Terracon’s contract has been increased by $90,000 to cover the FCC regulatory research and Staff has also retained legal counsel to give advice on FCC regulations, at a not-to-exceed cost of $50,000.

**VII. University of Arizona Dispatch Equipment**  
**Chief Anthony Daykin, University of Arizona Police Department**

The University of Arizona will expend approximately $250,000 to modify their building and accept the initial equipment. During the modification, the University found that they needed an additional dispatch console.

The University of Arizona is proceeding with a project to expand the equipment room that will house radio dispatch equipment for the PCWIN project. That project will also add furnishings for a fourth dispatch position in the police department’s dispatch center. UAPD has requested that the scope of work for the site specific agreement be modified to include provisions for the fourth dispatch position, which was not contemplated when dispatch equipment needs were specified during the purchasing phase of the radio project.

A fourth dispatch console, engineering, modification to console central electronics package, backup control station, accessories, and services are estimated to cost no more than $60,000.
UAPD recommends that the Committee accept the University’s request to seek a change order with Motorola to add a fourth dispatch console and backup control station to the University of Arizona dispatch center.

Motion

Mr. Hein motions to approve UAPD’s recommendations with a “not-to-exceed” amount of $60,000. Commander Larter seconds the motion. Motion unanimously carries.

Materials provided: University of Arizona letter to Captain Paul Wilson reference Additional Dispatch Console Equipment for the University of Arizona Police Department, dated October 26, 2011.

VIII. Logging Recorders
Lt. Mike Sacco, Pima County Sheriff’s Department Communications

Motorola’s contract includes provisions for the optional purchase of logging recorders. The procurement specifications defined the logging recorder requirements for the agencies operating out of the PECOC and TOPSC dispatch centers. Other remote dispatch centers and agencies were to provide their own radio communications and telephony recording solutions.

Motorola originally proposed a design with four logging recorders, two (2) each at PECOC and TOPSC to provide the redundant radio communications recording capabilities specified. They additionally proposed two separate logging recorders, one (1) each at PECOC and TOPSC to meet the telephony recording needs specified. The City of Tucson has since acquired a digital recorder that will be used to meet telephony recording requirements at TOPSC going forward.

A workgroup with representation from various agencies and dispatch centers met to review the logging recorder design to make recommendations for a final technical design. It was determined that the original design was not desired because it did not provide a recording solution to meet the needs of all of the radio user agencies and there was no good solution for the remote dispatch centers to provide recording options for radio communications without additional expense to each agency. A centralized recording option was explored.

The workgroup agreed that the originally proposed equipment could be reconfigured to provide an acceptable solution with no additional equipment required. Additional software licensing is required to facilitate remote access for end users. The proposed radio communications recording solution includes four (4) sixty (60) simultaneous conversation logging recorders, four (4) archiving interface servers, four (4) playback workstations, and one (1) NICE Inform Server. It is recommended that all recorders be installed at PECOC to establish a centralized recording solution. It is estimated that 12 NICE Inform Reconstruction licenses will be required to provide capacity for 12 concurrent logons for recorder access. This results in a centralized recording solution capable of recording every talk path in the system simultaneously and a capacity to retain the recordings for 200 days. This provides benefits to all of the radio user agencies, not just those operating out of PECOC or TOPSC.
The telephony recorder needs were not well known at the time of purchase. The vendors were given a basis of design to provide a proposal price. The number of channels to be recorded at PECOC was identified by the workgroup. The actual number is twice what was estimated during the procurement process. Although the equipment requirements for PECOC increased, there is an offset by the fact that the City of Tucson already purchased a telephony recorder for the TOPSC. PECOC will require a single 144 channel recorder with 128 channels of digital recording and 16 channels of analog recording for telephony and legacy radio system recording. This replaces two 56 channel recorders originally proposed.

To provide redundant off-line call logs from each of the recorders, a NICE Storage Center may be considered. This would provide 1.8TB storage capacity to exceed the 200 day retention requirements. Redundancy is recommended, but this solution is not proposed at this time. Pima County Information Technology Department would like to explore other options before making a recommendation.

**Recommendation**

Staff requests approval for the design changes at a cost of $20,005.71; approval for the software licensing at a cost of $20,103.48; and the NICE Storage Center solution at a cost of $36,143.70 at a later time. Pima County IT is researching options for redundancy, as there may be an opportunity for Pima County to provide the hardware and NICE could provide the software.

**Discussion**

Chief Daykin believes it makes sense to include the NICE Storage Center, as participants wouldn’t have to worry about redundancy at a later time. If the redundancy issue isn’t addressed, the Committee is moving forward without having that guarantee.

**Motion**

Division Chief Bynum motions to approve Staff to proceed with order of equipment and software for the radio communications logging recorder, and include the off-site storage solution to be coordinated with Pima County IT, at a not-to-exceed amount of $80,000. Chief Daykin seconds the motion. Motion unanimously carries.

Agencies are not required to purchase this equipment. Additionally, Captain Wilson notes that participating agencies will be able access their radio recordings even if their telephony recorder is not compatible with PCWIN, although participants will have to access two (2) different systems to get their recordings; one for telephone and one for radio.

**IX. Microwave System Project Status Report**

**Mr. Karl Ryan, PCWIN Staff Office**

**Schedule**

Our microwave vendor received their equipment in mid-September; staging the equipment to the various sites will be complete in January 2012, at which point Pima
County Staff will begin staging the network equipment. Once both are staged, testing and approval processes begin and will be complete by the end of February. Final completion is anticipated for November 2012.

**Additional Microwave Links**

Staff comes to the Committee to recommend the addition of two (2) microwave links to the overall design. Tumamoc to Walker, and Tumamoc to PECOC.

The original plan to help close the microwave loop was to use some equipment owned by the City of Tucson and to put in a new microwave link between Catalina and Sweetwater.

The plan was reconsidered and will now be located from Tumamoc to Walker, where construction has been completed. We will make use of the same City of Tucson equipment, although additional cost to enhance the equipment will be needed at a cost of $28,515.56.

Adding another link from Tumamoc to PECOC will help close a microwave loop and provides another level of redundancy for communications services into the PECOC facility, at a cost of $103,700.80.

**Recommendation**

Staff recommends the Committee approve both of the change orders at a total cost not-to-exceed $132,216.36.

**Motion**

Division Chief Bynum motions to accept Staff’s recommendations for additional microwave links. Commander Larter seconds the motion. Motion unanimously carries.

**X. Contracts/Agreements Status Report**

**Captain Paul Wilson, Pima County Sheriff’s Department**

County is in the process of negotiating numerous agreements and contracts on behalf of the PCWIN project. The Committee will receive a status report on the following agreements:

**University of Arizona Master Site Sharing Agreement**

Tumamoc Hill is progressing as the County finishes the FCC compliance and environmental assessment paperwork. The technical details have been worked out.

**Haystack**

The site agreements are approved with EPNG and our State Land Use Permit for the site has been approved. The County continues to work with EPNG and TEP on a Road Access Agreement.
Verizon Power Sharing Agreement (Beacon Hill)

A 3-way agreement between Verizon, County, and Marana has been approved by Marana Town Council, and the contract will go to the Board of Supervisors for approval in November. The County is in discussions with Verizon and Marana on how to supply power to the site.

Arivaca

The County’s Master Lease Agreement with GovNet has been approved. GovNet was given a Site Specific Agreement for the Arivaca site and Staff awaits their approval.

The County’s State Land Use Permit application has been submitted for approval to sublet space from GovNet, as well as GovNet’s commercial site lease application. The AZ State Land Department is reviewing the documents.

XII. Tumamoc Hill Site Development Status
Mr. Karl Ryan, PCWIN Staff Office

All workers on the Tumamoc site have to attend sensitivity training before they can conduct work on the site. The first training was on October 12th, and additional training dates are anticipated in early November.

Tumamoc is in the pre-construction stage; landscape trimming along the road access will commence, and a geotechnical survey will be completed. Additionally, the Verizon building demolition bid meeting is scheduled for November 15th. The building will have to be demolished prior to conducting archeological surveys required by the FCC.

XIII. Grant Updates
Lt. Mike Sacco, Pima County Sheriff’s Department

2010 UASI Grant - $900,000

This grant specified the purchase of 193 mobile radios and 194 portable radios at an estimated per unit cost. Not realizing the grant specified a specific type of radio platform, PCWIN ordered all mobile radios. AZDOHS only authorized the purchase of mobile radios: 195 for a total reimbursement cost of $545,354.55. We will request a one (1) year extension to the grant to allow us to purchase 148 portables.

2009 UASI Grant - $1.72M

This grant was originally intended to purchase microwave equipment but then modified to purchase radio fixed network equipment. With the modification, we also submitted an Environmental and Historic Preservation (EHP) review and we were granted a one year extension. Unknown to us and after a year, the EHP has not yet been approved and, as a recent development, AZDOHS is requesting additional information about the EHP – photos and lat/long for each location. To complicate matters, we recently became aware of a need to perform a NEPA evaluation, of varying granularity, for all the PCWIN sites. We requested a one year extension to allow us to fully complete the appropriate level of NEPA evaluation and allow AZDOHS to review and accept.
All DHS grants awarded to the Pima County Sheriff’s Department on behalf of the PCWIN project will undergo an audit on November 22nd.

XIV. Narrowband Update  
Ms. Catherine Hanna, Pima County Sheriff’s Department Administration

The PCWIN Executive Management Committee has directed staff to prepare and submit regional waiver request seeking approval to delay compliance with the narrowbanding deadline of January 1, 2013, until the PCWIN system is cutover to prevent PCWIN participant agencies from having to expend resources for the short-term benefit.

In order to prepare a complete and proper waiver request, additional information is needed. Larry Sayers has searched the FCC license database and has compiled a spreadsheet of frequencies licensed to each agency.

Participants will soon receive a cover letter, narrowbanding questionnaire, and a frequency spreadsheet for review, and are asked to answer the questions and fill in the necessary information to complete the waiver.

Ms. Hanna will email the packages early next week with a deadline date of November 21, 2011 to return the documentation. Questions are to be directed to Mr. Sayers, and returned questionnaires are asked to be returned to Ms. Hanna.

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

Captain Wilson refers to the Committee for New Business. He receives no response.

XIII. Call to the Public

Captain Wilson asks if anyone in the audience would like to address the Committee. Mr. Joseph Martinez requests that Staff include discussion and update the issues surrounding Kitt Peak and how it affects the Jewek site, and how it could potentially affect the overall costs to the participating agencies should the Nation not participate.

XIV. Date-Time-Location of Next Meeting(s)

Friday, December 9, 2011  
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 Daykin moves to adjourn the meeting. Division Chief Bynum seconds the motion. Motion is unanimously carries.

Meeting adjourns at 10:35 a.m.

Minutes prepared by: Catherine Hanna