

SECTION 305 TECH SUB COMM

MINUTES

MAY 28, 2020

3:00PM EASTERN

CONFERENCE CALL

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| FACILITATOR | <i>Charlie King, Chair, NGENC Technical Subcommittee</i> |
| ATTENDEES | Core Team Members: <i>Charlie King, Jeffrey Gordon, Momo Tamaoki, Curtis McDowell for Matthew Simmons, Jennifer Bastian, Charlie Poltenson for Ray Hessinger, Phil Meraz, Steve Hewitt, George Hull, Art Peterson, Michael Kraft, Melissa Shurland, Tarek Omar, Mike Murray, Larry Salci, Tammy Krause, Industry Members:</i> <i>Jon Mullin, Ed Golitko, Adam Saplin, Greg Gagarin, Martin Bloedt, Jeff Schultz, Kevin Myles, Rich Stegner, Rich Bowie, James Michel, Josh Coran, Vlad Ciobanu, Paul Jamieson, Anthony Lucas</i> |
| ABSENTEES | <i>Matthew Simmons, Marci Petterson, Ray Hessinger, Jason Biggs, Mike Jenkins, Byron Comati, Brian Marquis, Oscar Bermudez</i> |

DISCUSSION/DECISIONS MADE

1.

Chairman King, Amtrak, called today's meeting to order and asked Steve Hewitt to call the roll.

After calling the roll, Steve Hewitt confirmed the presence of a quorum.

As always, industry participants are asked to email a notification of their attendance to Steve Hewitt at shewitt109@aol.com.

2.

Review Meeting Agenda – Charlie King, Amtrak:

Chairman King provided a brief overview of today's meeting agenda.

3.

Review Action Items – Steve Hewitt, NGENC Program Manager:

Requesting Backgrounder educational document:

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Contact Steve Hewitt at shewitt109@aol.com for copies – hard copy or PDF. If hard copies, let Steve know where to send them and how many.

Maintaining Industry Participation List: There are approximately 200 industry participation members.

Establish process and timeline for Tech SC review of Access Board NPRM Accessibility Guidelines and compare with current NGENC Specifications:

The intent of this effort is for states to submit their comments to the Access Board Docket on the Accessibility Requirement Guidelines (advanced) Notice of Proposed Rulemaking. Amtrak has submitted its comments already. Once the comments "have come back", the Technical subcommittee will compare them with the NGENC specifications to ensure compliance.

Following the call (5-28-20), Melissa Shurland informed Steve Hewitt that The US Access Board extended the comment period for Recommendations on Access for Rail Vehicles until July 14, 2020.

<https://www.access-board.gov/guidelines-and-standards/transportation/vehicles/update-of-the-guidelines-for-transportation-vehicles/advance-notice-of-proposed-rulemaking-2>

Electronics on Trains Working Group activities as of 5-14-20:

NGENC Electronics Subcommittee – Update for 5-14-20:

We are currently asking the group to help us with guidance on the original intent of the PRIIA 305 specification, including the

topology, for the DTL system. In our last meeting, on April 21st, we discussed whether we should specify a RING topology or a Linear topology. This question came up because our initial find seemed to point to a Ring topology. But after review and feedback, it looked as though a linear topology would be more appropriate. Additionally, we have had industry suppliers tell us that we should specify the allowance for both topologies. This, as you know, would make interoperability between the two difficult, as one of them would have to be changed to the other to work correctly in the same consist.

We've yet to receive clarification as to the main intent.....do we need to design the specification(s) to ensure interoperability between all vehicles? Or, is this optional? And, if it does not apply to all vehicles, which vehicles or train sets would it apply to? That is the information that we are looking to clarify now.

Our next meeting is planned for May 19th.

Tammy Krause agreed to look at the issues/questions raised by David Brabb and to provide him with a response.

Next Update: 6-11-20

University of Nebraska High Speed Wireless Study as of 5-14-20:

Hamid Sharif – University of Nebraska-Lincoln Report:

Completed Project:

We designed, developed, and evaluated a unified communications architecture for high-speed passenger rail services. We focused on our evaluation framework and tested it on 4G LTE. This testing framework is designed to be applicable to a wide range of technologies under test by utilizing software radios. It also allows us to conduct both lab tests and field tests, both stationary and mobile.

We utilized this platform to conduct a series of tests. These included lab tests using our channel emulator facility to evaluate it under different wireless channel models. It also included testing in rural, urban, and suburban environments, as well as mobile drive tests at Interstate velocities.

We found our testing framework to dependable and versatile. With this testing framework now available, our aim for the next phase is to study different technologies that fit into different aspects of our architecture design.

Next phase:

One key challenge that drives system expense is the limited wireless communications bandwidth available to support these railroad applications, especially in high-density traffic areas. For example, data shows that dense urban areas such as the Chicago area have spectrum shortages that are expected to severely impact the performance of PTC systems and railroad operations. The 220 MHz band is the primary frequency used for interoperable PTC systems. Other railroad frequency bands are therefore of considerable interest to the rail industry to alleviate the demand on currently utilized bands.

We plan to conduct an in-depth review of the operating regulations and restrictions of these frequency bands and their theoretical applicability for different key railroad applications such as wayside communication, onboard train control and monitoring operations, and the exploration of mixed voice/data applications.

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For more information, please contact Hamid Sharif (HSHARIF@UNL.EDU)

Update: Amtrak Equipment Procurement as of 5-14-20:

On the Locomotives:

This procurement remains on schedule – with the first article still expected “to be shipped over next year” around February.

On the Acela:

Testing at TTCI has been going on at increases of 10mph each day and is expected to get up to 165mph this week.

On the Intercity Trainset Procurement:

This remains an active procurement still being evaluated.

On the Maintenance of Way Yard locomotives:

The request to fund this procurement will be taken to the Amtrak Board next week.

Next Update: 6-11-20

Update: Metro-North Dual Mode Locomotive Procurement:

As of 4-30-20, Metro-North continued to be in the procurement "Cone of Silence".

Next Update: 6-11-20

Status: Developing a TSSSA template/menu of options:

Charlie reported that he is waiting on approval from a company to use one of the diagrams that was jointly prepared with Amtrak. Once he has that approval, he will be able to proceed in the development of the TSSSA template.

Next Update: 6-11-20

4. Approval of the Minutes from 4-30-20 and 5-14-20 – Charlie King, Amtrak:

On a motion offered by Charlie Poltenson, NYSDOT, and seconded by Momo Tamaoki, Caltrans, the minutes from 4-30-20 and 5-14-20 were approved as submitted.

5. Update: Multi-State Railcar Procurement as of 5-28-20 – Momo Tamaoki, Caltrans:

Momo Tamaoki, Caltrans, provided the following update on 5-28-20:

Design review for the standard coach is complete. The Cab Car structure FDR is complete, and plans are in work for structural and CEM testing. Cab Car F-coupler FDR occurred on May 6. IDOT galley FDR reviews and releases are ongoing with the next review scheduled for June 4.

Travel restrictions are being evaluated, with potential travel in July to reviews and test sites. Video and photos continue to be provided for tests that SMEs are unable to witness. NEC testing is complete, and the test car is on route to Sacramento for cleanup and shipment preparation.

49 cars total are in production or have been produced at Siemens Sacramento Facility. System-level FAIs for standard coach are complete with final approvals in work for first car FAI. There are seven cars total at the Stockton facility. Cars 10 through 34 are in final assembly. Cars 11 and 12 are scheduled to be shipped the 2nd week of June. The First IDOT cars are scheduled to ship in mid-June.

The project teams continue to monitor potential production and schedule impacts due to the coronavirus and are receiving frequent updates from SCOA and Siemens.

6. Status Update – CT DOT Rail Car Procurement – Marci Petterson, CT DOT:

Marci Petterson was not on the call and did not provide an update – this item is tabled until the next call (6-11-20).

7. Document Control Update – Tammy Krause, NGEN DCM:

Tammy Krause provided the following update for inclusion in the minutes (5-28-20):

All DCRs for the DMU specification have been sent to the working groups and I have received comments back from the Propulsion group.

I have received comments on the Equipment Acquisition Best Practices document from Dick Bruss, Richard Stegner, California, Amtrak and Andrew Wood, the review meeting is scheduled for later today. All of the comments except Amtrak's have been incorporated into the new draft of the document. The final version should be created after today's meeting.

The Trainset specification will be the next document completed.

I have received working group member lists from the Mechanical, Electrical and Interiors groups.

8. Status Update: NGECE Equipment Acquisition and Ownership Best Practices/Lessons Learned Document – Steve Hewitt:

Steve Hewitt acknowledged that Tammy Krause had summed up the status on this item well in her Document Control update. Steve emphasized that the working group would meet today (5-28-20) and will go over the revised document as well as the new comments received. Steve expects there may well be additional comments brought forth on the call or thereafter and they will be submitted to Tammy Krause to send to Camren Cordell to incorporate in an updated DRAFT.

The working group will also begin to outline next steps and a path forward for ultimate completion of this critical document.

9. AAR TAG Committee on LED Headlights Phase 4 – Tarek Omar, FRA:

Tarek Omar reported that they had a meeting last week – all testing has been done on Phase 4. On Phase 3 the report is complete and should be out soon. On Phase 4, Tarek expects to have a DRAFT report to share with the members of the TAG committee in a week or 2.

10. Other Issues:

Charlie King reported to the Technical subcommittee that the Executive Board has been discussing the possibility of reducing the frequency of its calls (currently Bi-Weekly) to potentially every three weeks or every four weeks.

While there were some thoughts on changing the Technical subcommittee call frequency (to potentially every three weeks or every four weeks), Charlie has determined that the calls will remain as they have always been – bi-weekly. There may be times that a call is canceled, but primarily they will continue to follow the current schedule of every two weeks. Charlie believes "it is a routine we are all in" and it is better to hold the time on the calendars and to not disrupt the flow that has worked quite well. While these calls are important for the voting members (states, Amtrak and FRA), they are also important to the members of the industry (200+) as well.

With no further business forthcoming for today's call, Charlie King adjourned the meeting at 3:18PM Eastern.

Next Call: 6-11-20– 3:00pm Eastern

Decisions and Action Items

Requesting Background educational document:

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Maintaining Industry Participation List: There are approximately 200 industry participation members.

Reminder: The list is only as good as the information Steve is provided, and often members retire or move on to other companies and do not let Steve know so the list becomes inaccurate.

AAR TAG Committee on LED Headlights Phase 4 as of 5-28-20:

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Next update as appropriate.

PRIIA Multi-State Procurement Update:

Multi-State Car Procurement - Caltrans (Lead State): Progress reports from the lead state will be provided on each subcommittee call.

See agenda item 5 for 5-28-20 update.

Document Control Update as of 5-28-20:

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Metro North Dual Mode Locomotive Procurement:

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Next Update: 6-11-20

Connecticut DOT Rail Car Procurement:

On 4-30-20, Marci Petterson, Connecticut DOT announced that they are about to an RFP on new rail cars. Marci will send the link to Steve Hewitt for distribution to NGEC members.

There was no update provided on 5-28-20. This item was tabled until the next call.

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Next call: 6-11-20

Call in number is:

888 585-9008 access #: 559-120-127

ATTACHMENTS



Our Vision: The NGEC will provide national leadership in standardization, acquisition, and management of passenger rail equipment.

PRIIA Section 305 Tech Sub Committee Meeting

May 28, 2020

The agenda for the meeting is below:

- | | |
|--|-----------------|
| 1. Roll Call | Steve Hewitt |
| 2. Review Meeting Agenda | Charlie King |
| 3. Review Action Items | Steve Hewitt |
| 4. Approve Minutes from 4-30 -2 and 5-14-20 | Charlie King |
| 5. Update: Multi-State Rail Car Procurement | Momo Tamaoki |
| 6. Status Update: Connecticut Rail Car Procurement | Marci Petterson |
| 7. Update: Document Control Management | Tammy Krause |
| - Status: Completion of Single Level Trainset Specification 305-007 – Revision B | |
| - Status: DMU spec update – timeline | |
| - Updating list of Technical working group members | |
| - Status: Responding to Electronics on Trains Working Group Questions | |
| 8. Status: NGEC Equipment Acquisition and Ownership Working Group – DRAFT Document | Steve Hewitt |
| 9. AAR TAG Committee on LED Headlights Phase 4: | Tarek Omar |
| 10. Other issues | All |
| 11. Review this meeting: | Steve Hewitt |
| a) Decisions | |
| b) New Action Items | |

***Technical Sub Committee Conference Call Meeting:
Thursday 5-28-20 / 3:00pm Eastern / 1-888 585-9008 / passcode 559-120-127#***

*Please call in a few minutes early so all is in attendance for Roll Call.
Thank you
Next Call -6-11-20 at 3:00pm Eastern*