UWIN Utah Wireless Integrated Network

Technology Steering Committee

MEETING MINUTES
Friday October 26, 2004
Salt Lake City
DPS Conference Room
10:00 am

Attendance:

Tim Slocum (State Corrections)	Doug Chandler (State ITS)
Scott Mattson (South Salt Lake PD)	Lloyd Johnson (State DNR)
Boyd Webb (State ITS)	Paul Chavez (Utah National Guard)
Merv Gustin (Duchesne County SO)	Lee Lelley (Utah National Guard)
Forrest Roper (Millard County SO)	Brent Thomas (State DES)
Glen Murray (Tooele County SO)	Lou Little (State DES)
Jake Hunt (UCAN)	Tim Cornia (State DPS)
Jeff Stork (State ITS)*	

** Teleconferenced*

I. Mobile Data Subcommittee

IPMobileNet has received type-acceptance for the 700MHz base stations and mobiles. Many agencies are opting to order the 128K speed up-front, even though the initial system will support 33K. The upgrades are firmware (no hardware to deal with). The equipment is starting to ship now. Initial testing will begin in the Wasatch Front ASAP.

II. Applications for Mobile Data

Phil Bates pointed out that the mobile data network controllers will be located at the State Office Building and the Richfield Alternate Site. Mobile traffic will touch these two points before traversing any other points of the state network or internet. Phil is working with ITS on a 'Server Farm' at both of the network controller locations. An application such as FATPOT would not have to traverse (use up bandwidth in) the state's network since its server would be co-located with the mobile data controller. Messaging would never hit the state's WAN. The Server Farms will require working with vendors such as PSI and Spillman.

Once the mobile devices are installed, we can start pilots for turning the vehicle into a 'hot-spot' for 802.11 devices, or any other similar technologies. This will be a natural integration for incident command. Phil discussed Mesh Networking, where each device (i.e.: 802.11) becomes intelligent and will allow one 802.11 device to connect through several other intelligent devices to get back to the mobile data device or hot-spot. This is basically mobile routing. There are several companies coming out with products, but we would like to end up with an open-source product for interoperability and lower cost.

The rates that have been approved for the new statewide mobile data network:
$15/month - network user fee
$53/month - lease the radio (includes user fee)

DPS is working on standardization for information packets between CAD servers. XML will be the standard. This will allow a user to stay in his own application and send/retrieve information

to/from other applications. Records can be passed between agencies, eliminating multiple entries for the same incidents. Phil anticipates that by the 1st or 2nd quarter of 2005, most of the vendors will be compliant with the XML standard.

III. Omni-Link Interoperability

St. George was brought onto Omni-Link two weeks ago. One interesting thing that was learned; All of the assets of one dispatch center can be seen and controlled by any other connected center. This can include relay controls such as jail doors. The centers that have upgraded to the correct version of Motorola hardware/software have successfully groomed such controls away from the console positions. Motorola is doing research to see if individual assets (i.e.: jail doors) can be blocked. In the test with St. George, it was determined that in the event of an evacuation, it would be useful to allow Cedar Dispatch to control access to the building.

Conventional 800MHz installs are moving forward. The Vernal center will be connected to Omni-Link soon. Box Elder should be connected in January. Discussions are moving forward with San Juan, Grand, and Logan/Cache. The Idaho and Utah troopers are requesting a BIM-BIM connection to help with interoperability now.

The resources on the Zone A controller do not have direct access to the resources on the zone B controllers. Patches will have to be established for this.

IV. Narrowband Migration

Boyd Webb presented a PowerPoint overview of the FCC mandate to migrate to narrowband channels in the VHF and UHF bands. The Narrowband Migration project team has been doing bench testing to determine the effect of a wideband portable communicating to a narrowband base station (and vice-versa). The preliminary results show that it can be done, allowing for a migration period without having to turn systems over simultaneously.

The main goal of the project team is to establish a document for migration standards. FCC Docket 99-87 created the narrowband mandate. The docket has been out for public comment since last February. The FCC has stayed the date for wideband applications. They had previously ruled that they would no longer be accepted. We have not yet heard how long this stay will remain in effect.

- Effective January 1, 2005 the FCC will no longer certify (type accept) new equipment that has *any* 25KHz (wideband) mode.

- Effective January 1, 2008 the FCC will prohibit the manufacture or importation of radios that can operate in the wideband mode.

- Effective January 1, 2018 the operation of 12.5 KHz (narrowband) channels will be mandatory for public safety systems.

In the migration plan, the team has listed every single frequency and identified it as narrow or wide band. The costs for an agency to migrate to narrowband are based on many variables. Each case will have to be looked at individually.

The impact of narrowbanding may cut current VHF coverage by as much as 25% for each station. The State Repeater System (SRS) base stations have been replaced with stations that are capable of narrowband. Most of the Law Enforcement System (LES) is currently being changed out.

There is a specific issue related to paging. There are a handful of 25KHz channels set aside for paging. The FCC is looking at setting aside more, but existing VHF paging systems may need to change their frequencies.

There was a lot of discussion about the financial impact of the recommendations of the Narrowband Migration Project Team, as well as the exploration of alternatives:

- Should existing VHF systems be upgraded or replaced by 800MHz trunking?
- What is the cost per agency to migrate their radio fleets?
- What is the cost for the entire state (global financial scope)?
- What is the acceptance level of the reality of this 'mandate' from agencies?

To address these new issues will significantly impact the scope of the Narrowband Migration Team's original instructions. Boyd agreed to start moving in the direction of gathering information relative to this new scope.

V. Next Meeting

Friday December 10, 2004
10am - noon
Provo Regional Center, room 1800
150 East Center

http://uwin.utah.gov