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## SunGuide<sup>SM</sup> District 4 Pre-Deployment Site Visit Meeting Minutes



Friday, September 17, 2004, 12:30 PM to 2:15 PM EDT Ft. Lauderdale, District 4 CDRL 1-8.2.11

#### **Attendees:**

Liang Hsia, FDOT Robert Heller, SwRI
David Chang, PBS&J Steve Dellenback, SwRI
James Bitting, FDOT Steve Corbin, FDOT
Dan Baxter, PBF Dong Chen, FDOT

Charles Wallace, PBF

Bo Quan, HNTB

Jim Reynold, PBF

Jim Mosser, PBF

Sunil Mehta, Video Convergence

Kendra Blackford, Turnpike
Ranzy Whittacker, Turnpike
Blair Marsden, Kimley-Horn
Eric Pokrajac, DMJHarris
Raja Viswanatham, Video

Convergence

**Subject:** District 4 Deployment Site Visit

**Note:** Agenda and slides for each agenda item are available from the project website at:

http://sunguide.datasys.swri.edu

#### <u>Item #1 – Purpose of Meeting</u>

• Steve Dellenback described that the development team wanted to gain an understanding of what timeframe ITS devices would be available for deployment of the SunGuide<sup>SM</sup> software for the planned November software deployment.

#### <u>Item #2 – ITS Devices to be deployed and their Availability</u>

Note: the following items were discussed. The comments below are not in linear order of discussion because the discussion went around in several circles. The comments below represent the perspective gained by SwRI.

- DMS
  - o D4 currently has Mark IV DMS devices deployed.
  - o Signs are connected using two fiber based serial multi-drop lines or modems
  - The CCTV contractor indicated that they planed to use the SAME fiber that the DMS's are multi-dropped with to implement Ethernet connectivity to the DMS hubs. SwRI asked how the same fiber could be used to support both serial multi-drop devices and Ethernet. After extensive discussion the CCTV contractor

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realized that they would need to use a separate fiber or convert all of the DMS devices to TCP/IP connected – the final resolution of this is to be evaluated by the CCTV contractor. SwRI stated that the SunGuide<sup>SM</sup> software would support either using multi-drop or TCP/IP connections for DMS devices.

#### CCTV

- The CCTV project (contractor is Video Convergence which is a Cornet company) has submitted their 60% design submittals. They expect to delivery their 100% submittals by mid-October.
- o First camera should be available in December 2004
- "Sections" (the CCTV contractor is implementing sections this terminology describes a logical grouping of ITS devices) will be available in the April 2005 timeframe (this would provide DMS, CCTV camera, and Wavetronix devices). Other 3 sections should be complete by June 2005.
- o CCTV contractor presented a plan of attaching the "data line" (for PTZ control) of the camera to the serial port on a VBrick encoder. The contractor thought that this would provide TCP/IP access to the data line SwRI made the point that this was not correct and that the VBrick serial port was for IP pass through and required a VBrick decoder to send the serial data this does NOT provide TCP/IP access to the camera. Extensive discussion on this topic occurred it is not clear if SwRI was believed (although SwRI has this equipment in the lab and has exercised this capability). The CCTV contractor will look at other codecs (e.g. iMpath) as possible alternatives and will provide in their October submission. SwRI stressed that a number of hardware solutions could be used but that the SunGuide SM software REQUIRES TCP/IP access to the CCTV devices it is to control.
- O They are currently "leaning" towards Vicon cameras because they are NTICP compliant. SwRI discussed the issue of Vicon compatibility with the NTCIP standard (that Vicon is using the 1999 version of the standard that is V1.07 and the current standard and SunGuide software supports V1.08). There was significant discussion about what "compliant with NTCIP" means. The bottom line is that is was clearly stated by SwRI that the SunGuide software will support NTCIP V1.08 and we have proved in the labs that the Vicon camera is not compatible. SwRI recommended that FDOT pursue this issue with Vicon if the 100% submittals are based on Vicon cameras.
- Some CCTV hubs would be co-located with DMS hubs but in some cases separate hubs would be deployed (plans are in progress).

#### • IP-Video Hardware

- D4 will have a single decoder in the building for "short-term" CCTV
  demonstrations. In the long run, they plan for NO video decoders to be in the
  building (they will use the video decoding of the Barco/Argus wall only).
- o For the short term D4 plans to use 16 PCs (old ones they have) to connect to the 16 monitors in the control center (the 16 on the left side of the video wall) to perform software decoding of the D6 and other IP video sources.
- Barco/Argus Video Wall (Apollo software):

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- No support for Video decoding exists in the current Barco / Argus wall (will not be done until sometime in 2005).
- O D4 plans to upgrade their video wall which currently has 16 analog monitors on the left, a Barco/EOS wall in the middle, and 16 analog monitors on the right (the right side is dedicated to Broward County) to an entire Barco / Argus video wall (i.e. the 32 analog monitors will be removed and upgraded to be a Barco/Argus wall).
- Wavetronix RTMS devices
  - o They are deploying Wavetronix devices for detection
  - o The "coverage" area of a Wavetronix device is limited by lanes (max of 8), width of median and expected detection zone.
  - o For planning purposes, they will use a single Wavetronx device when 4 or less lanes need to be covered, more than 4 lanes they will use multiple devices.
  - o Final configuration will be in upcoming submittals.
  - o CCTV contractor plans to provide TCP/IP access to Wavetronix devices they will use some type or port server to provide this access (specific plans TBD).
- EIS RTMS devices:
  - o No plans to deploy these devices
- BiTrans B238-I4 devices
  - o No plans to deploy these devices

#### Item #3 – Network Topology and ITS Device List

• Items for this topic were covered in item #2 above

#### <u>Item #4 -- SunGuide Testing and Deployment Process</u>

• This item was not explicitly discussed during the meeting since it was extensively covered in the September 17, 2004 status meeting.

#### Item #5 – Open Discussion

- Splicing of fiber between D4 and D6 is actively underway. Problems with the fiber have arisen because of:
  - o Homeless person lit a conduit on fiber
  - o A truck took out a cabinet and 50 feet of cable
  - o Should be fixed in the next couple of weeks
- February is the current timeframe for a planned grand opening this would imply no CCTV at the grand opening this date is flexible and may change.
- SwRI summary of the hardware available for deployments (no person at the meeting voiced any objections of different opinions):
  - o November or December 2004:
    - DMS (Mark IV signs) it was noted that the communication to the devices may be changed to TCP/IP
  - o June 2005 (date could vary):

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- NTCIP CCTV cameras
- Barco / Argus video wall
- Wavetronix RTMS detectors
- Note: D4 does not believe they will use standalone decoders so no plans to deploy the video switching software will be made
- Tours of the facility were performed to see what hardware changes were being made.

### **ACTION ITEMS**

Numbering of Action Items is based on all action items identified on the SunGuide project.

Number	Responsible	Text	<b>Due Date</b>
1	FDOT	Provide SwRI with an electronic copy of the District 4 conceptual hardware drawing labeled "BCITSOF FDOT ITS Systems" dated August 30, 2004.	9/24/2004