

RSU Standardization WG Meeting – UCD Comments Review

The following are meeting notes from a meeting for RSU Standardization Working Group (WG). The meeting was a web conference on March 9, 2021 scheduled from 1:00 PM EST to 3:00 PM EST.

Meeting called to order at 1:02 PM EST.

Anti-Trust Guidance (Siva Narla)

Roll-Call/Quorum Reached (Blaine Leonard)

Blaine Leonard, Co-chair	Jason Graves	Faisal Saleem
Justin McNew, Co-chair	John Kenney	Danyang Tian
Wolfgang Buckel	Mike Ippoliti	Walt Townsend
Alan Davis	Dave Miller	Joanna Wadsworth
Joe Gorman	Lee Mixon	April Wire

Other Participants included:

Hassen Alwalie	Zhitong Huang	Christopher Poe
Justin Anderson	Jean Johnson	Bob Rausch
Kingsley Azubike	Steve Johnson	Randy Roebuck
Ralph Boaz	Mostafa Kassem	Kezhen Shen
Patrick Chan	Minseok Kim	Steve Sill
Alan Clelland	Tom Kurihara	Michael Stelts
Bronwen Crowe	Mike Lockerman	Nicola Tavares
Deborah Curtis	Israel Lopez	Jimmy Upton
Drew Van Duren	Venkat Nallamothu	Michaela Vanderveen
Chuck Felice	Linda Nana	William Whyte
Edward Fok	Siva Narla	Jingcheng Wu
Anthony Gasiorowski	Iouri Nemirovski	Seora Yun
Hideki Hada	Jay Parikh	
Mohammed Hadi	Frank Perry	

Presentation slides are attached at the back of these minutes.

Project Overview (Justin McNew)

- Justin McNew presented the slides on the project overview.
- Justin about an extension for the comments period
 - Patrick Chan: From a schedule perspective, there is no significant impact, especially if there is no second version of the standard as part of this project. Comments are still coming in.
 - Siva Narla: More comfortable if we extend this period for 10 days maximum.
- There was a motion to extend the comment period through the end of next week (COB March 19, 2021).
 - **Motion passed.**

Document Review (Patrick Chan)

- Patrick Chan presented the slides on the Document Review.
- Bob Rausch asked about the need to address that the role of the RSU in the CV Environment has changed over time with the introduction of C-V2X. What should we be doing to address that?
 - Patrick Chan: We will address that during the comments review. There were several comments on that topic.

Comments Review (Patrick Chan)

- Patrick Chan noted that 147 comments were received to date from 13 contributors. About 118 were technical in nature.
- C-V2X Discussion
 - Randy Roebuck asked about the changes that will come from the rule and order of the C-V2X report?
 - Deborah Curtis: Final rule and order has not been published yet. Would be beneficial to wait until it is posted until we make changes to this document. We do not want to lose the work that has already been developed.
 - Ed Fok: It's not been published because there are many things that have to happen before it gets published (internal discussions, issues).
 - Blaine Leonard: Although we think it will be published soon, it doesn't lay out everything. They haven't yet defined any licensing requirements for C-V2X or when the phase out time is for DSRC. It's a little premature to make changes to the document while so many things are still in-flux.
 - Steve Sill: Agree with Ed, Deb, and Blaine. Too soon to remove anything.
 - Randy: Can we put in the document that it's not dual active? He is getting requests for dual mode hardware.
 - Siva: Put that in as a comment.
 - Justin McNew: The NRTM is set up so that you can choose one or the other or both. Do we want to put some guidance in the document concerning RF performance?
 - Justin McNew: We have been unintentionally DSRC specific in the document in some places.
- Comment on Figure 5

- Bob: Remove the solid black line from the HSM to the SCMS. It's really part of the RSU processing
 - Wolfgang Buckel: Agree, draw the black line from the Hardware Security Module to the RSU processing app.
- Will the RSU optionally support the Active message file format defined in RSU v4.1 Specifications found in Appendix C?
 - Mostafa Kassem: It's a way to send messages by text files. We use them.
 - McNew: We don't specify a file format for active messages. There's nothing to prevent that from being used. But, if using that will help with interoperability, we can revisit whether or not we want to mandate something like that.
 - Wolfgang: NTCIP 1218 is the mandatory part of this, but it doesn't prevent other formats of messaging.
 - There may be some roadblocks from a security standpoint.
 - McNew: I'm inclined to stick with NTCIP 1218 file format and not include other options and don't explicitly allow this.
 - *Consensus: No corresponding change to the document.*
- SPaT Processing - 4.4.2.14.2 Comment (Bob)
 - Wolfgang: Bob is right that there is a need to have some type of mapping information that the SPaT application on the RSU would use to know for example what signal group to put in for phase 2. But that is not part of this standard, yet.
 - Remove tick marks.
- Receiver Sensitivity Issue (Wolfgang's comments)
 - Wolfgang: The value is very high when the sensitivity is very low, want to reduce the performance requirement from -92 to -82.
 - McNew: The way to reduce excessive range is by reducing transmit power. Don't think this is a valid reason to reduce sensitivity. It might be a valid reason if it can't be implemented. But not in favor of reducing performance measures as much as you have suggested.
 - McNew: If implementors need sensitivity increased by 2 dB, that would cover it.
 - Randy: As a grouping when you come down to -30 portion of it with receiver that close, it doesn't make sense on both ends. Possibility for a practical reason to loosen those parameters.
 - John Kenney: Sensitivity is not about range; sensitivity is about transmit power. RSUs have to deal with non-line of sight conditions. I would not address a problem of range by weakening the sensitivity requirement.
 - *Will have to discuss further with SMEs to decide upon a solution.*
- Mike Lockerman: Need to convert phase numbering to signal group numbering...that needs to be defined in NTCIP 1218.
 - Send comments in to ntcip@nema.org
- Patrick to work with SMEs to address remaining comments.

Reference Implementation (Siva Narla)

- How do we ensure that agencies and manufactures can co-mingle and come to an agreement?

- How do we create a baseline implementation from a manufacturer's perspective that ensures that they can build towards a common platform without restriction and constrictions?
- In this phase, we have to conclude by September 17, 2021.
 - Need to come up with a scope that is achievable from agency and manufacturers perspective so they can team up and provide and implementation.
- Deborah: Our intent was to have the community most impacted by the standard be the ones testing it out to make sure they wanted it.
- Siva: We need to have a meeting with a finite number of options so that we can choose something to propose to the USDOT.
 - Faisal Saleem: I'm interested (Maricopa County DOT).
 - Jason Graves: DENSO would be interested in participating.
 - Mostafa/Hassan Awalie: Danlaw would be interested, as well.
 - Wolfgang: If the scope is to be defined, Siemens would be interested.
 - Randy: I'm in. I'll see what I can do with OmniAir (holding a plug fest in June).
 - Joe Gorman: MDOT would also be interested.
 - Bob: I'll join.
 - Randy: May want to consider whether these are DSRC, C-V2X...
 - Siva: Not defining any of that at this point.
 - Bob: Is your attempt to specify some of these applications?
 - Siva: You're welcome to join.

Closing Remarks (Leonard/McNew/Curtis/Jean Johnson/Narla)

Meeting ended at 2:55 PM EST.