



Meeting Notes

Change Management Board



Document Title

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May 22, 20112 – 1:30 pm to 4:30 pm

Prepared for:

*Florida Department of Transportation
Intelligent Transportation Systems Program
605 Suwannee Street, M.S. 90
Tallahassee, Florida 32399-0450
(850) 410-5600*

List of Acronyms and Abbreviations

AVL	Automated Vehicle Location
C2C	Center-to-Center
CMB.....	Change Management Board
CO	Central Office
ConOps	Concept of Operations
COTS	Commercial Off-the-Shelf
DMS.....	Dynamic Message Sign
EM.....	Event Manager
FDOT	Florida Department of Transportation
FHP	Florida Highway Patrol
FL-ATIS.....	Florida Advanced Traveler Information System
FTE	Florida Turnpike Enterprise
GUI	Graphical User Interface
HAR	Highway Advisory Radio
IE.....	Internet Explorer
MDX	Miami-Dade Expressway Authority
OIS	Office of Information Systems
ONVIF	Open Network Video Interface Forum
OOCEA.....	Orlando-Orange County Expressway Authority
RCA	Remote Control Application
RR	Road Ranger
SPARR.....	Smart Phone Application for Road Rangers
SSUG	SunGuide Software Users Group
SwRI	Southwest Research Institute
TMC.....	Transportation Management Center
WPF	Window Presentation Framework

Florida Department of Transportation
CHANGE MANAGEMENT BOARD MEETING NOTES
Tuesday, May 22, 2012
1:30 P.M. to 4:30 P.M
Rhyme Building, Room 330 Tallahassee, Florida

Attendees:

Elizabeth Birriel, CO	Gene Glotzbach, CO	Arun Krishnamurthy, CO
Chris Birozak, D1	Donna Danson, D2	Pete Vega, D2
Mark Nallick, D3	Chad Williams, D3	Dong Chen, D4
Neena Soans, D4	Mike Smith, D5	Alejandro Motta, D6
Javier Rodriguez, D6	Terry Hensley, D7	John Easterling, FTE
Eric Gordin, FTE	Ivan del Campo, MDX	LA Griffin, OOCEA
Mark Laird, AECOM	Dee McTague, AECOM	David Chang, Atkins
John Hope, Atkins	Jo Ann Oerter, Atkins	Clay Packard, Atkins
Marie Tucker, Atkins	Rebecca Bratcher, Clear Channel	Ryan Crist, Clear Channel
Penny Kamish, Clear Channel	Santos Morin, Clear Channel	Jason Summerfield, Clear Channel
Cathie McKenzie, Gannett Fleming	Dave Howell, HNTB	Craig Carnes, Metric
Jill Dawson, Metric	Chris Botti, SwRI	Tucker Brown, SwRI
Robert Heller, SwRI	Frank Deasy, Telvent	

Purpose: The purpose of this meeting was to review and vote on statewide issues and requirements, and review footprints issues.

Welcome and Call for Quorum: Change Management Board (CMB) Chairman Javier Rodriguez opened the meeting at 1:30 p.m. A quorum was established. He briefly introduced the objectives of the meeting.

Previous Meeting Recap and Action Item Review

- Arun Krishnamurthy to send Terry Hensley the *SQL Storage Guidelines* document. – **Complete.**
- Districts to review Footprint 1744 suggestions and provide comments for finalization. – **Discussed in meeting.**
- Southwest Research Institute (SwRI) to provide cost estimate / description for making separate templates for AMBER, Silver, and LEO alerts. – **Discussed in meeting.**
- SunGuide[®] Software Users Group (SSUG) to discuss Open Network Video Interface Forum (ONVIF) and requirements for video decoding. – **Discussed in meeting.**
- A. Krishnamurthy to send ONVIF requirements and cost estimate to Districts. – **Complete.**

- SSUG to discuss bulk update automated vehicle location (AVL)-Road Ranger (RR) solutions. – **Discussed in meeting.**

Agenda Items

Intelligent Transportation Systems Wide Area Network Update

Frank Deasy stated that a visit was made to Florida Turnpike Enterprise (FTE) a few weeks back and progress was made, but Central Office (CO) now owes FTE some items. The connection of Districts 1 and 7 is pending some final splicing; the preliminary test looks good and the detailed tests are currently being analyzed. The connection of District 6 to the Traffic Engineering Research Laboratory is in place. CO is currently working on the fiber connection to the State Emergency Operations Center. The connection to the District 3 transportation management center (TMC) in Pensacola is complete, but extensive filtering is being done and CO is assisting. However, there are some configuration issues that District 3 will have to address. He continued to state that there is no update on the Florida Highway Patrol (FHP) computer-aided dispatch; it is available to all Districts connected to the wide area network.

SSUG Update

John Hope discussed the major items from the last SSUG meeting. He started by discussing the center-to-center (C2C) issues and stated that SwRI is handling this on a case-by-case basis. The suggestion has also been made to setup a test environment for upgrades to C2C so it can be tested before going live. He went on to review the remaining items:

- Video encoder / decoder plans – CO has collected various plans that some Districts had for encoders and decoders.
- Event type flag recommendations – This will be a voting item on the next agenda.
- Highway advisory radio (HAR) and SQL storage guidelines feedback – CO collected some feedback regarding these guidelines and is currently finalizing the comments.
- SSUG charter document – Atkins is currently drafting a document to specify the charter for the SSUG; it will be provided to the SSUG for review and comment.
- Zero speeds and occupancy issue – This is an old issue and has generally not been a problem, but was brought up to see if there were any issues in the Districts; it was decided that CO would provide some recommendations.
- Additional user permission per device and roadway - It was suggested that if additional permissions were added, it would assist operations; this will be discussed at future SSUG meetings.
- AVL-RR mobile reconnect issues – This will be discussed later in the meeting.

J. Hope went on to state that there is a link to the SSUG notes if anyone would like further detail. J. Rodriguez asked if there were any other items that needed to be brought to the CMB for

approval and J. Hope responded that other items are currently being worked on and are not ready for approval at this time.

Event Type Mapping

J. Hope reviewed the proposed changes to the event type flags and J. Rodriguez called for a vote.

Event Type Mapping – Vote:

District 1: Yes	District 2: Yes
District 3: Yes	District 4: Yes
District 5: Yes	District 6: Yes
District 7: Yes	FTE: Yes
CO: Yes	MDX: Yes

Video on Desktop

Clay Packard stated that the initial work was previously voted on, but wanted to provide an update. Originally, Lee County requested the video on desktop, but it would benefit all of the users. There have been some struggles with choosing the application to display video on the computer screen, but District 4 came up with a scope and is currently working with CO. The Concept of Operations (ConOps) has been updated and CO wanted to review it with the group. C. Packard then reviewed the changes made to the ConOps and stated that this will be an enhancement to the operator. Pete Vega asked if this was a commercial off-the-shelf (COTS) package and C. Packard responded that the user interface will be custom, but the media player is COTS. P. Vega stated that he wanted to clarify and make sure that there will be no license fees and asked if there was a limit to the number of cameras displayed. C. Packard stated that it was discussed how many images could be displayed, but it really depended on your computer configuration to determine how much video can be run. P. Vega then stated that this is a good selling point for local agencies to start using the SunGuide software. T. Hensley asked if there would be a drain on network resources, requiring a need for additional computer resources. Robert Heller stated that there will be some drain on the central processing unit. A. Krishnamurthy stated that most of the streams are already on the network so you are just tapping into them. T. Hensley then asked how the Florida Department of Transportation (FDOT) was recovering costs from local agencies. A. Krishnamurthy stated that when a local agency wants to use SunGuide software, they contribute toward the support which is currently \$50k per year. T. Hensley continued to state that this could move us away from using video walls, but consider if we want to use it for existing users. A. Krishnamurthy stated the he was under the impression that existing users wanted this option as well and then asked if anyone knew if operators were currently viewing cameras on their computer screens. District 5 stated that their operators currently view video on their computers. J. Rodriguez stated that District 6 also views video on the computer and that he was unsure of the cost, but it should be discussed at a later CMB meeting. A. Krishnamurthy followed up by stating that CO does not know the cost either;

District 4 has a scope for this application, but there are some proposed modifications to make it more user friendly. When the cost estimates are received they will be shared. P. Vega asked if there was a way to package and resell what is being described and R. Heller stated that the problem with reselling it is that the video local are network client would get into licensing and patent issues. A. Krishnamurthy stated that he has talked to other state agencies and also Office of Information Systems (OIS) and there will be no issue with it being used by FDOT and for local agencies.

Bulk Update AVL RR

Tucker Brown stated that this issue was discussed at the last CMB meeting and then reviewed the issue again. He then discussed the proposed solution, which is bulk position update messages and status updates. If this is approved it will be in Release 6.0 and will cost \$10K to update along with the Smart Phone Application for Road Rangers (SPARR) update of \$2.5K. Mark Laird asked if the bulk update was going to get the District data quickly. T. Brown responded that when you send in a message with the current and bulk updates, the current updates will be done prior to the bulk updates. M. Laird stated that this was good as long as the most recent is updated to the map. C. Packard stated that the channel processing the most current updates is only shown on the map. Neena Soans then asked if the last-in first-out (LIFO) would solve the problem without the bulk updates; C. Packard responded that this would minimize the number of individual transmissions and the LIFO would take longer to recover. He went on to state that if the batch option is used there is no concept of LIFO because there is only one message to process, and with the LIFO option, all the messages come through the same channel and you have to make sure how they are sent and the batch option is more effective. A. Krishnamurthy asked why the batch option would not meet the needs of users and M. Laird stated that he does not agree that it does the same thing. A. Krishnamurthy stated that the most recent message comes to the map and the large message goes to the subsystem and database. T. Brown stated that there was no way to prioritize the thread, but they are going in on separate threads. C. Packard stated that the bulk message will not hit the graphical user interface (GUI) and the current updates go the GUI virtually concurrently. The clients will send the most recent updates only and the old updates go through the bulk update. A. Krishnamurthy stated that CO felt the delay was minimal and unidentifiable and asked if SwRI agreed. T. Brown confirmed that there should not be any reason why they should not be concurrent.

Bulk Update AVL RR - Vote

District 1: Yes	District 2: Yes
District 3: Yes	District 4: Yes
District 5: Yes	District 6: Yes
District 7: Yes	FTE: Yes
CO: Yes	MDX: Yes

Need for SunGuide GUI Update

A. Krishnamurthy discussed the need for a SunGuide GUI overhaul. This started with the need to move the admin editor to the operator map, but the current admin editor has limitations. Moving the admin editor into the operator map would resolve a lot of problems associated with it. The second key issue is the use of Internet Explorer (IE); there have been some tests as to how long it takes IE to load a page versus using Window Presentation Framework (WPF). Using WPF would be more efficient and IE also has a lot of quirks. If we undertake this enhancement, this would touch a lot of interfaces. This could be an opportunity to redesign the GUI. He then went on to discuss some of the proposed modifications, such as tabbed GUI, ribbon style menu structure, and dock and pin screens. We could get a consistent look and feel, which SunGuide does not currently have. The cost and effort is unknown at this point. The two key changes would be to move the admin editor and migrate from IE to WPF; this would require the software to be installed at every TMC computer rather than be browser based. R. Heller clarified that installing the software would be done by accessing a web site and downloading the software; you do not have to manage the software as it will let you know when updates are available. M. Laird asked if the user would need administrator access and R. Heller responded no.

Vehicle Alert Templates

T. Brown discussed the problem and the solution to this issue. The templates do not match the event type and the solution is to create three event types. Vehicle alerts would cease, but would still be in the database. There would be the ability to create a template for new event types. Then he reviewed the GUI changes. The cost for this upgrade is \$10K and would be in Release 6.0.

Vehicle Alert Templates - Vote

District 1: Yes	District 2: Yes
District 3: Yes	District 4: Yes
District 5: Yes	District 6: Yes
District 7: Not present	FTE: Yes
CO: Yes	MDX: Yes

Dynamic Message Sign Blanking

T. Brown discussed the problem that when a dynamic message sign (DMS) loses communication with SunGuide software, the reported message cannot be changed until communication is restored, which can cause the sign be out of sync. The proposed solution is that when communication is lost, the sign will blank and when communication is restored, SunGuide software will ensure that the current message on the message arbitration subsystem queue matches what is displayed on the sign. This is scheduled to be in Release 5.1.1. M. Laird stated that this is a good upgrade and, for Florida Advanced Traveler Information System (FL-ATIS), it might be more responsive if the sign failed, for the message to be pulled from the sign—especially for Districts who do not have 24/7 coverage. District 6 asked what will happen when a sign is tied to an event manager (EM) response plan. T. Brown stated that he thinks it would

cause the sign to blank in the SunGuide software and FL-ATIS. District 6 followed up by stating that when the event is closed the communication would state the sign is blank and T. Brown confirmed.

DMS C2C for Orlando-Orange County Expressway Authority

T. Brown described this issue: when attempting to control another SunGuide software installation, the C2C DMS control is limited to a partial set of DMS functionality, such only having the ability to modify messages if you posted them. He then went on to describe the possible solutions, which are to expand C2C command / control or to use the application from Texas Department of Transportation, known as the remote control application (RCA). He then described some implementation issues—if this is done before Release 6.0, existing HTML / Java Scripts will have to be re-implemented in Release 6.0. Also, if this is included in Release 6.0, it will push the schedule further out for development. The recommendation is to start the development after Release 6.0, which will also allow SwRI to develop this against the new GUIs. SwRI's recommendation is to use RCA, the cost will be \$66K and will be in the release after 6.0. A. Krishnamurthy added the reason this is being discussed is because District 5 often manages DMSs for the Orlando-Orange County Expressway Authority (OOCEA) system; when they are managing an event they have to login to the OOCEA system as well as the District 5 system. Therefore, they are having to maintain two systems. M. Laird asked if the RCA was going to be just for DMS control. T. Brown responded that it would almost be like a subsystem with the ability to control DMSs, but other systems could be implemented at a later date. Eric Gordin asked if SwRI knew what the GUI was going to look like. T. Brown stated that from a design standpoint it would be recommended to use a tree structure. J. Hope asked if District 5 would like to control OOCEA DMSs, would the OOCEA DMS need to be included in the District 5 response plan. T. Brown confirmed yes.

DMS C2C - Vote

District 1: Yes	District 2: Yes
District 3: Yes	District 4: Yes
District 5: Yes	District 6: Yes
District 7: Not present	FTE: Yes
CO: Yes	MDX: Yes

Update on Upcoming SunGuide Software Releases

R. Heller gave a status update for Release 5.1.1 and Release 6.0 development status. He continued to state that Release 5.1.1 should be released to the Districts in July 2012, and Release 6.0 should be complete by the second quarter of 2013. A. Krishnamurthy stated that he wanted to add this agenda item because CO thought the Districts would appreciate an update on the upcoming releases.

Top Priority SunGuide Software Items by District

A. Krishnamurthy reviewed the items that were discussed at the previous meeting.

District 7 – Floodgate issue: issue is in the monitoring mode to see if it happens again.

OOCEA – C2C for DMS; discussed in current meeting.

District 1 – Footprint 722: Turn lane in EM: Some updates have been made to the footprint to address the complexity of the issue and further communication is needed with District 1.

FTE – Short name and long name configurable for email: The upgrade will be in Release 5.1.1.

FTE – Rich email text: This issue is still being investigated.

New Issues:

District 1: There has been some discussion about possibly getting text-to-speech in the floodgates; not sure if this has ever been discussed or is even a possibility.

District 2: P. Vega asked about including signals in SunGuide software and stated that Transportation Systems Management and Operations is getting more involved, so it will be needed. A. Krishnamurthy stated that CO will look into this and start some discussions. P. Vega then asked if there were any plans for road weather information systems or Bluetooth in SunGuide software. A. Krishnamurthy stated that District 4 currently has a scope out to include Bluetooth in SunGuide software. He continued to state that you are currently able to get the data either with raw data and then process it, or you can let the vendor process the data and receive it through C2C. District 4 is planning on getting a C2C connection with TrafficCast so they can process the raw data.

District 4: N. Soans asked about grouping devices as they are configured in SunGuide software. A. Krishnamurthy stated that he will discuss this with SwRI and it might be an agenda item at the next meeting.

District 6: M. Laird requested to have a web page that would list the hot fixes and what was included in them. C. Packard mentioned that this will be coming soon. M. Laird stated that recently District 6 is having a problem with older signs and they do not seem to be able to handle every minute updates. This issue just came up today and a footprint has been created (FP2274).

FTE: E. Gordin stated that FTE has been having a lot of problems with the calculation for miles ahead on DMSs and the operators have to manually edit the miles. There is an existing footprint for this problem.

Miami-Dade Expressway Authority (MDX): Ivan del Campo stated that MDX is going for approval for a statewide implementation of color DMSs and will be a high priority for SunGuide software usage.

Action Item Review

- 1) CO to propose ONVIF voting item at future CMB meeting.
- 2) CO to discuss device grouping for partitioning for permissions at future CMB meeting.
- 3) CO to propose GUI overhaul with cost / schedule at future CMB meeting.