

MINUTES OF THE
MARICOPA ASSOCIATION OF GOVERNMENTS
TELECOMMUNICATIONS ADVISORY GROUP

September 25, 2003
MAG Office
302 North First Avenue
Phoenix, Arizona

MEMBERS ATTENDING

Greg Binder, Phoenix, Chair
*Kevin Hinderleider¹, Avondale
✓ Jim Keen for Betsy Wise¹, Carefree
Joe Brugeman for Pat McDermott, Chandler
*Mike Ciccarone¹, Fountain Hills
*Shawn Woolley, Gilbert
*Ajay Joshi, Glendale
*John Imig¹, Goodyear
**Cary Parker², Maricopa County

Shirl Butler, Mesa
*Duncan Miller¹, Paradise Valley
*Ralph Spencer, Peoria
*Lester Godsey, Queen Creek
**Kevin Sonoda, Scottsdale
Randy Jackson, Surprise
✓ Dave Heck for John Laue, Tempe
Bruce Johnson, Tolleson
*Karen Strickland, ADOT
Randi Alcott¹, RPTA

*Members neither present nor represented by proxy.

OTHERS PRESENT

Tim Wolfe, ADOT
Dick Perkins, Arizona Department of Public Safety
Julie Crerand, Arizona State Retirement System
**Mark Goldstein, IRC
Linda Velazquez, Maricopa County Sheriff's Office
Mr. Loll, Maricopa County Sheriff's Office
Ken Reid, Rural-Metro
Dave Syms, Veleo, Inc.
Anabav Bagley, MAG
Debbie Kohn, MAG Telecommunications Assoc.

Heidi Pahl, MAG
Rita Walton, MAG
Valerie Day, MAG
Susan MacFarlane, Phoenix
Jerry Simpson, Phoenix
Jeff Miner, Phoenix
Tammy Deruiter, Phoenix
Liz Hunt, Phoenix
Bill Phillips, Phoenix
**Steve Brodsky, R.W. Beck

**Participated via telephone conference call.

✓ Participated via video conference call.

¹ = RVS Site Coordinator

² = RVS Backup Site Coordinator

1. Call to Order

The meeting was called to order at 10:05 a.m. by Chair, Greg Binder. Voting members Cary Parker, Kevin Sonoda, and proxy Dave Heck attended via telephone conference call and voting member Bruce Johnson and proxy Jim Keen attended via videoconference. All members and guests introduced themselves.

2. Approval of August 28, 2003 Meeting Minutes

It was moved by Randy Jackson, seconded by Shirl Butler and unanimously recommended to approve the August 28, 2003 meeting minutes..

3. Member Agencies and Public Safety Telecommunications

Greg Binder read a short biography of the guest speakers. Mr. Binder said that the first guest speaker, Liz Hunt is the new Community Emergency Notification System Program Manager. Previous to working with Maricopa Region 911, Ms. Hunt was with the City of Mesa as an Operations Supervisor in their Public Safety Communications Division. Ms. Hunt has been involved in dispatching police and fire for over 20 years.

Liz Hunt gave a PowerPoint presentation on the Community Emergency Notification System (CENS) project. She stated that CENS is a rapid notification system used to contact the public during emergencies. She stated that Maricopa 911 has partnered with Qwest to provide this service. CENS uses the 911 database to contact citizens by telephone.

Liz Hunt stated that funding for CENS came about because of an environmental lawsuit filed by the Arizona Department of Environmental Quality (ADEQ) against a private company. A portion of the financial judgement in the lawsuit was designated to put together a community emergency notification system in Maricopa County. ADEQ issued a Request for Proposals (RFP) to develop the CENS program and MAG was the successful respondent to the RFP.

Liz Hunt stated that CENS is made up of a 911 database, a voice message center, a web interface, an outbound calling platform, and an emergency call relay center. Ms. Hunt added that any emergency agency in the Maricopa region may use CENS. She explained that it is up to the field units to determine if notifications need to be done and that the CENS will be activated through the Public Safety Answering Points (PSAP) or the 911 Centers. Liz Hunt stated that the calls will be made using the 911 database and that when the field unit determines that notification needs to be made, a call is placed by the public safety agency to the CENS voice message center and sent through the notification system to the outbound calling platform and from there, the notification messages are automatically sent to the citizens in the pre-determined calling area. Liz Hunt explained that the web interface allows the PSAPs to send the outbound messages. She said that there are two emergency call relay centers in the nation; one in Denver and one

in Florida. Liz Hunt explained that the field units are police, fire, and emergency services personnel. She further explained that the 911 center calls a phone number and records the emergency message and then calls the notification system and sets the geographic parameters for the calls; then the CENS dials the phones and leaves the messages. Liz Hunt explained that all phone numbers are geocoded in the database. Liz Hunt stated that the CENS can send a 30 second voice message to 2,200 phones in one minute and that call lists can be developed in advance by specifying a certain radius or list of addresses or intersections. Liz Hunt stated that common situations where CENS could be used include weather emergencies, hostage situations and missing children. Liz Hunt added that the call list can also be done in real time and that the CENS can handle preplanned and dynamic situations.

Randy Jackson asked when CENS will be operational. Liz Hunt replied that simulation testing is underway this Fall, training will begin the end of October 2003 and CENS should be operational by December 2003. Randy Jackson asked if this will include all MAG PSAPs. Liz Hunt replied that it includes all MAG PSAPs and some others such as State agencies, and County Flood Control.

Joe Brugeman asked if a model policy has been developed for CENS. Liz Hunt replied that there is a CENS stakeholders group that is developing policies and addressing the financial impacts.

Cary Parker asked what departments from Maricopa County are involved in CENS. Liz Hunt replied that County Emergency Services, the Sheriff's Office and Flood Control are involved. Cary Parker asked if County Public Health is involved. Liz Hunt replied that they are not on the stakeholders group but can become involved.

Joe Brugeman asked how the notifications are broken down. Liz Hunt replied that CENS has a mapping component that allows notifications to be sent to only two houses or to the whole County and notifications can skip houses so as to avoid a house with a suspect in it. She added that notifications can be done by school district or zip code. Liz Hunt added that everyone who has a land line will be listed in the database.

Randy Jackson asked where the map information is from. Liz Hunt replied that the information is from the vendor and that as soon as a customer orders a land line, the number is geocoded and put into the database. Randy Jackson stated that he wants to make sure that new streets are added. Liz Hunt replied that when phones are moved or added they are included in the database and that is why this vendor was chosen.

Randi Alcott asked if MAG is running CENS. Liz Hunt replied that CENS is housed at Phoenix Fire Department and is a partnership between City of Phoenix and MAG. Susan MacFarlane added that Phoenix is the contracting agent doing the daily operations for MAG.

Greg Binder asked if CENS is the same as Reverse 911. Liz Hunt replied that Reverse 911 is a specific product but the concept is the same as CENS; CENS is a 911 database used to notify people of emergencies.

Jim Keen asked whether cell phones are recorded in the 911 database. Liz Hunt replied that they are not and that the State will tackle this issue in the future. Liz Hunt stated that there will be a need to educate the public that cell numbers are not included in the CENS database.

Kevin Sonoda asked if all telecommunications carriers are included in the CENS database. Liz Hunt replied that all carriers are included in the database.

Kevin Sonoda asked if an outbound follow-up call is conducted after the event. Liz Hunt replied yes it can be done and it is up to the agency who launched the emergency notification call. She added that the message could be to call a phone number or turn to Channel 3 on TV to educate yourself about the incident.

Kevin Sonoda asked for the cost of CENS. Liz Hunt replied that it is 23 cents per 30 second message call for every successful connection that is not a busy signal.

Kevin Sonoda asked if answering machine calls count as a successful call. Liz Hunt replied that the stakeholder group will decide this but that when an answering machine picks up and records the CENS message it is considered a completed call.

Kevin Sonoda asked what about caller ID. Liz Hunt replied that the machine will show “emergency message.”

Greg Binder thanked Liz Hunt for her presentation.

Greg Binder read the biography for the second guest speaker, Bill Phillips. Mr. Binder said that Mr. Phillips has worked in telecommunications and information technology with the U.S. Coast Guard for 22 years and the City of Phoenix for 9 years. Mr. Phillips is currently the Project Manager for the design, construction and implementation of the Phoenix Regional Wireless Network (PRWN), an 800 MHz, trunked radio system based on the Project 25 Standard. The network will provide public safety and municipal voice radio communications for Phoenix, and 17 surrounding communities. Mr. Phillips received a BSE from the U.S. Coast Guard Academy and a BSEE and MSEE from the University of Michigan.

Bill Phillips gave a PowerPoint presentation and showed a video on the Phoenix Regional Wireless Network (PRWN). Bill Phillips stated that Phoenix’ old communications network relied on 1950s technology and was no longer able to support operational needs. Bill Phillips stated that the current frequency channels were overloaded and no additional channels were available. Bill Phillips said that there was inadequate support for secure operations and that Federal Communication Commission (FCC) changes had increased the risk of communications interference. Bill Phillips stated that the Phoenix Regional Wireless Network was an informal partnership between Phoenix and Mesa that started in 1990 and in Mesa it is known as TOPAZ. Now a formal Intergovernmental Agreement (IGA) has been signed by both Phoenix and Mesa and the next step is to form the proposed Advisory Committees. Bill Phillips

explained that the PRWN includes 25 sites and 4 dispatch sites in Phoenix and 10 sites in Mesa. Bill Phillips explained that the basic system configuration is a hub in Phoenix with simulcast spokes in outlying areas such as Daisy Mountain, Sky Harbor, West Valley and others. Bill Phillips stated that the network streamlines frequency usage and maximizes frequencies' resources through a computer that assigns frequencies as needed so that multiple conversations can take place on the same frequencies. Bill Phillips explained that the network includes all departments in Phoenix and Mesa, Fire and Police in Gilbert, and Fire Departments in and other area cities. Bill Phillips explained that there are 35 network towers around the Valley and they allow roaming and simulcasting of transmissions. Bill Phillips stated that the benefits of the network are: improved and increased radio coverage in poor coverage areas such as inside buildings and behind mountains, increased reliability through a redundant wired and wireless system; available encryption for transmissions, no need for repeated transmission, clearer digital sound, has "Project 25" manufacturing standards that are used by multiple manufacturers, interoperability within and between cities, and future system expansion. Bill Phillips stated that the police pilot begins October 20, 2003. Bill Phillips explained that the network includes 17 fire agencies in the Valley and three police departments. Bill Phillips stated that the network is testing with DPS now and Glendale Police is pending. Bill Phillips added that they are looking at interoperability on a federal level with cooperation from the Public Safety Wireless Network.

Debbie Kohn asked when the network would be completed. Bill Phillips replied the end of 2005 for the initial participants but that it will be on-going as new participants are interested in joining. Bill Phillips added that the system is expandable and that 700 MHz will be available.

Randy Jackson asked if the videotape part of Mr. Phillips presentation is available for public use. Bill Phillips replied that it is.

Greg Binder thanked Bill Phillips for his presentation.

Greg Binder introduced Tim Wolfe of the Arizona Department of Transportation (ADOT). Tim Wolfe gave a PowerPoint presentation on the ADOT Freeway Management System. Tim Wolfe offered a tour of the ADOT Traffic Operations Center to any interested parties and said they could contact him directly at (602) 712-6622. Tim Wolfe stated that the Freeway Management System (FMS) includes loop detectors, cameras, ramp meters, message signs, pumphouse monitors and traffic signals. Tim Wolfe stated that there are four consoles; two in Phoenix and two in the rest of the State for the FMS. He noted that as new free ways are built, the "plumbing" for the FMS is added. Tim Wolfe stated that 15 - 20 miles of the FMS is planned to be built over the next five years and the goal is to complete the FMS along all of the freeways.

Tim Wolfe stated that the FMS is used for incident management to dispatch ADOT crews and work with DPS on incidents. DPS can see the same cameras as ADOT and help handle traffic accidents and incidents.

Tim Wolfe stated that the FMS is also used for traveler information. Tim Wolfe stated that 511 has been set up as the centralized, national number for traveler information by the FCC. Tim Wolfe stated that there is also a traveler information website. Tim Wolfe stated that in-vehicle information is the future. Tim Wolfe stated that az511.com uses still video and maps to provide information and the website is used for traffic reports. Tim Wolfe stated that 511 is a “brand” and that eventually all traffic management centers around the nation will furnish information to each other.

Tim Wolfe stated that FMS uses dedicated fiber to field devices. Tim Wolfe said that they are installing 96 fibers in all freeways and that node buildings provide redundant backbone. Tim Wolfe stated that AZTech goals are to get all AZTech cities on a fiber backbone and off of leased lines and to share traffic management center information with all cities and ADOT. Tim Wolfe stated that the future will include more and better remote, automatic traffic signal timing; smart corridors on city streets not just the free ways; the addition of outlying cities; and increasing private partners.

Tim Wolfe stated that, regarding the Regional Community Network (RCN) Study, ADOT issued a RFP for a design concept report. Tim Wolfe stated that the goal is to have plans ready so that they can move forward quickly if funding becomes available. Tim Wolfe stated that they are working on national standards for ITS equipment and software moving toward using more off-the-shelf and less custom software because off-the-shelf software is cheaper and more flexible.

Greg Binder asked for the benefits of traffic management. Tim Wolfe replied that one half of congestion is due to non-recurring incidents such as accidents and breakdowns and if they are cleared more quickly it helps remove congestion. Tim Wolfe stated that the FMS cameras are used to pinpoint incidents and dispatch help quickly.

Randi Alcott asked how 511 is being used. Tim Wolfe replied that people can dial 511 from their phone to get the latest traffic information for their area. He added that the format is changing and callers will be able to choose more specific stretches of the freeway system and there will be more sources of information. Tim Wolfe stated that a major media blitz is planned for late 2003 or early 2004 for the 511 system, including radio, TV, billboards and message signs.

Mark Goldstein asked if Tim Wolfe had an update on the ADOT Shared Right-of-Way (ROW) project. Tim Wolfe replied that the law allows ADOT to exchange the use of the ROW for a comparable benefit and that ADOT is working with Tempe, Mesa and Phoenix to allow them to access to ADOT ROW in exchange for traffic information. Tim Wolfe stated that ADOT had done an RFP for private vendors but that both chosen vendors went out of business. There is little private interest in the project now.

Mark Goldstein asked about metro, short haul or rural outreach. Tim Wolfe replied that ADOT is building out its fiber backbone now and the interest is statewide. Tim Wolfe stated that there is not much of a benefit now to exchange ROW with the private sector.

Greg Binder thanked Tim Wolfe for his presentation.

Mr. Binder introduced the final guest speaker, Mr. Dick Perkins, who has been the Information Technology Manager at the Arizona Department of Public Safety (DPS) for approximately 18 months. Prior to accepting the position at DPS, Dick Perkins worked at the Arizona Game and Fish Department for 5 years. Dick Perkins has worked in public sector environment in various positions in Phoenix and Tucson since 1979. He is a graduate of The University of Arizona, College of Business, MIS major.

Dick Perkins gave an oral presentation on the conversion of the Criminal Justice Information System (CJIS) network to Internet Protocol.

Dick Perkins stated that DPS deals with all criminal justice agencies and the network provides a pathway to disseminate CJIS information. Dick Perkins stated that several cities have contacted DPS to ask how they can become CJIS members. Dick Perkins stated that there are approximately 270 criminal justice agencies that need to be converted to a digital network. DPS is converting their analog network to digital but they need more funding to complete the project.

Dick Perkins stated that the new network would be better encrypted at 128 bit to meet the FBI requirements. He added that the deadline for the conversion of the network is September 2005. Dick Perkins stated that it would cost approximately \$2.3 million to convert all of the agencies. Dick Perkins stated that they have received a homeland security grant for part of the conversion and that DPS will provide the computers, software, virus protection software, network connections, and communication path such as T-1 or 56K Frame Relay circuits, or broadband/cable modem or DSL using a virtual private network to secure the data. Dick Perkins stated that they are trying to share data seamlessly and openly like what is being done for voice communications. Dick Perkins stated that XML is the new language that will be used to enable data sharing. Dick Perkins stated that DPS is also working on its internal network conversion with the remainder of the funding.

Dick Perkins stated that there are three networks in place: Arizona Fingerprint Identification System, the internal DPS network, and the Southwest Border States, Criminal Information Sharing Alliance. Dick Perkins stated that there is a need to consolidate these networks and circuits into one more manageable network. Dick Perkins stated that DPS is also working on converting legacy mainframe applications.

Randy Jackson stated that he appreciated working with Dick Perkins on the City of Surprise conversion and that the challenges are substantial but achievable as they move toward a converged network. Randy Jackson stated that the outside deadlines are influencing planning. Dick Perkins stated that DPS is working on a plan to prioritize agencies and funding for the conversion.

Randy Jackson asked where DPS is at on the dual factor authentication. Dick Perkins replied that they are working with Georgia Technology Research Institute (GTRI) and will have an estimated date by the end of 2003. Dick Perkins stated that the Southwest Border State agencies will be using the Neoteris

product via a virtual private network. Dick Perkins added that the product is browser-based and a rainbow ID key token will be used for secondary authentication.

Randy Jackson asked how field equipment concerns will be addressed. Dick Perkins replied that security of a wireless network is a challenge and they are doing a pilot now. Dick Perkins added that telecommunications coverage is a concern, there has been a problem with authentication, and therefore DPS is requiring agencies to update their interface packets. Dick Perkins stated that agencies should have an agreement with their wireless vendor because DPS cannot recommend a 'specific' vendor.

Cary Parker asked for the name of the security product. Dick Perkins replied that it is Neoteris and that a google search on the Internet could be done to get more information on the product. He added that the product is well recommended by Metadata and Gartner Group.

Kevin Sonoda asked if Dick Perkins has looked at Fortress technologies. Dick Perkins replied that they did not.

Greg Binder thanked Dick Perkins for his presentation.

4. MAGTAG Working Group Projects

Debbie Kohn provided a Digital Oasis Working Group update. She reported that the draft RFP for the Digital Oasis project has been written and approved by the Digital Oasis working group. Debbie Kohn stated that at the group's direction, MAG staff is researching the possibility of utilizing existing proprietary databases in order to expedite the data gathering component of the project as well as for on-going maintenance of the project data. Debbie Kohn stated that MAG staff has talked with CoStar and LoopNet and is in discussion with other sources of commercial building inventory data. Debbie Kohn reported that several members of the Digital Oasis working group viewed a presentation by CoStar following the September MAGTAG meeting. Debbie Kohn stated that the outcome of this research will determine whether additional changes are needed to the draft RFP. Debbie Kohn stated that once the RFP language has been finalized, it will be reviewed by the MAG attorney and that upon approval, advertisement of the RFP will begin.

Heidi Pahl stated that as part of the Additional Sites and Outreach Project, the next step in purchasing the Polycom phones is the letter of authorization from MAG to each member agency. Ms. Pahl explained that the letter for the Polycom phones will be sent to the IT Director at each member agency, and the MAGTAG member, city manager, intergovernmental coordinator and site coordinators will be copied on the letter. She noted that the letter would be signed by the MAG Executive Director and would be mailed out mid October. She said that the letter asks each member agency to send MAG a letter of authorization if they would like a Polycom phone. In the letter, they are to agree to keep it in a secure location and provide technical support to setup the phone. She reminded the group that if the agency does not want to

pay for an analog line to connect to the phone, then they can keep the phone in the videoconference room where there is currently an analog phone line.

Randy Jackson gave an Information Sharing Working Group update. He reported that the Information Sharing Working Group met this month to plan for upcoming MAGTAG presentations. Randy Jackson stated that due to schedule conflicts of some of the speakers, the Group has swapped the topics for September and October. October's topic will be cyber security. The working group has confirmed presentations by Tom Liffiton of the FBI, Gail Thackeray of the Arizona Attorney General's Office and Jerry Crow of EDS Enterprise Information and Technology and the Arizona Telecommunications and Information Council (ATIC) Cyber Security Co-Chair. Randy Jackson asked MAGTAG members to invite their staff who may be interested in cyber security to attend October's meeting on Thursday, October 23rd at 10:00am.

Randy Jackson reported that November's meeting topic will be Homeland Security and the working group has invited the State's Homeland Security Director, Frank Navarrette, to speak. The working group would like to have one of the MAG member agencies give a presentation also. Randy Jackson stated that if anyone is willing to speak to MAGTAG on this topic, please let him know as soon as possible and that if anyone has suggestions for other Homeland Security speakers, the working group would like to hear about it too.

Randy Jackson reported that the tentative topic for December's MAGTAG meeting is Wireless Technology and that if anyone has any ideas for specific aspects or speakers to please let him know.

Randy Jackson stated that the Information Sharing Working Group is looking for more members and that the time commitment is about 1-2 hours per month. He stated that the goal is to present topics and share information and best practices that are of interest to MAGTAG members. Randy Jackson stated that if anyone is interested in being on the working group to notify him or Heidi Pahl.

Mark Goldstein asked for the date of the wireless topic. Randy Jackson replied that it is planned for December. Mark Goldstein stated that Arizona State University will have a wireless event on November 17, 2003. Randy Jackson stated that the group is looking at incorporating information from the event into the MAGTAG presentation.

5. Announcements and Public Input

Heidi Pahl reported that there were three speakers at the ATIC public meeting on September 18th. She stated that the topic of the ATIC public meeting was Telecom Technology Development & Transfer in Arizona Driving Telecom Industry Growth. She stated that Kevin O'Connell of the Arizona Department of Commerce presented the executive summary of a paper called, "Positioning Arizona and its Research Universities: Science and Technology Core Competencies Assessment." The paper was prepared by the Batelle Memorial Institute and is available on the Arizona Department of Commerce website. Heidi Pahl

stated that Kevin O'Connell also spoke about recent efforts of the Governor's Council on Innovation and Technology's Advanced Communications and IT Roadmap Sub-Committee, a summary of what Chris Cummiskey addressed at the last TAG meeting.

Heidi Pahl reported that the second speaker was Nancy Welch of the ASU Morrison Institute. Ms. Welch spoke about how Arizona fares in science and technology related to economic development. Heidi Pahl stated that Nancy Welch presented information on Morrison's recently released reports "Seeds of Prosperity: Public Investment in Science and Technology Research" and "Economic Development Via Science and Technology: How Can Arizona Improve Its Standing?"(<http://www.asu.edu/copp/morrison/Science-TechnologyReport.pdf>) Heidi Pahl stated that she has a copy of the second report, "Economic Development Via Science and Technology: How Can Arizona Improve Its Standing?." Heidi Pahl stated that this report identifies Arizona's strengths and weaknesses and it compares Arizona's readiness to prosper from economic growth in science and technology sectors with that of the States of California, Colorado, Utah and Washington. Heidi Pahl stated that Arizona currently ranks 18th in science and technology which is pretty good for the 50 States but not so good when you think that Arizona's greatest competitors, California, Colorado, Utah and Washington placed 3rd, 2nd, 9th and 6th. Heidi Pahl noted that the report explains what the leading states in science and technology have done to get their first-tier standings. The case studies of the successful states focus on current tax and fiscal trends, education, and special programs for high tech business development. The one thing that the four successful states have in common is federal investment in defense and space that stimulated a high concentration of knowledge workers. The reports lists five things Arizona can do to improve its standing in science and technology. This report is available on the Morrison Institute website.

Heidi Pahl reported that the third speaker was Dr. Sayfe Kiaei, Director, of ASU Connection One and that Connection One is a National Science Foundation Industry/University Cooperative Research Center established by the Arizona State University College of Engineering and Applied Sciences (CEAS). The primary focus of Connection One is on communication circuits and systems to enable higher integration and smaller communication devices to facilitate system-on-a-chip (SOC) (<http://www.connectionone.org/>). Heidi Pahl reported that Dr. Kiaei presented on ASU's research initiatives in radio frequency integrated circuit (RF IC) design, communication systems, and signal processing, technology transfer opportunities and successes.

Heidi Pahl reported that on November 17th, Connection One is hosting an Arizona Wireless Expo from 9:00am - 1:30pm at the Arizona Historical Society. It will showcase the most innovative, leading-edge technologies in the wireless world. Heidi Pahl reported that she would have more information on this event by the next TAG meeting.

6. Date of Future Meetings

Greg Binder stated that the next MAGTAG meeting will be October 23rd with an information session on Cyber Security and asked if MAG can provide approved minutes to today's panelists. Heidi Pahl replied yes.

The MAGTAG meeting was adjourned at 11:55 am.