

SECTION 305 TECH SUB COMM

MINUTES

JUNE 9, 2022

3:00PM EASTERN

CONFERENCE CALL

FACILITATOR	<i>George Hull Chair, NGEC Technical Subcommittee</i>
ATTENDEES	Core Team Members: <i>George Hull, Jeffrey Gordon, Ray Hessinger, Jennifer Bastian, Gurleen Boparai, Curtis McDowell for Matthew Simmons, Marci Petterson, Art Peterson, Larry Salci, Tarek Omar, Tammy Krause, Rebecca Anger, Steve Hewitt</i> Industry Members: <i>Richard Curtis, Paul Jamieson, Josh Coran, Kevin Sudano, Dave Warner, Kevin Carmody, Rich Stegner, Paul Arnone, Daniel Castillo, Joanna Hallisy, Ed Golitko, Rich Bowie, Martin Bloedt</i>
ABSENTEES	<i>Mathew Simmons, Ed Engle, Troy Hughes, Jason Biggs, Mike Jenkins, Joe Paul, Blair Slaughter, Mike Kraft, Melissa Shurland, Mike Murray</i>

DISCUSSION/DECISIONS MADE

1.

Technical subcommittee Chair George Hull, Amtrak, called the meeting to order and asked Steve Hewitt to call the roll of core team members.

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 Action Items – Steve Hewitt, NGEC Program Manager:

2022 NGEC Backgrounder educational document:

The 2022 NGEC two-pager is available in hard copy by request of Steve Hewitt at shewitt109@aol.com.

To date 125 hard copies and 450 electronic copies have been distributed (575 – total).

Maintaining Industry Participation List:

There are just over 200 industry participants.

Any updates or changes to this list should be sent to Steve Hewitt at shewitt109@aol.com.

Connecticut DOT Rail Car Procurement:

Connecticut's initial Coach Procurement RFP was rescinded. A new RFP was released on 5-11-22. Marci Petterson, CtDOT, provided the link for Steve Hewitt, to distribute to subcommittee members:

[CTsource Bid Board](#)

Bid number: **22CTRAIL-1**

On 6-9-22, Marci Petterson reported that there is a pre-proposal meeting on 6-10-22.

Update: University of Nebraska/FRA High Speed Wireless Study:

As of 5-12-22:

In our study, we have been exploring the properties and capabilities of the 160 MHz RF band, and its suitability for a variety of applications, including Wireless Digital Trainline. This includes a key factor of investigating if 160MHz can alleviate the pressure on the 220MHz.

In this process, we designed and evaluated both a single-carrier transceiver architecture and an OFDM-based transceiver architecture, and conducted evaluations of both designs.

This quarter we expanded on our efforts by incorporating Forward Error Correction (FEC) Coding into these architectures. FEC is a way to improve the receive-side bit error rate, and thus communication distance, by sacrificing throughput capacity. The released throughput is instead used to carry additional information that the transmitter inserts into the data stream.

We plan to publish our results this summer.

Please contact Hamid Sharif @ University of Nebraska-Lincoln for any additional information.

Next Update: 6-23-22

3. Approval of the Minutes from 5-12-22 – George Hull, Amtrak:

On a motion by Curtis McDowell for NCDOT, and a second by Jennifer Bastian, IDOT, the minutes from 5-12-22 were approved as submitted.

4. Update: Multi-State Railcar Procurement as of 6-9-22 – Gurleen Boparai, Caltrans:

On 6-9-22, Gurleen Boparai provided the following for inclusion in the minutes:

The Cab Car shell final design has been approved and the cab cars are in production. Remaining Cab Car FDRs are in the final submittal and review stage. Cab Car Safety Appliance documents have been sent to the FRA for review, and the Cab Car Clearance information has been approved by Amtrak. IDOT Café Car FDRs are in the closure stage with Galley open items expected to close in June.

The Cab Car Collision and Corner Post Appendix F testing is complete, and the test report has been reviewed and Siemens is addressing the final comments. The revised cab car Compression test report has also been reviewed and comments from FRA have been addressed. The Cab Car locking luggage tower FAI is scheduled for week of June 13.

110 cars are in production or have been produced at Siemens Sacramento Facility. Revenue Service relevant FMIs are in progress and open items related to Conditional Acceptance are being addressed. IDOT coaches are currently in revenue service and Caltrans is planning revenue start once necessary agreements are in place.

5. Update: Metro-North Dual Mode Locomotive Procurement – Ray Hessinger, NYSDOT:

On 6-9-22, Ray Hessinger, NYSDOT, reported that Metro-North and Siemens concluded the Preliminary Design Review (PDR) and have moved to Final Design Review (FDR). Siemens has started the process of preparing FDR submittals to Metro-North.

6. Update: Amtrak Vehicle Procurements – George Hull, Amtrak:

On 6-9-22, George Hull reported:

On the Acela 21: Work continues on vehicle qualifications and modeling.

On the Charger Locomotive: Amtrak continues to get units from Siemens. There are 8 thus far and they are running on the Empire Builder and the City of New Orleans. They are waiting on ATC and PTC software updates.

On the Intercity Trainset (ICT): Preliminary Design Review is complete, and they are starting on Intermediate Design Review.

7. Update: Working Group On Weight Issues – Jeff Gordon, FRA:

On 6-9-22, Jeff Gordon, FRA, reported that the meeting originally scheduled for this morning (6-9-22) was canceled due to a schedule conflict and he is in the process of scheduling the next meeting.

8. Update: Document Control Management – Tammy Krause:

On 6-9-22, Tammy Krause provided the following update for inclusion in today's minutes:

The Bi-Level Specification propose update has received no DCRs to date.

As a result, Steve Hewitt recommended setting a final date for submittals. Steve agreed to send out a several e-mails giving everyone a chance to submit DCRs by **6/30/2022**

The Carbody Materials Working group met this week and they are working on Chapter 4 – Carbody, of the Single Level Specification. They are doing a comprehensive review of the spec.

I do not have an update on the Electronics on Trains working group.

The new cover sheet for PRIIA 305-100 has been sent to Ray Hessinger (NGEC Executive Board Chair) for signature.

Once signed by Ray – the updated document will be provided to AASHTO for posting to the website and to Steve Hewitt for filing.

Steve Hewitt also asked Tammy Krause to provide him with an updated document list for his files and for posting to the website.

Jeff Gordon, FRA, noted that the link to the Volpe Center pertaining to Crash Energy Management (CEM) is no longer current and will go to a folder that does not exist. This link is common in all vehicle specs, thus Jeff suggested that that link be removed, and a new series 305-900 Reference spec be developed to codify the correct information. Tammy agreed to develop the spec and give it a series 900 number.

I will be creating a new reference specification to address the Volpe Center information on CEM based upon information provided by Jeff Gordon.

9. Adjourn:

With no other business forthcoming on today's call, George Hull adjourned the meeting at about 3:20pm Eastern.

Next Tech subcommittee Call: 6-23-22– 3:00pm Eastern

Decisions and Action Items

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Maintaining Industry Participation List: There are about 200 industry participants.

There have been several updates/changes to the list that have been provided to Steve Hewitt and those changes were made.

Any further updates or changes should be sent to Steve Hewitt at shewitt109@aol.com.

Update: Multi-State Railcar Procurement:

Gurleen Boparai, Caltrans, provided the following update for inclusion in the 6-9-22:

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Next Update – 6-23-22

Document Control Update:

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The new cover sheet for PRIIA 305-100 has been sent to Ray Hessinger (NGEC Executive Board Chair) for signature.

I will be creating a new reference specification to address the Volpe Center information on CEM based upon information provided by Jeff Gordon.

Next Update – 6-23-22

Working Group on Weight Issues as of 6-9-22:

The scheduled Working Group meeting for 6-9-22 was canceled due to a schedule conflict. Jeff Gordon is looking at dates for the next meeting.

If interested in participating on this working group, contact Jeff Gordon at Jeffrey.gordon@dot.gov or Steve Hewitt at shewitt109@aol.com

Next Update – 7-7-21

University of Nebraska High Speed wireless study as of 4-28-22:

The following update was provided by Hamid Sharif on 4-28-22:

In our study, we have been exploring the properties and capabilities of the 160 MHz RF band, and its suitability for a variety of applications, including Wireless Digital Trainline. This includes a key factor of investigating if 160MHz can alleviate the pressure on the 220MHz.

In this process, we designed and evaluated both a single-carrier transceiver architecture and an OFDM-based transceiver architecture, and conducted evaluations of both designs.

This quarter we expanded on our efforts by incorporating Forward Error Correction (FEC) Coding into these architectures. FEC is a way to improve the receive-side bit error rate, and thus communication distance, by sacrificing throughput capacity. The released throughput is instead used to carry additional information that the transmitter inserts into the data stream. We plan to publish our results this summer.

Thank you.

Please contact Hamid Sharif @ University of Nebraska-Lincoln for any additional information.

Next Update: - 6-23-22

Metro North Dual Mode Locomotive Procurement –6-9-22

On 6-9-22, Ray Hessinger, NYSDOT, reported that Metro-North and Siemens concluded the Preliminary Design Review (PDR) and have moved to Final Design Review (FDR). Siemens has started the process of preparing FDR submittals to Metro-North.

Next Update: 7-7-22

Connecticut DOT Rail Car Procurement as of 6-9-22:

A Pre-proposal meeting was scheduled for 6-10-22.

Next Update: As appropriate

Amtrak Equipment Procurement as of 6-9-22:

On the Acela 21: Work continues on vehicle qualifications and modeling.

On the Charger Locomotive: Amtrak continues to get units from Siemens. There are 8 thus far and they are running on the Empire Builder and the City of New Orleans. They are waiting on ATC and PTC software updates.

On the Intercity Trainset (ICT): Preliminary Design Review is complete, and they are starting on Intermediate Design Review

Next Update: 7-7-22

Next call 6-23-22

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

Web Ex video/audio information:

By Computer: <https://stephenhewitthewittconsulting.my.webex.com/meet/shewitt109>

by phone: 1-415-655-0001

Access code: 126-073-1531

6-9-2022

The agenda for the meeting is below:

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|---|-----------------|
| 1. Roll Call | Steve Hewitt |
| 2. Review Action Items | Steve Hewitt |
| 3. Approve Minutes from 5-12-22 | George Hull |
| 4. Update: Multi-State Rail Car Procurement | Gurleen Boparai |
| 5. Update: Metro-North Dual Mode Locomotive Procurement | Ray Hessinger |

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| 6. Update: Amtrak Vehicle Procurementa | George Hull |
| 7. Update: Working Group on Weight Issues | Jeff Gordon |
| 8. Document Control Management | Tammy Krause |
| - Update – Bi-Level Specification Update and anticipated timeline | |
| - Update - Carbody Materials working group – status report | |
| - Update- Electronics on Trains working group – status report | |
| - Status: Updating PRIIA 305-100 per Executive Board approval 5-3-22 | |
| 9. Other | All |
| 10. Adjourn | George Hull |

Next Meeting 6-23-22