



**STMCSLS KICKOFF MEETING**  
**November 13, 2003**  
**FDOT Burns Building Auditorium**  
**Tallahassee, Florida**  
CDRL 1-8.2.1

**8:30 to 4:30 PM EST**

**Attendees:**

Chester Chandler, FDOT	Susan Crumrine, SwRI
Liang Hsia, FDOT	Steve Dellenback, SwRI
Nick Adams, FDOT	Tammy Duncan, SwRI
Ingrid Birenbaum, FDOT	Robert Heller, SwRI
James Bitting, FDOT	Hebbani Lokesh, FHWA
Tahira Faquir, FDOT	Jacinda Russell, FHWA
Gene Glotzbach, FDOT	Ivan Del Campo, MDX
Jesus Martinez, FDOT	Gregg Letts, MDX
Larry Rivera, FDOT	Mike Howarth, Intelligent Devices
Scott Silva, FDOT	Bryan Mulligan, Intelligent Devices
Pete Vega, FDOT	Walt Townsend, ITS Siemens
John Bonds, PBS&J	Frank Deasy, PB Farradyne
David Chang, PBS&J	Walter Kraft, PB Farradyne
Lisa Hapney, PBS&J	John Schumitz, PB Farradyne
David Jones, PBS&J	Charles Wallace, PB Farradyne
Arun Krishnamurthy, PBS&J	Ron Meyer, South Atlantic Traffic
Samhita Rajashekar, PBS&J	Ranzy Whiticker, Turnpike
Paul Waton, PBS&J	

**Subject:** Kickoff Meeting for STMCSLS

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

<http://stmcsls.datasys.swri.edu>

**Item #1 – Introduction**

- Chester Chandler provided a welcome and introduction.

**Item #2 – Project Team Structure**

- Steve Dellenback provided an overview of the SwRI / PBF team structure.

**Item #3 – License Discussion / Software Baseline**

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- MOU between FDOT and TxDOT supercedes sublicense with SwRI, but sublicense will still stand (at least for the short turn).
- Pete Vega – how will SwRI handle software distribution? Liang Hsia / Chester Chandler – want change management implemented. Susan Crumrine noted that the sublicense agreement requires distributions to be tracked (and reported to TxDOT). John Bonds suggested some technique to “register” licenses will be implemented.
- John Bonds - not clear that ramp meter software is separated from what PBF will be developing (the license situation was clarified). Liang Hsia - license requirements question and asked for a copy of the license terms. Charlie Wallace indicated that the license would have been more restrictive than what it currently is.
- Liang Hsia - noted that FDOT owns the majority of the modules compared to TxDOT.
- John Bonds - How much work has been done on CCTV subsystem so far? (answer: porting from the TransGuide UNIX platform to the FDOT windows platform is being performed) 360-surveillance? (answer: none – not in SwRI’s scope of work).
- Liang Hsia - schedule: what is been started? Steve noted that all modules that are marked as reuse (for Release 1) have had development efforts initiated.
- John Bonds - wants to make sure SwRI have a design review before too much code is written. Steve Dellenback clarified that SwRI is currently converting CCTV from Unix to Windows right now, not making enhancements. SwRI expects modifications to be made later after further discussions. Liang Hsia questioned process. Steve Dellenback specified that SwRI is doing exactly what SwRI said in the negotiations; requirements will need to be discussed soon. Steve tried to distinguish between modifications to scope versus agreed-upon plan, and how they affect schedule – need to make decisions soon, and in the meantime, SwRI is moving ahead (aggressively) according to schedule. Liang Hsia concurred. John Bonds wants more detail in schedule. SwRI is adding it, but also advises that everyone meet to discuss things more often.
- Liang Hsia - make sure that FDOT expertise is incorporated into plans for development (Release 2a). Steve stated that SwRI needs to have quite a bit of discussions in order to gather requirements for 2a tasks. Steve also mentioned that SwRI needs to have small working sessions (rather than presentations) for requirements gathering.
- John Bonds - trying to understand CCTV subsystem and how it interacts with other components. Steve Dellenback provided input as to how the subsystem interacts with the STMCSLS. Gregg Letts - will permissions be used? Yes – a four tiered security model is being implemented. FDOT asked about custom code for encoders/decoders? (answer: hardware function, no STMCSLS software is required). How does one get one camera to display in a certain place? (answer: through the video switch).

### **Item #4 – Budget / Work Plan**

- John Bonds - why does Steve Dellenback think FDOT is not comfortable with decision for system to be browser-based. Steve says he just wants it documented and that SwRI is being cautious.

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- John Bonds – What work will be done for each deployment ? SwRI - for each deployment, SwRI will develop a plan based on a site visit. There is also an overarching plan for each release. John Bonds would like that text added to final work plan. SwRI agreed to add additional detail. FDOT needs lead time to order equipment in time.
- Will STMCSLS support new drivers years in the future? (How flexible will system be?) SwRI – absolutely - room for discretionary modifications in contract, subject to scheduling issues and FDOT approval.

### **Item #5 – Staffing Plan**

- SwRI indicated that because FDOT dropped some functionality from the original ITN and because of the six month delay, SwRI changed staff – should have published resumes and will be included in the updated staffing plan.
- John Bonds - How does FDOT know SwRI is CMM Level 3? SwRI explained the process of hiring an assessor and performing a CBA-IPi assessment.
- John Bonds - PBF drops off after release 2a. What if SwRI need PBF during support phase? SwRI indicated that they can extend contract with PBF if needed.

### **Item #6 – FDOT Schedule Critical Milestones**

- Detection and video decisions will be known in Feb 2005 for District 5.
- Jesus Martinez - concerned that PBF will be gone when go online with Ramp Meter (Jul 2005); this is when FDOT District 6 will be ready for STMCSLS integration. SwRI / PBF will re-evaluate.
- John Bonds – asked about milestone demos? Steve Dellenback explained that they were expensive, only one was included in the SwRI BAFO. Could have status demos at district offices. Jesus Martinez suggested that FDOT come to SwRI during ITS America 2004 for demonstration. Tahira Faquir – no CCTV at milestone demo? (answer: depends on when the demo occurs).
- James Bitting - want input on how to deploy to D7 in ~Sep/Oct 2005 timeframe. Steve Dellenback indicated that SwRI can deploy 2a in to several sites concurrently.
- Jesus Martinez – suggested that SwRI incorporate MDX into C2C test (between District 6, MDX, and District 4).
- Center-to-Center discussions – Steve Dellenback suggested that the STMCSLS ICD be used (based on the TxDOT C2C ICD) for all districts, not just those falling under STMCSLS. John Bonds - what if the RTMCs do not all use TCP/IP? SwRI indicated that TCP/IP is a “given” in any network. Frank Deasy – was not aware of the STMCSLS C2C plans; need to have discussions with SwRI (and FDOT) to hash out direction. Jesus Martiniez – asked if the C2C ICD needs to be modified for FDOT? Steve Dellenback indicated probably not. Also, if not using the STMCSLS ICD, FDOT will need to do ICD conversion to go from one ICD to the STMCSLS ICD. Gregg Letts - asked why does TxDOT not have full camera control on ICD? Steve Dellenback indicated that it does. However, it does not have exchange of motion video because the ITS standards do not support full motion video.

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**Item #7 – SwRI Schedule Discussions**

- David Chang – asked why are client meetings scheduled for 2 years only? Robert Heller described that after a 2-year period, release 2b will be done. After that, monthly status meetings will not be cost-effective; therefore, they should probably drop-off. May still want monthly deployment meetings though. SwRI will put these in if FDOT wants them, but they will cost money that might be better used elsewhere.
- John Bonds - what will FDOT receive for Release1? Robert Heller explained the planned deliverables: installation CD, Version Description Document, Code, Training, Installation Instructions, Software User Manual, Test Report, etc. Acceptance Test will be at SwRI (per negotiations).
- FDOT asked that training to be done at installation site. SwRI asked to define “install” versus “deployment”: install is partial deployment. Release is not final until deployment is complete. To meet budget (during negotiations), SwRI cut back on training; there will be more full-scale training after 2b.
- Question asked: Does FDOT need training in order to do Acceptance Testing? Train for each deployment, or do once before testing? Train-the-trainer before deployment; one person from each district.
- John Bonds - what is done with FDOT comments for one-time deliverables? Robert Heller indicated that some deliverables do not call for comments, but Robert Heller adjusted schedule for some of them to allow for revisions. John Bonds - what about comments that SwRI disagree with? Steve Dellenback suggested that SwRI should make comment process less formal – pick up the phone. John Bonds - is documentation that SwRI asked for excessive? Steve Dellenback said no, but maybe the method should change; it is not simple to respond to comments formally. Liang Hsia prefers written exchange so that remarks are visible to everyone. Steve Dellenback and Susan Crumrine suggested that both SwRI and FDOT talk first, then write responses formally. For telecoms, issues = agenda, comments = minutes (general agreement on this approach).
- Jesus Martinez - wants Ramp Meter deployment around Jul 2005, rather than September as scheduled (SwRI will re-evaluate schedule).
- John Bonds- release 2b acceptance test = final system acceptance test? Rober Heller indicated yes, SwRI assumes an independent agency will produce test plan against system requirements.

**Item #8 – General Schedule Discussions**

- Steve Dellenback indicated that after September 2005, can schedule deployment for anyone (considering costs).
- Tahira Faquir asked after Release 1 deployment, how does she get Release 2a and 2b? Robert Heller indicated that BAFO costs cover single deployment for each district; if SwRI and FDOT need to do this differently, FDOT has to adjust monies (can be covered as “support”). Tahira Faquir asked if her staff be able to handle the upgrades?

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Steve Dellenback suggested yes, there might be some configuration issues; maybe they can be handled over the phone.

- Jesus Martinez – does SwRI want to do real C2C test in the field? Robert Heller indicated that release 2a has C2C test with Tallahassee. Steve Dellenback indicated that SwRI has very extensive labs (including some TxDOT systems) that will be used for testing.
- Jesus Martinez – suggested that FDOT send 1 or 2 staff members to San Antonio and they could train the rest (e.g., train the trainer). Robert Heller thought this would work. Steve Dellenback suggested they come over while they are at ITS America; unofficial demonstration plus maybe training.
- Frank Deasy - what is communication to field devices? Steve Dellenback indicated that SwRI needs to understand how they are being deployed. The STMCSLS software is pretty much topology independent.

### **Item #9 – Project Risks**

- John Bonds – indicated that the risks presented were “generic” risks. Wants to focus on “real” risks and provide more detail. Wants to manage them with some tool. Steve Dellenback believes the risks presented are real and need to be tracked at the level presented. FDOT / SwRI to further discuss.
- John Bonds - FDOT should verify protocols (make sure FDOT is using the same firmware that SwRI is coding to).
- Liang Hsia – FDOT has sent comments about C2C needing to be added to risk management. SwRI will add.
- John Bonds asked what if you do not get a timely response from FDOT? Steve Dellenback indicated SwRI would continue but changes could be required.
- Chester Chandler – clarified that the schedule should not slip because someone does not respond to an email. **PICK UP THE PHONE AND TALK!**
- John Bonds asked if SwRI uses a database to track risks? Steve Dellenback indicated that a spreadsheet is used.

### **Item #10 – Concept of Operations**

- John Bonds - clarified that the Data Bus is a push/pull. Each site needs to consider its own concept of operations. Will SwRI have a standard questionnaire? Steve Dellenback indicated that SwRI will come up with questions. Robert Heller indicated that this would be a part of system integration plan.
- Jesus Martinez - criticality of data bus. SwRI indicated that the architecture is consistent with what is used at TransGuide and the TxDOT C2C software infrastructure.

### **Item #11 – Preliminary Requirements Review**

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- John Bonds – Does RequisitePro generate a traceability matrix showing parent-child relationships. Wants to make sure this can be generated. Steve Dellenback indicated yes, Rational SODA generates Word document from RequisitePro requirements.
- Steve Dellenback proposed informal sit-down discussions with end-users/operators to gather requirements vs. (or in addition to) formal SRR. Liang Hsia still want statewide consensus (SwRI agrees). Steve Dellenback would like to have requirements discussions in early December (suggested 10<sup>th</sup> and 11<sup>th</sup>). Jesus Martinez thought this was a good idea. Pete Vega thought this was a good idea. James Bitting would like to attend meeting for other districts to listen and provide input. Proposed: 12/10: am-Miami/Tampa/MDX, pm-Broward County 12/11: am-Orlando/Jacksonville, pm-Turnpike. John Bonds asked if this was out of scope? Steve Dellenback said it was not explicitly discussed, but SwRI has to have user buy-in early on so SwRI will support! John Bonds asked if SwRI was setting expectations? Tahira Faquir – indicated no; adjust expectations.
- Steve Dellenback asked if SwRI still needed formal SRR? Want requirements nailed down before end of 2003. Maybe focus of SRR should be to resolve conflicting requirements between districts (omit items on which there is consensus). John Bonds indicated that the purpose of SRR is for SwRI to show FDOT that SwRI understands all their requirements; therefore, need to cover all. SRR will still be held.

### **Item #12 – User Interface Prototype Demo**

- David Jones, Jesus Martinez – asked if video switches and cameras that are IP-based will be supported? Steve Dellenback said that this was not currently in scope. Can be added by FDOT direction.

### **Item #13 – Open Discussion**

- 360 Surveillance Concept
  - Can 360 Surveillance Concept decouple their GUI? Steve Dellenback asked if 360 Surveillance Concept could use STMCSLS's CCTV ICD to conform as a subsystem?
  - Larry Rivera - how low-level is the STMCSLS code with respect to controlling devices? Steve Dellenback suggested that if it was NTCIP compliant, SwRI could integrate it.
  - Larry Rivera – FDOT chose 360 Surveillance Concept because they have drivers for “everything”.
  - Larry Rivera - does STMCSLS have mouse control for cameras? Steve Dellenback indicated yes.
  - Walt Townsend - could actually put our solution as well as 360's within the same system (if 360 will decouple user interface). SwRI liked this solution.
  - SwRI and FDOT are to have technical discussions with 360 Surveillance about how it could be potentially integrated into the STMCSLS.

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- Gregg Letts – noted this is a cost issue, particularly if both solutions are used (SwRI agreed).
- Device Driver Alternatives
  - IDI Translator/Controller Device - Issues:
    - STMCSLS only needs to support one protocol per device class (e.g., NTCIP).
    - Exposes NTCIP functionality for any device.
    - Loop-through capability facilitates deployment and “cut over.”
    - Augment device functionality (e.g., FDOT MIB).
  - FDOT to have further discussions internally and with IDI about possible deployment.

## ACTION ITEMS

Number	Responsible	Text	Due Date
1	PBF	Provide University of Washington license terms and summary report of fuzzy logic code to FDOT.	
2	SwRI	Provide FDOT with TxDOT C2C status and C2C Command/Control ICDs.	
3	SwRI	Add detail to final work/deployment plan (release plan along with each site).	
4	FDOT	Refine scope of services based on BAFO.	
5	FDOT	Redefine “milestone demo” to be more informal.	
6	SwRI / PBF	Consider advancing Ramp Meter schedule – provide feedback at future status meetings.	
7	FDOT	Deploy MDX concurrently with District 6.	
8	SwRI	Add Center-to-Center to project risks.	
9	SwRI	Provide preliminary minimal TMC configuration ASAP to FDOT.	
10	SwRI	Modify schedule to reflect training in Florida after acceptance testing in Texas and consider district deployment dates.	
11	SwRI / FDOT	Have a side bar discussion on Risk Management techniques.	
12	FDOT Districts	Feedback on requirements (will mostly occur at planned small group requirements meetings scheduled for Dec 10 <sup>th</sup> and 11 <sup>th</sup> ).	
13	SwRI / FDOT	Determine most appropriate way to handle Software Requirements Review.	
14	SwRI / FDOT (D5)	Talk to 360 Surveillance System manufacturer – determine if decoupling the user interface is possible (this will allow the 360 Surveillance System to look like a subsystem to the STMCSLS).	

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15	FDOT	Form subcommittee to investigate IDI solution (translator/controller) for legacy devices.	
16	SwRI / PBF	Consider issue of IP video.	