# **SECTION 305 TECH SUB COMM**

MINUTES JANUARY 19, 2023 3:00PM EASTERN

CONFERENCE CALL

FACILITATOR	Joe Paul, Vice Chair, NGEC Technical Subcommittee
ATTENDEES	Core Team Members: Joe Paul for George Hull, Jeff Gordon, Ray Hessinger, Ed Engle, Jennifer Bastian, Curtis McDowell for Mattew Simmons, Troy Hughes, Jason Biggs, Mike Jenkins, Art Peterson, Larry Salci, Tammy Krause, Steve Hewitt Industry Members: Dave Warner, Ken Martin, Stephen Mark, Rob Magdule, Rich Stegner, Ed Golitko, Frank Pascazio, Jack Madden, Richard Curtis, Tom LaMano, Kevin Myles, Rich Bowie, Steve Ojalvo, Kevin Sudano, Jow Kenas, William Luebke, Brian Ley, Josh Coran, JoAnn Hallisey, Dick Bruss, Darrell Smith
ABSENTEES	George Hull, Gurleen Boparai, Marci Petterson, Matthew Simmons, Tarek Omar, Mike Murray, Melissa Shurland, Blair Slaughter, Rebecca Anger

## **DISCUSSION/DECISIONS MADE**

1.

Technical subcommittee Chair George Hull, Amtrak, was unavailable. Joe Paul, Vice Chair 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 <a href="mailto:shewitt109@aol.com">shewitt109@aol.com</a>.

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 <a href="mailto:shewitt109@aol.com">shewitt109@aol.com</a>.

To date 655 copies have been distributed.

The 2023 version has been completed by MODOT Graphic Arts. The new version will be available at the Annual Meeting.

## **Maintaining Industry Participation List:**

There are just over two hundred industry participants.

We added one new member moments ago – Dave Fox ACS Railroad Solutions – welcome!

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

#### **Connecticut DOT Rail Car Procurement:**

On 1-5-23, Marci Petterson reported that they expect to receive proposals by the end of January. At that point they will enter the "cone of silence."

**Next Update: As Appropriate** 

#### **Metro-North Dual Mode Locomotive procurement:**

On 1-5-23, Ray Hessinger reported that Metro-North and Siemens are resolving FDR comments. They still anticipate car shell production to begin by the end of this month (January).

Next Update: 2-3-23 NGEC Annual Meeting

### **Amtrak Vehicle procurements:**

On 1-5-22, George Hull reported:

On the new Acelas:

They continue to work on qualification and modeling. Four trainsets have been delivered.

On the Charger Locomotives (ALC 42):

They are progressing well. They are working on PTC issues, They had a good experience during the winter storm and are working on items that came up during the extreme weather.

On the Intercity Trains (ICT):

They have named the trainsets "Airo". They continuing in the Final Design Review (FDR) Phase and have begun construction of the first car shell.

#### Next Update: 2-3-23 NGEC Annual Meeting

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

Hamid Sharif Report as of 10-13-22:

During the previous phase of this project, which was completed in August, our team systematically explored the reusability of underutilized RF resources such as the 160MHz RF band. In this work, we studied the distinct capabilities - and limitations - of the 160 MHz RF frequency bands through our theoretical and computer models to design an RF communications solution to maximize achievable performance, reliability, and security for rail applications.

In the new phase, which started in September, we aim to research the transition from the developed model to a full prototype and conduct extensive field testing utilizing the rail facility to demonstrate our model capabilities. This phase also includes collections of a variety of performance metrics. We also aim to leverage these to accelerate research into a universal and modular cognitive radio solution for the rail industry that intelligently adapts to any usable RF band, for any rail wireless application.

I hope in the next report, provide more details about our plan for field testing. Please contact me (<a href="mailto:hsharif@UNL.edu">hsharif@UNL.edu</a>) for any questions. Thank you.

### Next Update: 2-3-23 - NGEC Annual Meeting

#### 3.

#### Approval of the Minutes from 1-5-23 - George Hull, Amtrak:

On a motion byJennifer Bastian, IDOT and a second by Ed Engle, Iowa DOT, the minutes from 1-5-23 were approved as submitted.

#### 4.

## **Update: Multi-State Rail Car Procurement – Gurleen Boparai, Caltrans:**

Gurleen Boparai, Caltrans, was unavailable so this item was tabled until the Annual Meeting -2-3-23 where a more detailed presentation will be provided.

#### 5.

## Update: Document Control —review of the Bi-Level Specification DCRs - Tammy Krause, NGEC Document Control Manager:

Tammy Krause provided an overview of the DCRs focusing on comments received from the technical working groups. Most requested changes were accepted by the working groups with only a few rejected and several with comments.

Jeff Gordon provided a review of comments submitted from the Mechanical Working Group which had a few changes that they recommended a no on, but mostly all of the DCRs pertaining to the working group were accepted.

Many of the DCRs for the Bi-Level Specification update were ones that were approved previously for the Single Level Specification and would also apply to the Bi-Level Spec.

Following the summation of the DCRs, there was little discussion raised – primarily clarifications.

#### 6.

#### Consideration of Tech subcommittee approval of the DCRs fopr Bi-Level Specification Rev D - Joe Paul:

Joe Paul called for a motion to approve the DCRs as adjudicated out of the Technical subcommittee and sending them to NGEC Executive Board Chair Ray Hessinger.

A motion to approve was offered by Ed Engle, Iowa DOT and was seconded by Curtis McDowell for NCDOT.

Joe Paul asked if there was any other discussion. With no discussion forthcoming, Joe Paul asked Steve Hewitt to call the roll of the voting members present.

The results of the roll call vote was a unanimous approval with all voting members present voting in the affirmative.

Joe Paul determined that consensus was achieved and the motion passed.

Steve Hewitt asked Tammy Krause to put together a packet of the DCRs as approved by the Technical subcommittee along with a cover letter to NGEC Cahir Ray Hessinger. At next week's NGEC Executive Board meeting (1-24-23) Ray Hessinger will reconvene the Bi-Level Specification Review Panel and formally request that Technical Consultant Larry Salci prepare a Review Panel Report with Recommendations.

#### 7.

#### Update: Working Group on Weight Issues - Jeff Gordon, FRA:

Jeff Gordon reported that he was planning to hold the next working group meeting in February – likely the 20th or 27th.

#### 8

#### NGEC 2023 Annual Meeting - Steve Hewitt:

Steve Hewitt reported that the current draft agenda for the 13th NGEC Annual Meeting (February 3, 2023 – 8:00am-12:30pm Eastern) has been distributed and is or will be posted to the NGEC website.

Please register your intent to attend by sending an email to Steve Hewitt <a href="mailto:shewitt109@aol.com">shewitt109@aol.com</a> and state whether you plan to attend in-person or virtual. Please respond by 1-20-23.

A current registration list will be included with the distribution of today's draft minutes. At this point, the registration list includes fifty-four in-person and thirty-one virtual attendees.

#### 11.

#### Adjourn:

With no other business forthcoming on today's call George Hull adjourned the meeting at 3:38pm Eastern.

## Next meeting - 2-3-23 NGEC Annual Meeting

#### **Decisions and Ongoing Action Items**

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## Maintaining Industry Participation List: There are about two hundred industry participants.

There are just over two hundred industry participants.

Three new members were added this month: Ron Lammerts – Colliers Engineering and Mike Monaco – TPSC Rail -and Dave Fox – ACS Railroad Solutions - Welcome!

Any updates or changes to this list should be sent to Steve Hewitt at <a href="mailto:shewitt109@aol.com">shewitt109@aol.com</a>.

#### **Update: Multi-State Railcar Procurement as of 1-5-23:**

The remaining Cab Car FDRs are in the final review and closure stage and the Cab Car dynamic framing representative approach has been submitted to FRA for review. IDOT Café Car system level FDR reviews are nearly closed.

The Cab Car Collision and Corner Post Appendix F testing is complete, and the test report has been approved. The Cab Car emergency egress demo occurred on October 25 with Amtrak and FRA in attendance. The Cab Car F-Coupler FAI is tentative for February.

121 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 all necessary agreements are in place.

#### Next Update - 2-3-23 NGEC Annual Meeting

#### **Document Control:**

On 1-19-23, the Technical subcommittee approved changes to the PRIIA Bi-Level Rail Car Specification as recommended by the technical working groups and asked that they be sent to the Executive Board Chairman. The next step is for the Chair to convene the NGEC Bi-Level Specification Review Panel and ask technical consultant Larry Salci to prepare a Review Panel Report with Recommendations.

Tammy Krause will send the DCRs as adjudicated to Chairman Hessinger with a cover letter. This will be done in advance of the 1-24-23 Executive Board meeting.

## Next Update - 2-3-23

#### **Working Group on Weight Issues:**

As of 1-19-23, the document is nearly complete. There is some work to do on it before sending back out to the working group members.

The document is turning out a bit differently than expected. Jeff Gordon had said that he is not sure exactly how the Technical subcommittee will use it.

The group has uncovered things that need to be changed in the spec. None of these are controversial. Some are simply updates to the references and some are corrections to equations that have changed. Jeff will handle these through the DCR process that is ongoing now on the Bi-Level specification update.

On 1-19-23, Jeff Gordon reported that he hopes to meet with the working group in February – either the 20th or 27th.

#### Next Update - March 2023

#### University of Nebraska High Speed wireless study:

On 10-13-22 Hamid Sharif provided the following report for inclusion in the meeting minutes:

#### Hamid Sharif Report 10/13/2022:

During the previous phase of this project, which was completed in August, our team systematically explored the reusability of underutilized RF resources such as the 160MHz RF band. In this work, we studied the distinct capabilities - and limitations - of the 160 MHz RF frequency bands through our theoretical and computer models to design an RF communications solution to maximize achievable performance, reliability, and security for rail applications.

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#### Next Update: 2-3-22 NGEC Annual Meeting

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#### Next Update: 2-3-23 Annual Meeting

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#### **Next Update: As Appropriate**

## **Amtrak Equipment Procurement:**

George Hull reported on 1-5--22:

On the new Acelas:

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On the Charger Locomotives (ALC 42):

They are progressing well. They are working on PTC issues, They had a good experience during the winter storm and are working on items that came up during the extreme weather.

On the Intercity Trains (ICT):

They have named the trainsets "Arrow". They continuing in the Final Design Review (FDR) Phase and have begun construction of the first car shell.

#### Next Update: 2-3-23 NGEC Annual Meeting.

### **Amtrak's NGEC CRISI Grant Application:**

As of 12-8-22:

Steve Hewitt reported that the Amtrak/NGEC CRISI Grant was submitted to the FRA before the deadline. The application has been uploaded to the FRA website. FRA will review all applications received and make determinations.

The application is for \$2 million with a period of 5 years (although a sunset date is not known – Tim is checking). Amtrak is providing the 20% match (\$400,000) using non-federal funds (fare box), with the FRA providing the remaining \$1.6 million.

The Executive Board members had a brief opportunity to review and comment on the application before it was submitted. Tim Ziethen, Amtrak, who is the NGEC Treasurer and FASC Chair reported to the subcommittee (FASC) that he feels good about the application. He believes "we" made a good case. The application is comprehensive – more than thirty-five pages with included attachments.

Steve Hewitt noted that the application received many letters of support including individual states, rail manufacturing and supply companies, individual industry members, and associations such as AASHTO, the States for Passenger Rail Coalition, Inc. (SPRC) and the Rail Passenger Association (RPA).

Steve noted that Tim had reported that Meghan Histand, Amtrak Grants, commented to him that the support letters received

was impressive.

During the FASC call, T im also noted that the application received strong support from within T adding that the support went "all the way to the top."

Steve mentioned that he did not have a timeline for when FRA would announce what grants were awarded, but it would be a number of months for sure.

Steve thanked those NGEC members who submitted letters in support and stated added that letters can still be sent even though the application has been submitted.

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Next Meeting - NGEC Annual Meeting 2-3-23

#### **ATTACHMENTS**



Update: Document Control

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: <a href="https://stephenhewitthewittconsulting.my.webex.com/meet/shewitt109">https://stephenhewitthewittconsulting.my.webex.com/meet/shewitt109</a>

by phone: 1-415-655-0001 Access code: 126-073-1531

## <u>Agenda</u>

## 1-19-23

Roll Call
 Review Action Items
 Approve Minutes from 1-5-23
 Update: Multi-State Rail Car Procurement
 Steve Hewitt
 George Hull
 Gurleen Boparai

Tammy Krause

- Review of Bi-Level Specification Summary of Changes

6. Consideration of Tech SC Approval of the Bi-Level changes George Hull

7. Update – Working Group on Weight Issues Jeff Gordon

8. NGEC 2023 Annual Meeting Steve Hewitt

9. Other All

10. Adjourn George Hull

Next Meeting 2-3-23
NGEC 13<sup>th</sup> Annual Meeting