

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

Pima County Sheriff's Department
Administration Building, Sheriff's Operations Center, 3rd Floor
1750 E. Benson Highway, Tucson, Arizona
Tuesday, September 11, 2007
9:00 a.m.

SUMMARY OF MEETING

Note: The following is a summary of what transpired at the September 11, 2007 meeting.

- I. **Call to Order:** Mr. Larry Sayers, Technical Committee Chair, calls the meeting to order at 9:03 a.m.

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

Quorum is established for the Technical Committee with a total of 15 members present.

Members Present Technical Committee

Larry Sayers, Chair, Pima County Fleet Services
John Armstrong, Tucson Police Department
Steven Campbell, Drexel Heights Fire District
Scott Ferguson, Pima Community College DPS
Don Harrison, Tucson Airport Authority
Tim Hoban, Tucson Airport Authority
Pat Joy, Pima County Sheriff's 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
Isaiah Twombly, City of Tucson Communications
Anita Velasco, City of Tucson Communications
Gregg White, Northwest Fire District

Others Present

Manny Barreras, Motorola
Paul Punske, Motorola
Paul Wilson, Pima County Sheriff's Department

Members Not Present – Technical Committee

Ken Boynton, University of Arizona
Rick Brown, Marana Police Department
Gary Bynum, Drexel Heights Fire District
Harry Findysz, Mount Lemmon Fire District
Joseph Jakoby, City of Tucson IT
Greg Lugo, Tucson Police Department
Ben Standifer, Tohono O'odham Police Department

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

Mr. Sayers asks members if there are any suggested changes for the June 27, 2007, joint meeting minutes. Ms. Joy moves to accept and approve the minutes and Mr. Martin seconds the motion. Motion unanimously carries.

Materials provided: User/Technical Joint Meeting Summary for June 27, 2007.

III. Nominations – Technical Committee Chair Captain Paul Wilson, Pima County Sheriff's Department

Captain Wilson explains that the By-Laws require the Committee to elect a chairman on an annual basis. Mr. Sayers' tenure has expired and Captain Wilson seeks nominations from the Committee on a new chairman. Captain Wilson adds that elections do not have to take place today; this item can be tabled until the Committee collects nominations.

Mr. Martin nominates Mr. Sayers as Chairman for the Technical Committee. Ms. Joy seconds the motion. Captain Wilson seeks discussion from the Committee. Mr. Sayers accepts the position of Chairman. Motion unanimously carries.

IV. Tohono O'odham Nation Update Captain Paul Wilson, Pima County Sheriff's Department

Captain Wilson explains that during the August 23rd Executive Management Committee (EMC) meeting, Committee members acted on a motion to exempt the Tohono O'odham Nation from further participation in the project, which gives direction to put together a package of information to send to the Bond Advisory Committee and Board of Supervisors to change the scope of the project.

The Executive Committee had lengthy discussion about entertaining the idea of allowing the Nation back into the project if they execute the MOU in a timely manner, although no deadline date was given. Captain Wilson explains that today's meeting will discuss ideas on how to deal with providing radio services to the bulk of the County if the Committee is unable to access the mountain sites on the Tohono O'odham Nation.

Captain Wilson states that the EMC's action was definitive, although the discussion made it less clear whether they were definitively excluding the Nation's participation. No further communication has been received from the Nation following the August 23rd meeting regarding MOU progress.

Mr. Sayers asks if the Nation would be invited back into the project if the MOU was signed two to three months from now. Captain Wilson states that the EMC would probably entertain that idea based on the August 23rd discussion, although a reasonable deadline has not been established. He adds that he has not prepared the paperwork for the Bond Committee, as of yet.

Dr. Moffatt states that according to a letter from the Nation's Chairman, the Nation was requesting two (2) additional months to resolve issues regarding PCWIN.

Mr. Sayers asks how this delay affects the Business Plan. Captain Wilson explains that it impacts the Business Plan because the document contains chronological information and carries maps, graphs, and charts detailing conceptual design systems. Additional modifications are forthcoming from the City and the County, but dealing with the Nation's uncertainty will need to be addressed.

Captain Wilson adds that he is currently creating an amendment to the Business Plan, which will carry forward the chronology which details the impacts of those changes.

Captain Wilson explains these delays also impact the RFP Specifications document. The Committees need to know if mountain sites will be readily available to vendors and if not, the plan will have to change before it is released for bid. Captain Wilson seeks a recommendation from the Technical Committee to the Executive Committee regarding the best alternative path to take if the Nation is not part of the project.

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

Captain Wilson explains that he is deeply saddened by what has recently transpired with the Nation. PCWIN had a goal of producing a radio system, which would provide countywide coverage and include the needs of 32 public safety entities. The Nation's exclusion is a step, which unfortunately had to be taken due to the lack of commitment on their behalf. The action was not taken without numerous efforts from the Committees and the Nation's police and fire departments, who have attempted to bring these issues to their elected officials for action.

Captain Wilson explains that the letter from the Nation's Chairman indicated that the Legislative Council needed more time to educate newly elected officials about the project, although PCWIN has never been placed on the Council's meeting agenda for discussion. It remains unclear if the decision makers will discuss this issue in the near future. Captain Wilson expresses disappointment and hopes the Nation returns to the Committee with support for the project.

V. Alternative System Designs – Tohono O'odham Nation Participation
Captain Paul Wilson, Pima County Sheriff's Department
Mr. Larry Sayers, Pima County Wireless Services

Mr. Sayers explains that he was asked to create alternative designs in the event the Nation does not participate with PCWIN project. Mr. Sayers begins with an overview of the Conceptual Design map; Figure 3-23 of the Conceptual Design document.

Captain Wilson explains that the biggest concern of the Nation is Kitt Peak. Each of the sites on the Nation have several entities who share responsibility for the mountain sites. Kitt Peak includes the local district, which has the responsibility of making development recommendations on the land. The district then makes recommendations to the Legislative Council, who makes the final decisions. Cultural and political decisions have made it difficult to allow for further development on Kitt Peak.

Regarding Quijotoa, the local district has been working for several years with the Legislative Council to approve a Site Management Agreement, giving the Tohono O'odham Utility Authority (TOUA) right to manage that site. Essentially, four (4) different entities have responsibility for facilities on Quijotoa:

- Quijotoa has a cinderblock building and equipment room, constructed and operated by the TOUA
- An antenna tower, constructed by the Nation's FM broadcast station
- Site itself, under the responsibility of the local district
- The Nation

The agreement has not been completed, although it has been in draft form for over four (4) years.

Captain Wilson explains that the conceptual design currently includes the use of the APS fiber network and their substations. An alternative to that would be to substitute use of the DPS microwave backbone.

Alternative System Designs

Mr. Larry Sayers, Technical Committee Chair

Topics discussed:

Option #1:

- **Original Design Elements Less Kitt Peak and Quijotoa Sites**
- **Substitute microwave link between Confidence Peak and Keystone**
- **May include a small system controller at the Ajo Substation in case the link was lost**
- **Users would still have radio service and coverage with connectivity back to Tucson**
- **Kitt Peak and Quijotoa could be easily added at a future date**
- **\$2,737,881.69 less than Conceptual Design**

Option #2:

- **Stand Alone System for Western Pima County**
- **Substitute microwave link between Confidence Peak and Keystone**
- **No connectivity back to Tucson**
- **\$3,390,841.69 less than Conceptual Design**

Option #3:

- **Expansion of Yuma Regional Communications System to Service Western Pima County**
- **Substitute microwave link between Confidence Peak and Keystone**
- **Yuma has a P25, 800 MHz radio system**
- **This option would use Yuma's system and controller in the Ajo area**
- **Microwave may be placed up to Oatman**
- **The Oatman site can eventually connect PCWIN to DPS**
- **\$800,000 grant funding (Stone Garden) will benefit Pima County and the border by connecting microwave links**
- **Additional funding may possibly come from the PSIC grant**
- **\$2,927,981.69 less than Conceptual Design**

Option #4:

- **Original Design Elements Less Quijotoa**
- **Substitute microwave link between Confidence Peak and Keystone**
- **Quijotoa site availability cannot be assumed**
- **\$2,227,099.44 less than Conceptual Design**

Mr. Sayers explains that Dr. Ken Ballard, of CTA Communications, recommended Option #1 for the project as it moves forward. Mr. Sayers states that PCWIN would provide a tower for Childs Mountain and have a microwave path to their Gila Bend site.

Captain Wilson states that when plugging the Nation back into Option #1, we will essentially have a holistic system for the County. Mr. Martin states that the goal of today's discussion is to make a recommendation to the EMC to move forward with the RPF.

Mr. Martin motions to recommend Option #1 with continued research with DPS to replace the APS Fiber loop with the State's microwave network. Battalion Chief Campbell seconds the motion.

Mr. McNeal requests clarification on Option #4. He asks if the intent of this discussion is to assist the City and the County to connect eastern and western Pima County or to include the Nation, at some point in the future, back into the project. Captain Wilson explains that the Committees have to assume that the Nation will not participate in the project.

Dr. Moffatt explains that the Nation struggles in deciding whether the two (2) mountain sites are appropriate for PCWIN's use. He adds that if the Nation executes the MOU and rejoins the project, these options will not be needed. Captain Wilson explains that the long-term goal would be to connect a Pima County system to Yuma, Santa Cruz, and Cochise counties. Option #3 would require PCWIN users be added to Yuma's system. Captain Wilson explains that Option #1 furthers the original goal of a countywide system.

Mr. McNeal asks how comfortable the County is with APS Fiber. Mr. Sayers states the APS is loop protected and has very high standards on their communications systems. If an issue arises, they have milliseconds to shut the system down. Mr. McNeal voices concerns on putting sole control into APS. Mr. Martin explains that the original conceptual design includes APS fiber; the only difference is that the reservation would not be part of the project, cutting those sites out of the design.

Mr. Sayers refers to the Committee for further discussion. He states that the Committee has a motion and a second and seeks a vote. Motion unanimously carries.

Materials provided: PCWIN Connectivity Design Options (1-4), presented by Mr. Larry Sayers.

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

Mr. Sayers asks if Committee members request agenda items for presentation at the next meeting. Dr. Moffatt requests that the next meeting include discussion on the DPS option. Mr. Reeve requests that the next meeting also include discussion on the AIRS Plan.

Mr. Sayers explains that the next meeting will include the User Committee.

IX. 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.

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

TBD

XI. Adjournment

Mr. Armstrong makes a motion adjourn the meeting and Mr. McNeal seconds the motion. Motion unanimously carries.

Meeting adjourns at 10:05 a.m.

Minutes prepared by: Catherine Hanna

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