Connected Intersections Committee Meeting

The following are meeting notes from the monthly meeting of the Connected Intersections (CI) Committee on Monday, June 15, scheduled from 3:00 PM EDT to 5:00 PM EDT by web conference. The agenda and chat log can be found in the back.

All times in EDT.

Call to Order & Welcome

Roy Goudy called the meeting to order at 3:07 PM.

Siva Narla reviewed ITE's anti-trust guidelines.

Roll Call of Committee

A quorum was present.

The committee members in attendance were:

Roy Goudy, Nissan (co-chair)	Mike Schragin, McCain
John Thai, City of Anaheim (co-chair)	Mike Shulman, Ford
Ali Ragan, Wyoming DOT	Mike Stelts, Panasonic
Doug Schmidt, APTIV	Ray Starr, Minnesota DOT
Ed Seymour, TTI	Steve Bowles, 360 Network Solutions
Faisal Saleem, Maricopa County	Whitney Nottage, Intelight/Q-Free
Jason Graves, DENSO	Vivek Vijayakumar, GM
Jay Parikh, CAMP	William Lerner, ISO
Jim Misener, Qualcomm	

Also in attendance were:

AJ Lahiri, ConSysTec	Jean Johnson, NEMA	Michael Maile,
Alan Clelland, Applied Information	Jesus Ruiz, McCain	Nadereh Moini,
	Julie Evans, ITS Roads	Nicola Tavares, ITE
Alan Davis, GDOT	Justin McNew, JMC Rota	Patrick Chan, ConSysTec
Andy Mao, TxDOT	Justin Anderson, Noblis	Peter Jager, UDOT
Anthony Gasiorowski, WSP	Kellen Shain, Noblis	Polly Okunieff, GO Systems
April Wire, Maricopa County DOT	Ken Yang, AECOM	Ralph Boaz, Pillar Consulting
Blaine Leonard, UDOT	Kevin Chan, Minnesota DOT	Randel Roebuck, OmniAir
Bob Rausch, TransCore	Kevin Tobias, Pennsylvania	Robert Saylor, City of Plano
David Aylesworth, Ceve	Kevin Vitta, ITS America	Siva Narla, ITE
Deborah Curtis, USDOT	Kevin Chan, Minnesota DOT	Timothy Seitz,
Ed Leslie, Leidos	Linda Nana, Noblis	Tom Kurihara, TkStds
Gary Duncan, Econolite	Lui Greco	Tony Ahmad, ITS Roads
Ivan Vukovic, Ford	Manny Insignares, ConSysTec	

A CI Committee member may have a surrogate (substitute) if that member is unable to attend a Committee meeting.

Review Purpose and Objective

John Thai reviewed the meeting purpose and scope.

- Purpose:
    - o To review the project scope and create task forces to perform the work
- Objectives
    - o Adopt the committee scope and project scope
    - o Create task forces

Reviewed Proposed Committee Scope

Presented updated committee scope based on comments received.

Roy Goudy requested motion to approve committee scope. Jim Misener made a motion to approve the Committee Scope as presented. Ed Seymour seconded. No motion was made for a discussion and there was no opposition. Committee has approved the Committee Scope.

Action Item: Patrick Chan to send the updated version of the Committee Scope and the Project Scope to the Committee.
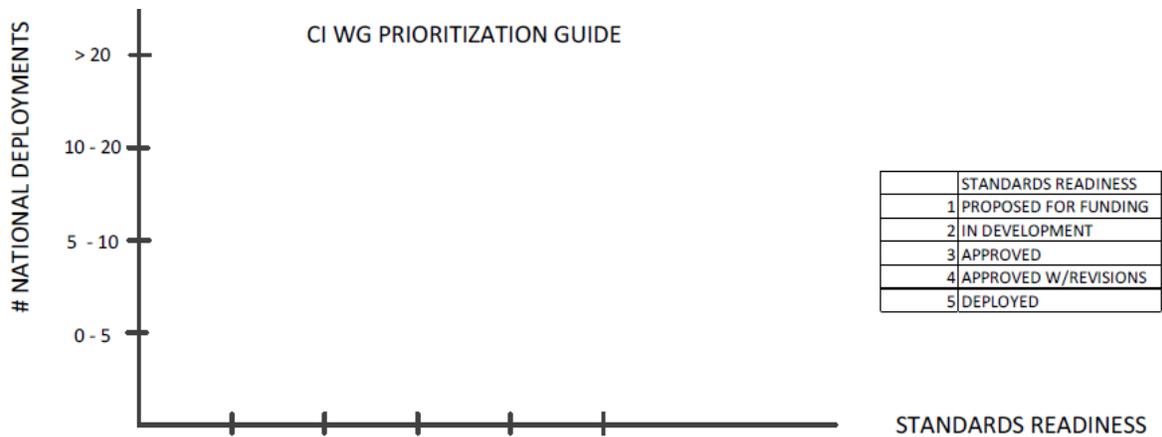
Reviewed Proposed Project Scope

John Thai reviewed the proposed Project Scope. There was discussion on bounding condition #6. Agreed to changing the paragraph to, "…in implementing systems to communicate using the WAVE Short Message (WSM) protocol." Several other editorial changes were also made.

Jean Johnson mentioned the goal is the harmonize implementations of SPAT, MAP, and RTCM messages rather than harmonize the messages themselves.

Discussed CI Committee

Roy Goudy reviewed the CI Committee functions.

There was debate on using of number of national deployments on the y-axis on the CI WG Prioritization Guide graph.   General agreement to use the number of deployments in the US instead.

CI WG PRIORITIZATION GUIDE

NATIONAL DEPLOYMENTS

- > 20
- 10 - 20
- 5 - 10
- 0 - 5

	STANDARDS READINESS
1	PROPOSED FOR FUNDING
2	IN DEVELOPMENT
3	APPROVED
4	APPROVED W/REVISIONS
5	DEPLOYED

STANDARDS READINESS

There was a question on the intention of Publish Interim Findings Report as a deliverable. The document is not intended to be published, but rather a tool to list what has been accomplished/resolved.

Discussed CI Task Forces

John Thai discussed the CI Task Force functions. Individual volunteers can actively be on at most two task forces. If any task force does not recruit enough volunteers, it may be dropped. Task forces to have two co-chairs. At least one must be a member of the CI Committee. Volunteers vote by consensus on behalf of industry, not on behalf of employer

Co-chairs need to submit work plan and schedule for task force. May be used to determine if task force could be broken up into smaller groups.

A question was posed whether there would be single walkthrough for all task forces (e.g., ConOps walkthrough, Requirements walkthrough, etc…). To be determined by the co-chairs of the task forces. The TF co-chairs also to determine the scope of the TF.

A comment was made that standards did not include provisions for conforming extensions, only options (choices inclusive to the context of the standard), that focuses on the circumstances that would require localization (rules, regulations, and degree to which proprietary with closed interfaces are deeply embedded in the system and variants of the SAE message sets.

Look for variances, then figure out what is needed for guide would address with extensibility capabilities need to make the standards are applicable across a broad range of locations.

There was a question about whether revisions to the appropriate standards are part of the schedule. Siva expects the revision will be initiated by the TF within the project timeline, but completion of a standard(s) revision is outside the scope of this project.

Proposed Task Forces

- SPaT -Address gaps, ambiguities, and interoperability issues with the SPaT message

- MAP -Address gaps, ambiguities, and interoperability issues with the MAP message, including minimum requirements

- Testing/Conformity -Define test requirements and criteria for verifying conformity to the CI Implementation Guidance
- Security -Address gaps, ambiguities, and interoperability issues with security across the V2X interface, including minimum requirements
- GNSS -Address gaps, ambiguities, and interoperability issues with positional accuracy.

Suggestion made to combine the SPaT and MAP task forces. Suggestion made to have a task force for traffic signal controller issues that includes OEMs. Task forces on BSM and Signal Priority messages being contemplated.

Due to time constraints, Roy Goudy mentioned that there is a standing CI co-chairs meeting on Fridays, and asked that any further recommendations for TFs, with explanation, be sent to John or Roy by Friday. Also, asked Nicola to keep the doodle poll for volunteering to co-chair a TF (open to the CI Committee members only) open until the end of the week.

Meeting adjourned at 5:06 PM EDT.

Agenda

1. Call to Order

2. Anti-Trust Guidelines

3. Review Purpose and Objective

4. Review Committee and Project Scope

5. Creation of Task Force

6. Next Steps

7. Next Meeting

8. Adjourn

Chat log

ITE Headquarters (to Everyone): 3:12 PM: Hello: If you are not speaking. Please mute your line. Thank you

Whitney Nottage (to Everyone): 3:21 PM: I'm slightly concerned that we're acknowledging that this should cover all road users, but are not including BSM, PSM, or SRM in the scope. By excluding those we're basically only addressing vehicles. That said, i'm providing this comment but cannot volunteer to lead a task force... but I think it bears discussion.

Ray Starr (to Everyone): 3:22 PM: Just to clarify. My comment on the scope was that we should address both. the original text said agnositic.

Jean Johnson (to Everyone): 3:38 PM: At Sec 3, I don't think the goal is to harmonize SPaT, MAP and RTCM messages, themselves. Rather, I think the goal of the CI guide is to harmonize implementations of SPaT, MAP, and RTCM.

Jean Johnson (to Everyone): 3:41 PM: You are welcome.

J Thai (to Everyone): 3:41 PM: Nice

Faisal Saleem (to Everyone): 3:43 PM: On #8 should we add also have agreement of needs that will be addressed.

Jean Johnson (to Everyone): 3:47 PM: Is it intended that there is a single task force, or more than one task force (subject based) reporting to teh CI Committee.

Siva Narla (to Everyone): 3:48 PM: A single task force matching a single area is what the chairs have in mind.

J Thai (to Everyone): 3:49 PM: More than one task force. One for each area.

ITE Headquarters (to Everyone): 3:53 PM: Please mute your audio if not speaking. There is noise in the background. Thanks

Thomas M Kurihara (to Everyone): 3:56 PM: Focus on standard imlementation, i.e., conformance to standards, should consider the tailoring of the standards agreed to in an implementation to fit inot the oeprational environment.

J Thai (to Everyone): 3:58 PM: You're breaking up Ed.

Justin (to Everyone): 3:58 PM: What is a "National Deployment"?

Ralph Boaz (Pillar Consulting) (to Everyone): 3:58 PM: Is there other criteria that we might include in in a Y-Axis. There may be something discovered in one deployment that would affect a full CV deployment in other sites.

J Thai (to Everyone): 3:59 PM: Known deployments across the country.

Michael Stelts (to Everyone): 4:00 PM: I consider the y-axis as the experience that exists, not the technology used. If we focus on message communication issues, rather than radio transmission issues, then the resulting recommendations will benefit any radio.

J Thai (to Everyone): 4:01 PM: Yes Michael. The more deployments, the more data and experience we will have.

Jim Misener (to Everyone): 4:02 PM: I agree as well. If we can discuss messages and applicaiton protocol deployments we are fine.

Justin (to Everyone): 4:02 PM: Maybe "# Deployments in the US" would be less ambiguous

J Thai (to Everyone): 4:02 PM: Sure.

Ed Leslie (Leidos) (to Everyone): 4:02 PM: A "National Deployments" sounds like deployments that span the nation. But it sounds like it means "Nationally-Recognized Deployments"

J Thai (to Everyone): 4:03 PM: I think Justin has a good suggestion.

Ed Leslie (Leidos) (to Everyone): 4:03 PM: agree

Jean Johnson (to Everyone): 4:05 PM: What is "publish interim findings report"? Isn't that just a draft, published frequently to the CI committee? what am I missing?

MICHAEL MAILE (to Everyone): 4:06 PM: I think the objective is to provide updated standards, test procedures and implementation guidance so this can be implemented anywhere in the US.

Jean Johnson (to Everyone): 4:11 PM: John, it is difficult to evaluate the work load, and develop a work plan, if participants don't know how many TFs they're on. Also, it would be helpful if teh CI Committee Co-Chairs developed a template, or model of the input that is expected from each TF. What does one "item" look like? I sense that it is the format and style of input that is going to be one of the greater challenges for each TF.

Jean Johnson (to Everyone): 4:13 PM: Object Defs for RSU is 1218

Ray Starr (to Everyone): 4:15 PM: Will the project provide consultants to help schedule meetings, create agendas, write minutes and draft documents that come out of the task forces?

Jean Johnson (to Everyone): 4:18 PM: Is it your intent that there will be a single ConOps walkthrough, covering all User Needs from each TF? If so, then it may be more productive to provide a global schedule to the TFs, so that each TF doesn't need to develop its own.

Bob Rausch (to Everyone): 4:18 PM: One of the over-riding issues is security certificates and SCMS services. Will this program simply assume everyone has the necessary certificates - or will it deal with the support for security credential management as well?

Justin (to Everyone): 4:22 PM: does timeline to resolve include a standard(s) revision?

Thomas M Kurihara (to Everyone): 4:31 PM: Essential to include certificates be included. Deferring is more likely to cause more probelms to backfill. Principle should be stated for teh task force to fit into timeline.

Alan Clelland (Applied Information) (to Everyone): 4:37 PM: SO we have 3 to 5 WGs on the topics suggested PLUS a WG for each applicable Standard?

Justin (to Everyone): 4:41 PM: suggest combine SPaT and MAP into "messages TF" and add a "traffic signal controller issues TF"

Jim Misener (to Everyone): 4:41 PM: Agree

Jean Johnson (to Everyone): 4:41 PM: Thought that DSRC/C-V2X was on the list? Am I missing it in the TF list?

MICHAEL MAILE (to Everyone): 4:42 PM: Agree with Justin

J Thai (to Everyone): 4:42 PM: Jean - we combined them as Short Wave Message

Jim Misener (to Everyone): 4:42 PM: Jean - wouldn't we address WSMs...

Jim Misener (to Everyone): 4:42 PM: I suggest that WSM be an underlying assumption.

Jim Misener (to Everyone): 4:43 PM: These TFs use WSM as a basis. They can be considered orthogonal to the radio.

Jay Parikh (to Everyone): 4:43 PM: Is testing/conformity inclusive of SPaT/MAP/Security/GNSS - meaning all of the above?

MICHAEL MAILE (to Everyone): 4:43 PM: GNSS is also much more complicated due to availability issues and defining what integrity should look like

William S Lerner (to Everyone): 4:44 PM: I think we should combine SPaT and MAP

J Thai (to Everyone): 4:44 PM: *sorry meant Wave Short Message

MICHAEL MAILE (to Everyone): 4:46 PM: Is defining minimum performance requirements part of the TFs?

Justin (to Everyone): 4:46 PM: everything is a wave short message based on the scope

Justin (to Everyone): 4:48 PM: over the air anyway

MICHAEL MAILE (to Everyone): 4:49 PM: There is a need for bringing SPaT up to ISO 26262 Functional Safety levels to be acceptable for autonomous vehicles

Ralph Boaz (Pillar Consulting) (to Everyone): 4:51 PM: There may be interpretation issues in creating the message between controller manufacturers.

Deborah Curtis (to Everyone): 4:52 PM: Can I address this?

J Thai (to Everyone): 4:52 PM: OK

J Thai (to Everyone): 4:52 PM: Let me work you in.

Ray Starr (to Everyone): 4:58 PM: Wouldn't the SPaT and Map task force answer those questions?

Jim Misener (to Everyone): 4:59 PM: This long discussion is interesting. Data integrity could be part of the SPaT/MAP task force work.

Jim Misener (to Everyone): 4:59 PM: @ Michael, this may include a mapping to ASIL.

Jim Misener (to Everyone): 5:00 PM: We're at the top of the hour. Next steps?

J Thai (to Everyone): 5:00 PM: Ray - Maybe but perhaps not to the leve of specificity that one might want...

Justin (to Everyone): 5:00 PM: we can form the four and revisit the fifth next meeting

Jim Misener (to Everyone): 5:01 PM: No.

Jim Misener (to Everyone): 5:01 PM: Schedule issues.

J Thai (to Everyone): 5:02 PM: Anyone who is interested in participating and/or leading a TF should

contact Roy or me.

MICHAEL MAILE (to Everyone): 5:02 PM: Jim, this is precisely correct. We need to certify the entire process chain from the controller to the outgoing message set. Otherwise it is of limited use for autonomous vehicles.

Ray Starr (to Everyone): 5:03 PM: There was a doodle poll for volunteering by the end of this week?

J Thai (to Everyone): 5:05 PM: Yes to ITE.

Peter Jager (to Everyone): 5:05 PM: Would you post the doodle poll again?