

## Connected Intersections Quarterly Plenary Meeting

The following are meeting minutes from a quarterly plenary meeting of the Connected Intersections (CI) Committee on Monday February 22, 2020 scheduled from 2:00 PM to 5:00 PM by web Conference on Microsoft Teams.

The agenda and chat log are provided at the end of these minutes.

All times are in EST.

Roy Goudy called the meeting to order at 2:02 PM.

Siva Narla reviewed ITE's anti-trust guidelines.

John Thai went over agenda.

### Roll Call of Committee

The committee members in attendance are highlighted in yellow.

Roy Goudy, Nissan (co-chair)	Jay Parikh, CAMP	Steve Bowles, 360 Network Solutions
John Thai, City of Anaheim (co-chair)	Jim Misener, Qualcomm	Steve Sprouffske, Kapsch
Christina Spindler, Wyoming DOT	Justin McNew, JMCRota	Vivek Vijayakumar, GM
Doug Schmidt, Aptiv	Mike Schragrin, McCain	Whitney Nottage, Q-Free
Ed Seymour, TTI	Mike Shulman, Ford	
Faisal Saleem, Maricopa County	Mike Stelts, Panasonic	
(Alternate: April Wire, Wyoming DOT)	Raj Ponnaluri, Florida DOT	
	Ray Starr, Minnesota DOT	

A quorum is present.

Also in attendance were:

Aaron Moore, OmniAir	Danyang Tian, Honda	John Kenney, Toyota
Alan Clelland, DKS	David Aylesworth	Justin Anderson, Noblis
AJ Lahiri, ConSysTec	Dean Deeter, Athey Creek	Kellen Shain, Noblis
Alan Davis, GDOT	Deborah Curtis, USDOT	Ken Yang, AECOM
Alain Hungerford	Doug Gettman, KHA	Kevin Chan, Minnesota DOT
Aleksandr Grinshpun	Eric Raamot, Econolite	Kevin Vitta, ITS America
Anthony Gasiorowski, WSP	Frank Perry, WSP	Kezhen Shen, NEMA
Asfand Siddiqui	Geoff Knapp, WSP	Kingsley Azubike, USDOT
Austin Averkamp	Guoyuan Wu	Kyle Garrett, Synesis Partners
Blaine Leonard, Utah DOT	Iouri Nemirovski, Siemens	Li Jiangchen
Brandon Schlueter	Jason Stack	Linda Nana, Noblis
Brian Reed, WSP	Jean Johnson, NEMA	Manny Insignares, ConSysTec
Brian Simi, Caltrans	Jeannie Willis	Mary Buonarosa
Bruce Eisenhart, ConSysTec	Jim Alfred, Blackberry	Mark Rodgers, Siemens
Bob Rausch, TransCore	Jimmy Upton, ISS	Masoud Motamedi, JMC Rota
Charlie Cheng	Jody Carriere	Mateusz Malinowski, Panasonic
Christopher Poe, Mixon Hill	John Abraham	Matt D'Angelo, Gresham Smith

MD Omar Faruk	Ralph Boaz, Pillar Consulting	Steve Sill, USDOT
Michael Finocchio	Randy Roebuck, OmniAir	Subhadipto Poddar
Michael Lockerman, Denso	Rich Deering, CAMP	Suzanne Murtha, AECOM
Mohammed Hadi, FIU	Robert Heilman, OST	Tony Qiu
Nicholas Hegemier, DriveOhio	Roger Ryder, USDOT	Thomas Timcho, WSP
Nicola Tavares, ITE	Ryan Bollo	Virginia Lingham, WSP
Patrick Chan, ConSysTec	Shane McKenzie	Venkat Nallamonthu, AASHTO
Peter Jager, UDOT	Stephen Novosad, HNTB	Walter Espinoza
Purser Sturgeon, SWRI	Siva Narla, ITE	Wolfgang Buckel, Siemens

## Purpose

- John Thai went over meeting purpose

## Objective

- John Thai reviewed the project overview
- Patrick Chan went over system engineering process, deliverables, and what the design details consist of.

## Task Force Reports

- **Traffic Controller**
  - Roy Goudy went over accomplishments
  - Ralph Boaz went over sample design details written by task force
  - Roy Goudy went over Red-Light Violation Warning situation
  - In response to a Chat question, noted that the TSC vendors have agreed on supporting AGP. There is a common interpretation agreed to by the vendors that will be included in the document.
- **SPaT/MAP**
  - Ray Starr went over progress and highlighted design details written by task force
  - Is it not better to have a network of stations that work together and then have the RSU site send its location to the CORs and the CORS respond with more precise correction info?
  - In response to a Chat question, there is a proposed solution for addressing future phase (interval) timings.
  - ATSPM consider for a future phase
- **Security**
  - Jimmy Upton went over security design detail highlights and references
- **Positioning Task Force**
  - Justin McNew went over work on requirements and design details as well as key decisions by task force
  - In response to a Chat question, there was a discussion about using a network of CORS stations.
- **Testing/Conformity**
  - Christina Spindler went over results of letter of interest submissions

- 15 sites
- Asking all sites to participate in validation activities. 5-7 will be selected for field validation.
- Went over process to select sites
- Jay Parikh discussed proposed verification test tool developed by CAMP
- Discussed field test criteria
- Showed example message report and analysis
- Showed example MAP message visualization
- **Action:** Task forces to contact submitted agencies regarding next steps.

## Project Schedule

Patrick Chan went over project schedule

- System Design Details Document walkthrough expected week of 3/8
- Draft final expected this week
- Validation expected to take place April-June 2021
- Final Implementation Guidance Document expected September 2021

## Closing Remarks

- ITE and USDOT gave closing remarks

Meeting Adjourned at 4:57 PM.

## Agenda

1. Call to Order
2. Anti-Trust Guidelines
3. Roll Call
4. Plenary Meeting Purpose (20 minutes to this point)
5. Project Overview (30 minutes)
6. Task Force Presentations (10-15 minutes each)
  - 15 minute break after the SPaT/MAP TF
  - Testing and Conformity TF will discuss validation sites
7. Project Schedule
8. Participation
9. Closing Remarks

Adjourn

## Chat Log

2:34 PM] Jim Misener (Guest)

question -

[2:34 PM] Jim Misener (Guest)

"RSU has a problem and can alert vehicles accordingly"

[2:34 PM] Jim Misener (Guest)

This seems a new requirement - and outside of standard messages

[2:57 PM] Michael Lockerman (Guest)

Are the TSC manufactures on board with AGP?

[3:09 PM] Ralph Boaz (Guest)

Is there a guess when the international method would be ready?

[3:13 PM] Michael Lockerman (Guest)

I'm wrestling with protected vs permissive (with TSCBM) at the moment. Where can I learn about your soln?

[3:24 PM] Buckel, Wolfgang (SMO NAM RC-US ITS R&D) (Guest)

for future phase timing in spat is it limited to the cases mentioned?

[3:24 PM] Buckel, Wolfgang (SMO NAM RC-US ITS R&D) (Guest)

Ne[3:51 PM] Timcho, Thomas

Is it not better to have a network of stations that work together and then have the RSU site send its location to the CORs and the CORS respond with more precise correction info? The OBU wouldn't know the difference between a single ref station or an aggregated response, but the accuracy would improve. I wouldn't suggest doing this down to vehicle location, only RSU location.

xt phase is yellow. or change from permissive to protected?

[3:58 PM] Hegemier, Nicholas (Guest)

<https://www.dot.state.oh.us/Divisions/Engineering/CaddMapping/Survey/VRS/Pages/default.aspx>

(1 liked)

[4:09 PM] Ralph Boaz (Guest)

TSC TF has decided that we are not signing messages.

[4:13 PM] Ralph Boaz (Guest)

NTCIP will eventually be heading to SNMP v3. The direction of using TLS 1.3 is the likely where we need to go. DTLS 1.3 has not been shown to work yet.

[4:36 PM] Starr, Ray (DOT) (Guest)

Some agencies may have Automated Traffic Signal Performance Measures incorporated in their signals, which records each change of state to a tenth of a signals. Would their be value in the agencies comparing the SPaT message states with the logged actual signal state?

[4:44 PM] Siva Narla

If it is a good requirement, we can add to the parking lot

[4:57 PM] Charlie Cheng

Thank you for the very great discussion. First time attendee.

[4:57 PM] Blaine Leonard (Guest)

Thanks all for a good meeting. And, Thanks Walter Cronkite!