

# SECTION 305 TECH SUB COMM

MINUTES

JUNE 22, 2023

3:00PM EASTERN

CONFERENCE CALL

<b>FACILITATOR</b>	<i>Joe Paul, Vice Chair, NGENC Technical Subcommittee</i>
<b>ATTENDEES</b>	<b>Core Team Members:</b> Joe Paul for George Hull, Jeff Gordon, Jodi Lehmkuhl, Curtis McDowell for Matthew Simmons, Jennifer Bastian, Ed Engle, Ray Hessinger, Mike Jenkins, Larry Salci, Melissa Shurland, Art Peterson, Steve Hewitt <b>Industry Members:</b> Richard Stegner, Paul Jamieson, Jack Madden, Kevin Sudano, James Michel, Ed Golitko, Tom LaMano, Steve Ojalvo, Josh Coran, Kevin Myles, Joanne Hallisey, Jeff Schultz, Darrell Smith, Paul Arnone, Rob Magdole, Steve Morrison
<b>ABSENTEES</b>	<i>George Hull, Matthew Simmons, Troy Hughes, Jason Biggs, Marci Petterson, Mike Murray, Tarek Omar, Barley Fields, Blair Slaughter, Tammy Krause</i>

## DISCUSSION/DECISIONS MADE

### 1.

Technical subcommittee Vice Chair Joe Paul, 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](mailto:shewitt109@aol.com).**

### 2.

**Review Action Items – Steve Hewitt, NGENC Program Manager:**

**2023 NGENC Backgrounder educational document:**

The 2023 NGENC two-pager is available in hard copy by request of Steve Hewitt at [shewitt109@aol.com](mailto:shewitt109@aol.com).

To date 334 copies have been distributed.

**Maintaining Industry Participation List:**

There are just over two hundred industry participants.

**Any updates or changes to this list should be sent to Steve Hewitt at [shewitt109@aol.com](mailto:shewitt109@aol.com).**

**Connecticut DOT Rail Car Procurement:**

Marci Petterson attended the call on 6-8-23 and confirmed that negotiations are continuing and the “cone of silence” remains in effect.

**Next Update: As Appropriate**

**Working Group on Vehicle Weight Issues:**

On 3-30-23, Jeff Gordon, FRA reported that he intends to update the document based on working group feedback rather than schedule a meeting. He will then ask for input from the members via email. His issue is that he has been called for Jury duty and if enpaneled could be serving for 3 months and he would not be able to hold a working group meeting. If he is not enpaneled, this may change, but for now he intends to begin updating the document based on feedback received to date.

Steve Hewitt asked Jeff to let him know when he is ready to present an update to the technical subcommittee and he will add it to the agenda at that time.

**Next Update: As Appropriate**

**Communications on Rail Cars Working Group as of 4-13-27:**

Ken Martin, Sharma and Associates and team leader for the Communications on Rail Cars Working Group, reported that they are working on writing a DTL specification to include in the Single-level Rail car specification once completed and approved.

Ken is working on the first draft and will distribute it to the working group members in advance of their next meetin (a week or week and a half from now). It will be a few months down the line before it will be ready for review outside of the Working Group. Ken noted that this spec may well be applicable to some of the other PRIIA specs. There are similarities but also some differences. Ken noted that he was able to get the updated Amtrak specification and is including it.

Additionally, Ken noted that there have been some requests that the Working Group also look at developing a CCTV specification. Ken would welcome input from leadership on whether this is something that the Working Group should do.

Joe Paul commented that he believes a CCTV specification is a good idea. Amtrak is working on video surveillance for the Venture cars and it is clear that there is a need for standardization.

Ken asked if this should be a "global spec"?

Joe responded that there will need to be further discussion to determine how to approach this. He invited input form subcommittee members - "feel free to reach out".

On 5-25-23, Steve Hewitt noted that a follow-up with this working group was needed. Tammy Krause will follow-up with Ken Martin and provide an update on the next subcommittee call – 6-8-23.

**On 6-8-23, Tammy Krause reorted the following update:**

*The Communications on Rail Cars Working Group is working on the communications chapter 12 of the single level specification. They were asked to bring the communications section up to current. They are currently working on the Digital Train Line section. The PRIIA sub specification was sunset but the concept is still needed. The new section being written by the communications group includes newer technology and options as opposed to the original ethernet cables. Their next meeting will be on June 20, 2023.*

**3. Approval of the Minutes from 6-8-23 – Joe Paul, Amtrak:**

On a motion by Ed Engle, Iowa DOT, and a second by Jennifer Bastian, IDOT, the minutes from 6-8-23 were approved as submitted.

**4. Update: Multi-State Venture Rail Car Procurement – Jodi Lehmkuhl, Caltrans:**

On 6-22-23, Jodi Lehmkuhl, Caltrans, provided the following update for inclusion in today's minutes:

- *The remaining Cab Car FDR submittals are in the final closure stage with nearly all subsystems approved. The Cab Car MCAT simulation report has been submitted to Amtrak for review and transfer to FRA with clarifications made. IDOT Café Car system level FDR reviews are nearly closed.*
- *The Cab Car Collision and Corner Post Appendix F test reports are approved. The Cab Car Complete FAI is scheduled for July 18, to be followed by the FRA Sample Car Inspection on July 27.*
- *129 cars are in production or have been produced at Siemens Sacramento Facility. IDOT coaches are currently in revenue service and Caltrans is targeting revenue start in 2023. Progress on agreements has been made with signatures expected in July.*

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

Ray Hessinger provided the following update for inclusion in the minutes:

- *Metro North and Siemens closed the Final Design Review (FDR) Phase on May 8th.*
- *Production for Metro-North Charger #301 and #302 is progressing ahead of DCS schedule. Carshells for both locomotives have*

completed Q14 (ready for blast) and have been put into storage until finishing begins.

- Sub-assembly has started in May as the DCS and Final Assembly is on track to start in July 2023.
- First Article Inspection (FAI) for the MNR carshell has been successfully completed with zero open items.
- FAI for truck frame welding has been successfully completed.

## 6.

### **Update: Amtrak Vehicle Procurements – Joe Paul:**

On 6-22-23, Joe Paul reported on the status of the Amtrak Vehicle Procurements:

On the new Acela:

Work continues on the qualification requirements.

On the Airo Trainsets:

Final Design Review continues.

On the Charger Locomotives:

29 are in-house, 28 and 29 will be commissioned this week. Service on the Capital between Washington and Chicago has begun. Silver Service in Washington is scheduled to begin on 6-29-23 as the ATC hurdle was passed.

## 7.

### **Update: University of Nebraska High Speed Wireless Study – Hamid Sharif:**

On 6-22-23, Hamid Sharif provided the following update for inclusion in the minutes:

*We continued our field testing for verification of our transceiver design. This is to investigate a better utilization of some of the sub-giga-Hertz frequencies for rail applications to ease the spectrum saturation. We have been investigating 160 MHz which has been used primarily for voice communications but believe this band can be utilized more efficiently for some of the data rail applications and this is the core of our study. We have built computer models for the physical layer transmission of 160 MHz as well as the upper layers to simulate and field test different rail applications. Our developed transceiver has been implemented using software-defined radios for field tests. Hope to provide the results later in the summer.*

For any questions, please contact Hamid Sharif at:

[hsharif@UNL.edu](mailto:hsharif@UNL.edu)

## 8.

### **Update Document Control Management - Steve Hewitt for Tammy Krause:**

In Tammy's absence, Steve Hewitt read her update into the record:

*I have received 10 comments on the PRIIA sub specs and I will be creating DCRs from them and submitting them to the entire Technical Subcommittee (TSC) for review. The next group of documents to be reviewed are the APTA Standards and Recommended Practices.*

*The Materials Working Group has not completed their review of the EN Welding Standards yet but will give a report/summary to the TSC when they do.*

## 9.

### **Status: NGEN Funding – CRISI Grant Timeline – potential next steps – Steve Hewitt:**

#### **Balance/Spend Rate Through April 2023**

Total Initial Grant Amount: \$1,250,000.

Expenses Incurred through April 2023: \$1,173,648.37

Balance remaining: \$76,351.67.

Estimated spend at current rate for balance of the Grant: \$74,281.54

Current Spend Rate per month (as info and used in calculating): \$14,856.31.

Estimated Balance at the end of the Grant Period: 2,070.13

#### **Path Forward:**

Amtrak has submitted a 6-month no-cost extension of the current grant agreement to allow for the expenditure of funds beyond the current grant period ending date of 9-30-23. The no-cost extension submittal, if approved by FRA, will allow us to exhaust every bit of the funds.

Amtrak plans to submit a request to fund the NGEC possibly as a part of its Annual Operating Plan (AOP).

The request is anticipated to be included in the Amtrak Operating Plan (AOP) but this still needs to be firmed up. Currently it is expected to be "a keep the lights on" request for about \$260,000 for the 12-month period beginning 10-1-2023 through 9-30-2024.

The hope is still for the CRISI Grant to be approved, but this request is to be submitted as a fall back and to fill the void while awaiting potential CRISI Grant funds to be awarded and obligated. The proposed interim funding request is subject to approval both internally at Amtrak and FRA and could change before final.

Tim Ziethen, NGEC Treasurer, reported that he has confirmed with Amtrak Legal that no changes to the NGEC By-Laws or its structure will be required if there is a new funding source.

According to Tim Ziethen the NGEC line item is in the current proposed Amtrak Budget for FFY 2024, subject to Amtrak Board approval. (He noted that he has a verbal commitment from CMO George Hull and from Amtrak Finance.)

Tim is also checking with Amtrak Accounting to see if the 12-month interim funding should be in the AOP or as a line item capitalization project. It seems that it is a better fit as part of the Amtrak Annual Budget rather as a capitalized project which would pertain to creating new assets rather than maintaining existing assets.

## **8. Adjourn:**

With no other business forthcoming on today's call Joe Paul adjourned the meeting at 3:22pm Eastern.

**Next meeting – 7-6-23**

## **Decisions and Ongoing Action Items**

### **2023 NGEC Backgrounder educational document:**

The 2023 NGEC two-pager is available in hard copy or electronic copy. Send requests to Steve Hewitt at [shewitt109@aol.com](mailto:shewitt109@aol.com)

To date 334 copies have been distributed.

It is also posted on the NGEC website – [www.ngec.org](http://www.ngec.org)

### **Maintaining Industry Participation List:**

There are just over two hundred industry participants.

Any updates or changes to this list should be sent to Steve Hewitt at [shewitt109@aol.com](mailto:shewitt109@aol.com).

### **Update: Multi-State Railcar Procurement as of 6-22-23:**

- *The remaining Cab Car FDR submittals are in the final closure stage with nearly all subsystems approved. The Cab Car MCAT simulation report has been submitted to Amtrak for review and transfer to FRA with clarifications made. IDOT Café Car system level FDR reviews are nearly closed.*
- *The Cab Car Collision and Corner Post Appendix F test reports are approved. The Cab Car Complete FAI is scheduled for July 18, to be followed by the FRA Sample Car Inspection on July 27.*
- *129 cars are in production or have been produced at Siemens Sacramento Facility. IDOT coaches are currently in revenue service and Caltrans is targeting revenue start in 2023. Progress on agreements has been made with signatures expected*

in July.

**Next Update – 7-6-23**

**Document Control Management as of 6-22-23:**

Tammy Krause submitted the following update on 6-22-23:

*I have received 10 comments on the PRIIA sub specs and I will be creating DCRs from them and submitting them to the entire Technical Subcommittee (TSC) for review. The next group of documents to be reviewed are the APTA Standards and Recommended Practices.*

*The Materials Working Group has not completed their review of the EN Welding Standards yet but will give a report/summary to the TSC when they do.*

**Working Group on Weight Issues:**

On 3-30-23, Jeff Gordon, FRA reported that he intends to update the document based on working group feedback rather than schedule a meeting. He will then ask for input from the members via email. His issue is that he has been called for Jury duty and if enpaneled could be serving for 3 months and he would not be able to hold a working group meeting. If he is not enpaneled, this may change, but for now he intends to begin updating the document based on feedback received to date.

Steve Hewitt asked Jeff to let him know when he is ready to present an update to the technical subcommittee and he will add it to the agenda at that time.

**Next Update – As Appropriate**

**University of Nebraska/FRA High Speed Wireless Study as of 6-22-23:**

*We continued our field testing for verification of our transceiver design. This is to investigate a better utilization of some of the sub-giga-Hertz frequencies for rail applications to ease the spectrum saturation. We have been investigating 160 MHz which has been used primarily for voice communications but believe this band can be utilized more efficiently for some of the data rail applications and this is the core of our study. We have built computer models for the physical layer transmission of 160 MHz as well as the upper layers to simulate and field test different rail applications. Our developed transceiver has been implemented using software-defined radios for field tests. Hope to provide the results later in the summer.*

For any questions, please contact Hamid Sharif at:

[hsharif@UNL.edu](mailto:hsharif@UNL.edu)

**Next Update – As Appropriate**

**Metro North Dual Mode Locomotive Procurement –6-22-23:**

- Metro North and Siemens closed the Final Design Review (FDR) Phase on May 8th.
- Production for Metro-North Charger #301 and #302 is progressing ahead of DCS schedule. Carshells for both locomotives have completed Q14 (ready for blast) and have been put into storage until finishing begins.
- Sub-assembly has started in May as the DCS and Final Assembly is on track to start in July 2023.
- First Article Inspection (FAI) for the MNR carshell has been successfully completed with zero open items.
- FAI for truck frame welding has been successfully completed.

**Next Update – 7-20-23**

**Connecticut DOT Rail Car Procurement:**

On 6-8-23, Marci Petterson confirmed that negotiations are continuing and the “cone of silence” remains in effect.

**Next Update - As Appropriate**

**Amtrak Vehicle Procurements as of 6-22-23:**

On the new Acela:

Work continues on the qualification requirements.

On the Airo Trainsets:

Final Design Review continues.

On the Charger Locomotives:

29 are in-house, 28 and 29 will be commissioned this week. Service on the Capital between Washington and Chicago has begun. Silver Service in Washington is scheduled to begin on 6-29-23 as the ATC hurdle was passed.

On the Long Distance Trains (nothing new reported on 6-22-23):

Submittals have been received and the preliminary process is being worked on.

**Next Update: 7-20-23.**

**NGEC Funding – CRISI Grant Timeline – potential next steps as of 6-22-23:**

**Balance/Spend Rate Through April 2023**

Total Initial Grant Amount: \$1,250,000.

Expenses Incurred through April 2023: \$1,173,648.37

Balance remaining: \$76,351.67.

Estimated spend at current rate for balance of the Grant: \$74,281.54

Current Spend Rate per month (as info and used in calculating): \$14,856.31.

Estimated Balance at the end of the Grant Period: 2,070.13

**Path Forward:**

Amtrak has submitted a 6-month no-cost extension of the current grant agreement to allow for the expenditure of funds beyond the current grant period ending date of 9-30-23. The no-cost extension submittal, if approved by FRA, will allow the NGEC to exhaust every bit of its funds from the current grant.

Amtrak plans to submit a request to fund the NGEC possibly as a part of its Annual Operating Plan (AOP).

The request is anticipated to be included in the Amtrak Operating Plan (AOP) but this still needs to be firmed up. Currently it is expected to be "a keep the lights on" request for about \$260,000 for the 12-month period beginning 10-1-2023 through 9-30-2024.

The hope is still for the CRISI Grant to be approved, but this request is to be submitted as a fall back and to fill the void while awaiting potential CRISI Grant funds to be awarded and obligated. The proposed interim funding request is subject to approval both internally at Amtrak and FRA and could change before final.

Tim Ziethen, NGEC Treasurer, reported that he has confirmed with Amtrak Legal that no changes to the NGEC By-Laws or its structure will be required if there is a new funding source.

According to Tim Ziethen the NGEC line item is in the current proposed Amtrak Budget for FFY 2024, subject to Amtrak Board approval. (He noted that he has a verbal commitment from CMO George Hull and from Amtrak Finance.)

Tim is also checking with Amtrak Accounting to see if the 12-month interim funding should be in the AOP or as a line item Capitalization project. It seems that it is a better fit as part of the Amtrak Annual Budget rather as a capitalized project which would pertain to creating new assets rather than maintaining existing assets.

Tim Ziethen and FRA still need to have a conversation and FRA approval will likely be needed on the proposed interim funding.

**CRISI Grant Awards Timeline:**

Timeframe: Announcement of CRISI Grant Awards: August-September 2023

Timeframe for receiving funds if awarded a Grant – about 6 months.

**Next Meeting – 7-6-23**

**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

**Agenda**

**6-22-23**

- |   |                               |
|---|-------------------------------|
| 1. Roll Call  | Steve Hewitt                  |
| 2. Review Action Items  | Steve Hewitt                  |
| 3. Approve Minutes from 6-8-23                                  | Joe Paul                      |
| 4. Update: Multi-State Venturev Rail Car Procurement            | Jodi Lehmkuhl                 |
| 5. Update: Metro-North Dual Mode Locomotive Procurement         | Ray Hessinger                 |
| 6. Update: Amtrak Vehicle Procurements                          | Joe Paul                      |
| 7. Update: University of Nebraska/FRA High Speed Wireless Study | Hamid Sharif                  |
| 8. Update: Document Control                                     | Steve Hewitt for Tammy Krause |
| 9. Status: NGEC Funding   | Steve Hewitt                  |
| 10. Adjourn   | Joe Paul                      |

**Next Meeting 7-6-23**