

---

# **CI Implementation Guidance System Design Details Walkthrough**

Traffic Controller Issues/SPaT Design Details  
March 9, 2021 (11:00 AM – 12:30 PM EST)

---

## Anti-Trust Guidance (Narla)

- The Institute of Transportation Engineers is committed to compliance with antitrust laws and all meetings will be conducted in strict compliance with these antitrust guidelines. Further if an item comes up for which you have conflict of interest, please declare that you have a conflict of interest on the matter and recuse yourself from action on that item.
- The following discussions and/or exchanges of information by or among competitors concerning are prohibited:
  - Prices, price changes, price quotations, pricing policies, discounts, payment terms, credit, allowances or terms or conditions of sale;
  - Profits, profit margins or cost data;
  - Market shares, sales territories or markets;
  - The allocation of customer territories;
  - Selection, rejection or termination of customers or suppliers;
  - Restricting the territory or markets in which a company may sell services or products;
  - Restricting the customers to whom a company may sell;
  - Unreasonable restrictions on the development or use of technologies; or
  - Any matter which is inconsistent with the proposition that each company must exercise its independent business judgement in pricing its service or products, dealing with its customers and suppliers and choosing the markets in which it will compete.

---

## **Agenda (Goudy, Thai)**

1. Call to Order
2. Anti-Trust Guidelines & Logistics
3. Roll Call
4. Walkthrough – System Design Details (Continued)
5. Next Steps

## Roll Call of Committee Members

Affiliation	First Name	Last Name	Organization	Alternate
OEM	Roy	Goudy	Nissan	
ITE	John	Thai	City of Anaheim	-
AASHTO	Raj	Ponnaluri	Florida DOT	Derek Vollmer
AASHTO	Christina	Spindler	Wyoming DOT	Ali Ragan
AASHTO	Ray	Starr	Minnesota DOT	Kevin Chan
ITE	Ed	Seymour	Texas A&M Transportation Institute	Kevin Balke
ITE	Faisal	Saleem	AZ McDOT Maricopa County	April Wire
NEMA	Whitney	Nottage	Q-Free/Intelight	Douglas Tarico
NEMA	Steve	Bowles	360 Network Solutions	Billy Stalcup
NEMA	Mike	Schagrin	McCain	Jesus Ruiz
OEM	Mike	Shulman	Ford Motors	Michael Maile
OEM	Vivek	Vijayakumar	General Motors	Bo Yu
V2X	Michael	Stelts	Panasonic	Mateusz Malinowski
V2X	Jim	Misener	Qualcomm	William Whyte
V2X	Doug	Schmidt	Aptiv	Chris Hedges
CAMP	Jay	Parikh	CAMP/IOO-OEM Forum	
Mobile Services	Steve	Sprouffske	Kapsch	Imran Inamdar
IEEE 1609/SAE	Justin	McNew	JMC Rota Inc.	Masoud Motammedi

---

## SDD Walkthrough Schedule

- Monday, March 8 (All times EST)
  - 11:00 AM – 5:00 PM Traffic Controller Issues/SPaT Design Details
- Tuesday, March 9:
  - 11:00 AM – 12:30 PM Traffic Controller Issues/SPaT Design Details (if needed)
  - 3:30 – 5:30 PM Testing and Conformity
- Wednesday, March 10:
  - 12:00 – 5:00 PM Security
- Thursday, March 11:
  - 11:00 AM – 5:00 PM Positioning/MAP
- Friday, March 12:
  - 11:00 AM – 2:30 PM: If needed

---

## SDD Walkthrough Notes

- Due to time constraints, we may not walk through every requirement during this walkthrough
  - Focus on known gaps or inconsistencies between the Task Force inputs
- Due to resource and time constraints, may not address every potential issue or gap in this first CI Implementation Guide
  - CI Implementation Guide to be published by September 2021
  - The CI Implementation Guide creates a framework for future revisions
  - Created a “parking lot” for future consideration (See Annex F)
    - No clear need
    - No consensus on the design details

# Traffic Controller Issues/SPaT Design Details

Figure 2

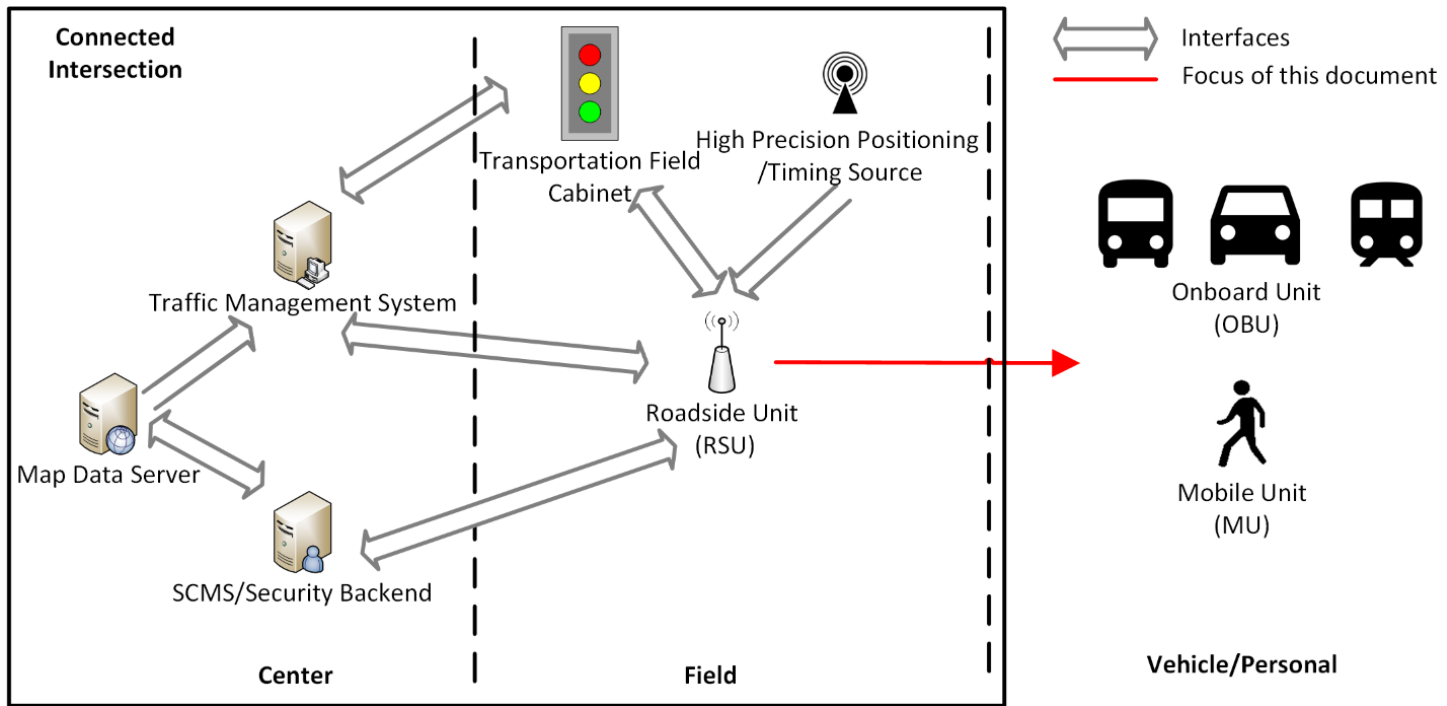
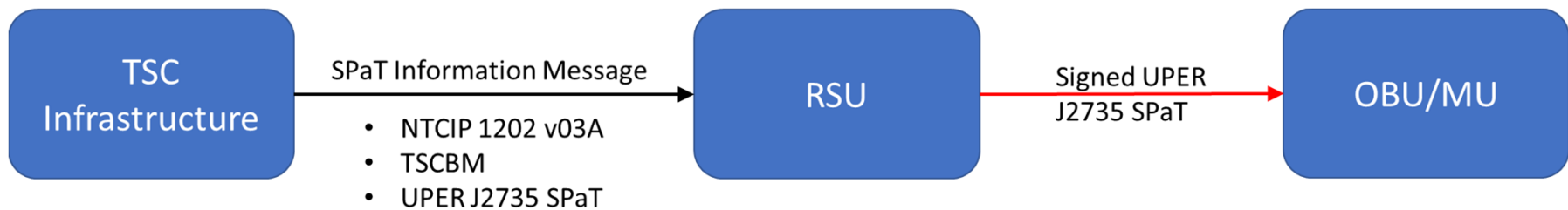


Figure 11



---

## Traffic Controller Issues/SPaT Design Details

### – Plan

- Review of Annex A – CI Traffic Controller Issues & Recommendations
- Review Architectural Needs
- Review of TSC Infrastructure – RSU interface
  - NTCIP 1202 v03A
  - V2I Hub ICD SPaT Information (TSCBM)
  - UPER-encoded SAE J2735 SPaT message
- RLVW Support
  - Annex B – Assured Green Period Use Cases
- SPaT Messages
- Security
  - Annex C.1 – Security Profile for SPaT Messages
- Annex G – Recommendation to SDOs



---

## Next Steps

- SDD Walkthrough – March 8-11 (11:00 AM - 5:30 PM EST)
- Updated Draft SDD Document – distribute by March 19 for a 2-week comment period.
  - Comments due April 2, 2021
- Final SDD Document – expected April 6, 2021
- Start Validation Phase

---

# Adjourn

– Thank you!

---

# **CI Implementation Guidance System Design Details Walkthrough**

Testing and Conformity Task Force  
March 9, 2021 (3:30 PM – 5:30 PM EST)

---

## Anti-Trust Guidance (Narla)

- The Institute of Transportation Engineers is committed to compliance with antitrust laws and all meetings will be conducted in strict compliance with these antitrust guidelines. Further if an item comes up for which you have conflict of interest, please declare that you have a conflict of interest on the matter and recuse yourself from action on that item.
- The following discussions and/or exchanges of information by or among competitors concerning are prohibited:
  - Prices, price changes, price quotations, pricing policies, discounts, payment terms, credit, allowances or terms or conditions of sale;
  - Profits, profit margins or cost data;
  - Market shares, sales territories or markets;
  - The allocation of customer territories;
  - Selection, rejection or termination of customers or suppliers;
  - Restricting the territory or markets in which a company may sell services or products;
  - Restricting the customers to whom a company may sell;
  - Unreasonable restrictions on the development or use of technologies; or
  - Any matter which is inconsistent with the proposition that each company must exercise its independent business judgement in pricing its service or products, dealing with its customers and suppliers and choosing the markets in which it will compete.

---

## **Agenda (Goudy, Thai)**

1. Call to Order
2. Anti-Trust Guidelines & Logistics
3. Roll Call
4. Walkthrough – System Design Details (Continued)
5. Next Steps

## Roll Call of Committee Members

Affiliation	First Name	Last Name	Organization	Alternate
OEM	Roy	Goudy	Nissan	
ITE	John	Thai	City of Anaheim	-
AASHTO	Raj	Ponnaluri	Florida DOT	Derek Vollmer
AASHTO	Christina	Spindler	Wyoming DOT	Ali Ragan
AASHTO	Ray	Starr	Minnesota DOT	Kevin Chan
ITE	Ed	Seymour	Texas A&M Transportation Institute	Kevin Balke
ITE	Faisal	Saleem	AZ McDOT Maricopa County	April Wire
NEMA	Whitney	Nottage	Q-Free/Intelight	Douglas Tarico
NEMA	Steve	Bowles	360 Network Solutions	Billy Stalcup
NEMA	Mike	Schagrin	McCain	Jesus Ruiz
OEM	Mike	Shulman	Ford Motors	Michael Maile
OEM	Vivek	Vijayakumar	General Motors	Bo Yu
V2X	Michael	Stelts	Panasonic	Mateusz Malinowski
V2X	Jim	Misener	Qualcomm	William Whyte
V2X	Doug	Schmidt	Aptiv	Chris Hedges
CAMP	Jay	Parikh	CAMP/IOO-OEM Forum	
Mobile Services	Steve	Sprouffske	Kapsch	Imran Inamdar
IEEE 1609/SAE	Justin	McNew	JMC Rota Inc.	Masoud Motammedi

---

## SDD Walkthrough Schedule

- Monday, March 8 (All times EST)
  - 11:00 AM – 5:00 PM Traffic Controller Issues/SPaT Design Details
- Tuesday, March 9:
  - 11:00 AM – 12:30 PM Traffic Controller Issues/SPaT Design Details (if needed)
  - 3:30 – 5:30 PM Testing and Conformity
- Wednesday, March 10:
  - 12:00 – 5:00 PM Security
- Thursday, March 11:
  - 11:00 AM – 5:00 PM Positioning/MAP
- Friday, March 12:
  - 11:00 AM – 2:30 PM: If needed

---

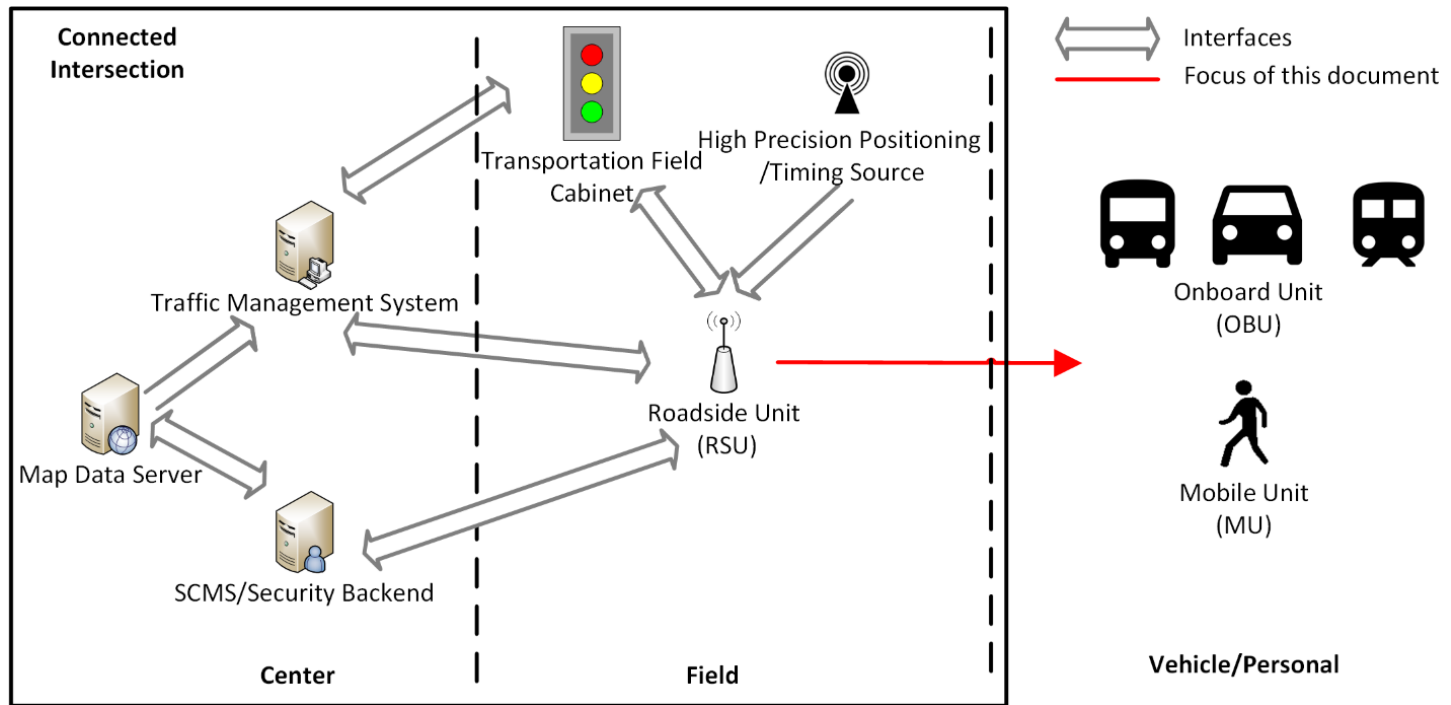
## SDD Walkthrough Notes

- Due to time constraints, we may not walk through every requirement during this walkthrough
  - Focus on known gaps or inconsistencies between the Task Force inputs
- Due to resource and time constraints, may not address every potential issue or gap in this first CI Implementation Guide
  - CI Implementation Guide to be published by September 2021
  - The CI Implementation Guide creates a framework for future revisions
  - Created a “parking lot” for future consideration (See Annex F)
    - No clear need
    - No consensus on the design details



# Testing and Conformity Issues

Figure 2



---

## Testing and Conformity Issues

### – Plan

- Review of Section 5 – Connected Intersection Testing [Normative]
- Review of Annex E – Testing Resources [Informative]

---

## Next Steps

- SDD Walkthrough – March 8-11 (11:00 AM - 5:30 PM EST)
- Updated Draft SDD Document – distribute by March 19 for a 2-week comment period.
  - Comments due April 2, 2021
- Final SDD Document – expected April 6, 2021
- Start Validation Phase

---

## Adjourn

– Thank you!