

**PIMA COUNTY WIRELESS INTEGRATED NETWORK (PCWIN)
USER COMMITTEE / TECHNICAL COMMITTEE
JOINT MEETING**

Pima County Sheriff's Department
Administration Building, Sheriff's Operations Center, 3rd Floor
1750 E. Benson Highway, Tucson, Arizona
Wednesday, March 28, 2007
9:00 a.m.

SUMMARY OF MEETING

Note: The following is a summary of what transpired at the March 28, 2007 meeting.

- I. Call to Order:** Mr. Larry Sayers, Technical Committee Chair, calls the meeting to order at 9:10 p.m.

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

Quorum is established for the Technical Committee with a total of 9 members present.

Quorum is established for the User Committee with a total of 12 members present.

Members Present Technical Committee

Larry Sayers, Chair, Pima County Fleet Services
Rick Brown, Marana Police Department
Gary Bynum, Drexel Heights Fire District
Steven Campbell, Drexel Heights Fire District
Joseph Jakoby, City of Tucson IT
Pat Joy, Pima County Sheriff's Department
Ben Standifer, Tohono O'odham Police Department
Anita Velasco, City of Tucson Communications
Gregg White, Northwest Fire District

Members Not Present – Technical Committee

John Armstrong, Tucson Police Department
Ken Boynton, University of Arizona
Scott Ferguson, Pima Community College DPS
Harry Findysz, Mount Lemmon Fire District
Don Harrison, Tucson Airport Authority
Tim Hoban, Tucson Airport Authority
Greg Lugo, Tucson Police Department
Ted Martin, Pima County Sheriff's Department IT
Gregory McNeal, City of Tucson IT
John Moffatt, Pima County Office of Strategic Planning
Kerry Reeve, Pima County OEM
Gary Schmitz, Oro Valley Police Department

Others Present

Stella Bay, Pima College DPS
Steve Lanier, TAA Communications
Kevin Mayhew, Tucson Police Department
Tammy Vincent, Lockheed Martin

Members Present User Committee

Nancy Anderson, Oro Valley Police Department – Proxy
Linda Basham-Gilbert, Tucson Police Department
Gary Bynum, Drexel Heights Fire District
Shannon Collier, Sahuarita Police Department
Benny Gomez, Pima County OEM – Proxy
Charles Hangartner, Tohono O'odham Tribal Police
Matt Janton, Northwest Fire District
Hector Olivo, Pascua Yaqui Police Department
Todd Pearson, Tucson Fire Department
Mike Sacco, Pima County Sheriff's Department
Dan Simmons, Pima Community College DPS
Kevin Trick, South Tucson Fire Department – Proxy

Members Not Present – User Committee

Patrick Abel, Golder Ranch Fire District
Larry Anderson, South Tucson Fire Department
Paul Ashcraft, Marana Police Department
Lee Bucklin, Rincon Valley Fire District
Jim Bush, Ajo/Gibson Volunteer Fire Department
James Craig, Helmet Peak Fire Department
Harry Findysz, Mount Lemmon Fire District
Wren Keller, Corona de Tucson Fire District
Charles Kmet, Tohono O'odham Fire Department
Basilio Martinez, Pascua Pueblo Fire Department
Dan Morelos, Tucson Airport Authority
Tom Nix, Avra Valley Fire District
Luis Puig, University of Arizona Police Department
Kerry Reeve, Pima County OEM
Ernie Robles, Picture Rocks Fire Department
Larry Stevens, Oro Valley Police Department
John Williams, Three Points Fire District
Chuck Wunder, Green Valley Fire District

II. Approval of Minutes, Mr. Larry Sayers, Technical Committee Chair

Mr. Sayers asks members if there are any suggested changes for the February 28, 2007, joint meeting minutes. Ms. Joy moves to accept and approve the minutes and Mr. Trick seconds the motion. Motion unanimously carries.

Materials provided: User/Technical Joint Meeting Summary for February 28, 2007.

III. Tohono O’odham Nation Update Lt. Mike Sacco, Pima County Sheriff’s Department

Lt. Sacco explains that the Nation recently suggested changes to the MOU presented by Pima County, although those changes were deemed unacceptable by Captain Wilson. Captain Wilson will schedule a meeting with Nation and County representatives to discuss and resolve these issues in an effort to complete the MOU process and move forward with the project. Captain Wilson is currently on vacation and anticipates a meeting with the Nation during the week of April 2, 2007.

Lt. Sacco refers to Mr. Standifer to provide additional information to the Committees. Mr. Standifer explains that the Nation is looking forward to meeting with Captain Wilson to continue the project’s momentum and move forward with the project.

Microwave Project

Mr. Standifer explains that the Nation’s microwave project is progressing. The equipment has been purchased, although the Nation has to wait for the MOU resolution before equipment is placed on the site. The microwave project is anticipated to be completed by the summer.

Mr. Sayers refers to the Committees for questions. He receives no response.

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

Lt. Sacco explains that a final plan of direction has yet to be obtained regarding the \$1B interoperability grant funding, although awards will be filtered through the State. He adds that the MOU executed by the National Telecommunications and Information Administration (NTIA) and the U.S. Department of Commerce will empower the Office of Grants and Training to administer the Public Safety Interoperable Communications grant requirements to agencies throughout the State. Grant funding must be awarded by September 30, 2007.

Mr. Sayers refers to the Committees for questions. He receives no response.

V. Bond Ordinance Amendment Update Lt. Mike Sacco, Pima County Sheriff’s Department

Lt. Sacco explains that Captain Wilson had a meeting with the Bond Advisory Committee on March 16, 2007, to propose amending the Pima County Bond Implementation Plan – Ordinance No. 2004-18, pertaining to bond funding limitations for the PCWIN project.

If PCWIN were to receive federal funding, it could interfere with the bond dollars, which has a cap at \$105M. The Bond Advisory Committee was very supportive of this effort and has drafted language to recommend these changes to the Board of Supervisors at their next meeting on April 10, 2007.

Mr. Sayers refers to the Committees for questions. He receives no response.

**VI. Meeting with County Administrator & City Manager
Lt. Mike Sacco, Pima County Sheriff's Department**

Lt. Sacco explains that the County and City representatives met on March 5, 2007, to brief the County Administrator and the City Manager on the progress of the PCWIN project and to seek support of partnering agencies for use in future outreach meetings. Both managers expressed their support to fulfill the entire scope of the project and provided suggestions when handling the budget shortfall:

- Staff conduct further research to document current operations and maintenance costs of the legacy communications systems deployed by the partnering agencies to illustrate for each governing body the cost trade offs that might be realized by future commitment to PCWIN.
- Upon completion of the Business Plan, have staff conduct outreach meetings to inform the governing bodies of each of the participating agencies to seek their future support and participation followed by execution of MOU's.
- Explore the possibility of bringing the City of Tucson and County public works departments onto the PCWIN system, sharing some of the implementation costs.
- Staff appeal to the Arizona Legislature for future appropriation to support the project.

Mr. Sayers refers to the Committees for questions. He receives no response.

**VII. M.E.D.S. System Participation
Lt. Mike Sacco, Pima County Sheriff's Department**

Lt. Sacco explains that Asst. Chief Gary Bynum, of the Drexel Heights Fire District, has requested to discuss the M.E.D.S. System participation in the radio project, enabling communications between E.M.S. units and hospitals. It was proposed that PCWIN would place radios in the hospitals and assign them a talk group to permit communication. The current statewide M.E.D.S. System is UHF; PCWIN is planning for an 800 MHz voice system. This item was brought up at the last meeting, but Asst. Chief Bynum was unable to attend. As a result, the item was tabled.

Lt. Sacco states that he does not know how PCWIN will avoid UHF in M.E.D.S. vehicles. Asst. Chief Bynum states that his idea was to interface PCWIN with M.E.D.S. to allow agencies to contact agencies through PCWIN, utilizing voice and data. Current communication is "spotty" and cuts out.

Mr. Sayers clarifies that the idea is to provide M.E.D.S. vehicles and hospitals with PCWIN radios on the PCWIN system. Asst. Chief Bynum states that hospitals and M.E.D.S. vehicles may not necessarily need radios, but a possible link established to allow Pima County fire units to contact the hospitals. Asst. Chief Bynum adds that the Phoenix M.E.D.S. system is completely different than Pima County's M.E.D.S. system. Hospital contact in Pima County far exceeds contact in Phoenix.

Lt. Sacco asks how an EMS provider, in another part of the State, would communicate with those under the PCWIN system (800 MHz). Asst. Chief Bynum states that he doesn't see that as an issue, explaining that most agencies going into statewide response will have the necessary equipment.

Lt. Sacco clarifies that those units within PCWIN, with mutual agreements throughout the State, will have the responsibility to maintain that 450 radio. Asst. Chief Bynum agrees, explaining that the coverage anticipated under PCWIN will exceed the coverage a cell phone carrier can provide.

Lt. Sacco explains that he doesn't see a conflict with interfacing M.E.D.S. and PCWIN in the 700 MHz data network. Mr. Dye agrees and adds that there are a lot of fine nuances of technology which will need to be researched. Mr. Sayers asks if hospitals currently have data capability. Asst. Chief Bynum states that hospitals only have cell phone coverage and access to fax machines, which dial specific numbers. Asst. Chief Bynum explains that placing a bridge in between the UHF and 800 MHz systems will be the least expensive way for hospitals to receive communication from those on PCWIN. Lt. Sacco clarifies that hospitals will keep their 450 radios and will not be equipped with 800 MHz radios; interfacing will suffice. Mr. Dye cautions that data networking will be more involved than voice networking.

Mr. Sayers explains that this idea is technically feasible, although operationally complex. Ms. Giggetts explains that CTA focused more on the voice networking in the hospitals, as opposed to the data networking, under the Conceptual Design publication. Radio IP is available to switch from remote data systems to cellular systems, if needed. She adds that within the technical specification documents, PCWIN will ask vendors to provide their solutions and follow those with cost benefits. Ms. Giggetts will ask CTA's engineers to add detail to the specifications on this issue. Mr. Dye explains that he will draft questions for hospitals to answer, which will provide CTA with a better understanding of how they operate with M.E.D.S.

Mr. Sayers refers to the Committees for questions. He receives no response.

VIII. Concept of Operations / Consultant Engagement Status Report

Ms. Cheryl Giggetts, CTA Communications

Mr. Mike Dye, CTA Communications

Concept of Operations Presentation, Mr. Mike Dye

- Completed and delivered March 15, 2007
- Cover areas treated in the previous reports
- Goal is to be "Non-Technical"
 - Description of the Users Needs
 - Users desires and goals
 - Design constraints and strategies
 - How public service will be improved
- Design Constraints for Voice/Data, AVL, and Connectivity Network System
 - Frequencies and Restrictions
 - Available Sites, Terrain, and In-Building Needs
 - P.25 Technologies and Limitations
 - Re-use of existing resources

- Identified Best Solutions for Each
- Dispatch Constraints
 - Space required
 - Co-locating operations
 - EOC requirements
- Space Requirements to 5 Levels
 - Current
 - Immediate
 - Future
 - Training
 - Back-up
- ECC Back-Up
 - Cover all capacities
 - Operate in a “live” environment
- EOC Facility Requirements
 - Added space
 - Technology requirements
- Design Includes
 - Tucson module
 - Marana system
 - Mt. Bigelow / Mt. Lemmon
 - Countywide trunked sites
- Dispatch Operations Will Be Two (2) Locations
 - 22nd Street
 - Thomas Price Service Center
 - Each location will back-up the other
- Conclusions
 - The design has taken shape as a reasonable goal
 - Benefits can be achieved with the communities resources

Materials provided: CTA Communications’ Concept of Operations Presentation by Mr. Mike Dye, CTA Communications.

IX. Business Plan Presentation
Ms. Cheryl Giggetts, CTA Communications
Mr. Mike Dye, CTA Communications

Business Plan, Cheryl Giggetts

- Agenda
- Background – Mission
- Background – Objectives
- Background Participants
- Background – Project Phases

- Situational Analysis – Technology
 - User Needs Assessment Summary & Conclusions – Operational Requirements
 - User Needs Assessment Summary & Conclusions – Functional Requirements
 - User Needs Assessment Summary & Conclusions – Technical Requirements
 - User Needs Assessment Summary & Conclusions – Interoperability Requirements
 - User Needs Assessment Summary & Conclusions – Mobile Data & AVL
 - Legacy Systems Summary & Conclusions
 - System Alternatives & Recommendations Summary & Conclusions
 - Concept of Operations Summary & Conclusions
- Situational Analysis – ECC/EOC
 - User Needs Assessment Summary & Conclusions
- Procurement Strategy (currently under development)
 - Develop Procurement Documents
 - Issue Procurement Documents
- Implementation Strategy (currently under development)
- Governance, Management & Staffing Strategy
 - Technical and Maintenance
 - ECC/EOC Factors
- Risk Management Strategy
- Financial Strategy (currently under development)

Mr. Sayers refers to the Committees for questions. He receives no response.

Materials provided: CTA Communications' Business Plan Presentation by Ms. Cheryl Giggetts and Mr. Mike Dye, CTA Communications.

**X. Data Discussion – 700 MHz
Ms. Cheryl Giggetts, CTA Communications**

Ms. Giggetts explains that during the technical specifications phase of each project, CTA allows vendors to review client documentation (vendor review) to make certain that request items are feasible and available prior to going out for bid. Due to Pima County having its own Procurement process, CTA did not use vendor review as part of the PCWIN project. But while working with another client, utilizing the vendor review, concerns were raised over the design methodology used in the 700 MHz mobile data system.

Concerns

Ms. Giggetts explains that the 700 MHz system is divided into two (2) bands; narrowband and wideband. In January 2005, the FCC released a notice of proposed rule making, which adopted a standard, TIA-902, as a wideband interoperability standard. In March 2006, the FCC released another proposed rule making notice, which states that they encourage the use of 1.2 MHz broadband channels, which is compatible with CDMA broadband capacity, under the 700 MHz wideband; all of which is quite positive. These trends were encouraging high performance (better speeds) under the 700 MHz band, which is why CTA chose this band to use for PCWIN's mobile data system.

Ms. Giggetts add that very recently, the National Capital Region requested and was granted a waiver to operate a broadband network in DC, Maryland, and northern Virginia under the rules which are currently in place for our 700 MHz band. The National Capital Region just signed a contract for a wide area network under the 700 MHz band utilizing the CDMA 2000 1XEVDO (commercial cellular standard). In December 2006, the FCC released another notice of proposed rule making, which adopted certain elements of a petition by Siren Call Communications. This company establishes single nationwide broadband network, overseen by a non-profit organization.

Ms. Giggetts explains that we are beginning to see the FCC lean towards adopting a broadband allocation at the 700 MHz band, which will change the current regulations. In regards to PCWIN, when writing the mobile data specifications, CTA has proposed the 700 MHz with the option of an alternative 700 MHz narrowband channels or 800 MHz channels. This allows for flexibility and keeps vendors from feeling boxed in when competing for a contract. Ms. Giggetts explains that vendors sometimes have inside information in regards to the FCC and CTA does not want to procure something for PCWIN which will then become obsolete by implementation.

Ms. Giggetts stresses that CTA is still honoring their Conceptual Design for mobile data, but providing flexibility so vendors can explain what they believe is the best route for PCWIN. CTA will continue to monitor the FCC's changes and provide their findings to all Committees.

Mr. Sayers refers to the Committees for questions. He receives no response.

XI. New Business, Mr. Larry Sayers, Technical Committee Chair

Mr. Sayers asks if Committee members request agenda items for presentation at the next meeting. He receives no response.

XII. Call to the Public, Mr. Larry Sayers, Technical Committee Chair

Mr. Sayers asks if anyone from the public would like to address the Committees. He receives no response.

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

Thursday, April 26, 2007, 1:00 p.m.
Pima County Sheriff's Department
Administration Building, 3rd Floor
1750 E. Benson Highway

XIV. Adjournment

Asst. Chief Bynum makes a motion adjourn the meeting and Ms. Joy seconds the motion. Motion unanimously carries.

Meeting adjourns at 11:06 a.m.

Minutes prepared by: Catherine Hanna