

# SECTION 305 TECH SUB COMM

MINUTES

JUNE 8, 2023

3:00PM EASTERN

CONFERENCE CALL

<b>FACILITATOR</b>	<i>George Hull, Chair, NGENC Technical Subcommittee</i>
<b>ATTENDEES</b>	<b>Core Team Members:</b> <i>George Hull, Jeff Gordon, Jodi Lehmkuhl, Curtis McDowell for Matthew Simmons, Art Peterson for Jennifer Bastian, Ed Engle, Troy Hughes, Troy Hughes for Jason Biggs, Ray Hessinger, Marci Petterson, Joe Paul, Tammy Krause, Larry Salci, Tarek Omar, Steve Hewitt</i> <b>Industry Members:</b> <i>Richard Stegner, Paul Jamieson, Jack Madden, Kevin Sudano, James Michel, Ed Golitko, Tom LaMano, Steve Ojalvo, Josh Coran, Stephen Mark, Kevin Myles, Bill Luebke, Brian Ley, Gary Wagner, Joanne Hallisey</i>
<b>ABSENTEES</b>	<i>Mike Jenkins, Matthew Simmons, Jennifer Bastian, Jason Biggs, Mike Murray, Melissa Shurland, Barley Fields, Blair Slaughter</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](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).**

#### **Metro-North Dual Mode Locomotive Procurement as of 5-16-23:**

On 5-16-23, Ray Hessinger reported the following to the Executive Board (read into the record by Steve Hewitt today – 6-8-23):

Siemens and Metro-North have closed all Final Design Review items and are performing FAIs on various components such as brakes, air compressors, and roofs. Car Shells are scheduled to be done in the May-June timeframe.

Car Shells 301 and 302 are ready for blasting and are way ahead of schedule.

On 5-16-23, Ray also noted that they have identified the fact that Pueblo has no under running third rail so they cannot test third rail there. They are looking at options for testing the locomotive in third rail mode.

#### **Next Update: 6-22-23**

#### **Amtrak Vehicle Procurements as of 5-25-23:**

On the new Acela:

Work continues on testing and modeling for submittal for acceptance.

On the Charger Locomotives:

ATC issues have been cleared. They are waiting on documentation and should be able to add the locomotives to more routes. They are currently running on the City of New Orleans, the Empire Builder, Coast Starlight and should be able to "head East soon."

On the Airo trainset:

They are progressing well, with the first car shell is nearly completed. Final Design Review (FDR) is finished. Overall, the Procurement is on track.

On the Long Distance Trains:

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

#### **Next Update – 6-22-23**

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

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

##### **Update:**

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.**

**University of Nebraska/FRA High Speed Wireless Study as of 4-13-23:**

Hamid Sharif provided the following update on 4-13-23:

=====

*Our work at the University of Nebraska-Lincoln has been in the area of better utilization of RF resources for the rail industry. In short, it is becoming harder and harder to locate available spectrum resources for rail industry applications. Our work has been to concentrate on better utilization of 160 MHz. So, we have designed and built a computer simulation model for the 160 MHz. We have verified this model and have done a number of application tests in the lab.*

*Currently, we are transitioning our transceiver design into a prototype implementation using a software radio platform, in preparation for extensive field testing to evaluate the accuracy of our prediction models and the reliability of our design. It also provides the basis for the exploration of cognitive radio principles in the pursuit of a unified communications architecture for the rail industry. We continue our work on the transceiver implementation, by evaluating and refining our receiver synchronization capabilities to be more robust against phase, frequency, and timing offsets. We also have begun our work to implement the higher-layer functionalities of our protocol stack. These are all ahead of our field tests next month.*

*For any questions, please contact Hamid Sharif at:*

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

Hamid was not available to provide an update for this meeting but offered to give an update on the next call 6-22-23.

**Next Update – 6-22-23**

**3. Approval of the Minutes from 5-25-23 – George Hull, Amtrak:**

On a motion by Ed Engle, Iowa DOT, and a second by Art Peterson for IDOT, the minutes from 5-25-23 were approved as submitted.

**4. Update: 6-8-23 - Multi-State Rail Car Procurement – Jodi Lehmkuhl, Caltrans:**

Jodi Lehmkuhl, Caltrans, provided the following update for inclusion in today's (6-8-23) 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. 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 once all necessary agreements are in place.*

**5. Update Document Control Management - Tammy Krause:**

On 6-8-23, Tammy Krause provided the following update for inclusion in the meeting minutes:

*The Bi-Level specification update has been completed and is now available upon request from Steve Hewitt.*

*I will have a follow up to the review of the PRIIA sub specifications on the next call.*

*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.*

Preparing Document Management SOW and budget for potential 12-month "bridge".

Tammy added that she had prepared and submitted a SOW and budget for Document Control and for Technical Writing for the 12-month period beginning 10-1-2023 through 9-30-2023. These were provided to Steve Hewitt, Ray Hessinger, and Tim Ziethen.

## **6.**

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

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

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

Expenses Incurred through March 2023: \$1,161,003.14

Balance remaining: \$89,996.85.

Estimated spend at current rate for balance of the Grant: \$89,307.93

Current Spend Rate per month (as info and used in calculating): \$14,884.66.

Estimated Balance at the end of the Grant Period: **(\$311.07)**

### **Pending:**

As of 6-8-23:

Casamar: \$9,546.30 TLK: \$7,425.00

Casamar/TLK: original estimate \$17,346.30 - updated estimate: \$16,971.30

### **Path Forward:**

Amtrak is in the process of developing a 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. It is expected to be submitted this week (week of 6-5-23) to FRA. The no-cost extension submittal, if approved by FRA, will allow us to exhaust every bit of the funds.

Amtrak is planning to submit a request to fund the NGEN possibly as a part of its Annual Operating Plan (AOP). Tim Ziethen, Amtrak – NGEN Treasurer, is meeting with the FRA to discuss what options there are.

Steve Hewitt emphasized that the request expected to be included in the Amtrak Operating Plan (AOP) still needs to be firmed up. Currently it is expected to be "a keep the lights on" request for about \$200,000 for one year.

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 "bridge" funding request is subject to approval both internally at Amtrak and FRA and could change before final.

The action that is still needed is for the NGEN to come up with/define a Statement of Work (SOW) and estimated costs that should be in the area of \$200-300,000. The SOW needs to be prepared quickly as there is a deadline for Amtrak to complete its AOP and submit it to FRA. His effort is in process.

It was agreed during the NGEN Executive Board meeting on 5-25-23 that Tammy Krause will provide a work plan and cost estimates for the additional work on the Charger update as a part of the costs anticipated for the period from 10-1-23 through 9-30-24. She is to provide it to Steve Hewitt, Ray Hessinger, and Tim Ziethen asap (this week), and from there it will go to the Executive Board members for discussion and consideration of approval on 6-13-23.

Today, (6-8-23) Tammy has provided the SOW and budget as requested and it will be on the Executive Board agenda next week – 6-13-23.

Tim Ziethen, NGEN Treasurer, will follow-up with Steve Hewitt and the Executive Board on what he learns from Amtrak Legal on what would need to be changed in the By-Laws, if anything, if there is a new funding source. (Steve Hewitt noted that any changes to the NGEN By-Laws need to be in the hands of Board members in writing for 30 days before a vote can be taken.)

George Hull noted that he had nothing further or new to add from his end at this time.

## **7.**

### **2024 NGEN Annual Meeting:**

Steve Hewitt reported that AASHTO is making plans for its Council on Rail Transportation (CORT) meeting and the other association

meetings (SAIPRC, SPRC and the NGEC Annual Meeting) that take place annually in the January-February timeframe.

The meetings will, once again, take place at the Hyatt Regency Hotel, Capitol Hill, Washington, DC, and the plan is for the meetings to take place from 1-30-24 through 2-3-24. The NGEC Annual Meeting would be scheduled for Friday 2-2-24.

**8.  
Adjourn:**

With no other business forthcoming on today's call George Hull adjourned the meeting at 3:18pm Eastern.

**Next meeting – 6-22-23**

**Decisions and Ongoing Action Items**

**2023 NGEC Backgrounder educational document:**

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Hamid was asked if there were interim reports that have been published. He responded that interim reports went to FRA in August (2022) He will check with FRA and provide to anyone in the subcommittee who is interested. He added that two papers were published last year.

Hamid agreed to provide links to Steve Hewitt for distribution to NGEN members. Steve Hewitt will also re-send the Annual Meeting presentation that Hamid gave in February 2023. (It is also posted on the NGEN website).

Hamid was not available to provide an update for this meeting but offered to give an update on the next call 6-22-23.

**Next Update – 6-22-23**

**Metro North Dual Mode Locomotive Procurement –5-25-23:****Report given to the NGEN Executive Board on 5-16-23:**

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George Hull noted that he had nothing further or new to add from his end at this time.

#### **CRISI Grant Awards Timeline:**

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

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

Brief summary of efforts to determine interim solutions/funding provided by Tim Ziethen on 5-16-23 are as follows:

*I am working with our grants office to confirm the process to request additional funding to close out this year under the current grant. At this point we are projecting to be slightly over budget but most likely within 1% and may need to request the FRA for authorized funding to cover this small amount. Amtrak with George Hull's support is moving forward to request a project for next year (at least until the CRISI grants are determined) to fund the continued operation of the NGEC 305 at the current spend rate that would be covered out of annual grant from the FRA.*

Once this goes through the approval process internally with Amtrak Senior Management, it still will need FRA review and approval.

**Next Meeting – 6-22-23**

#### 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://stephenhewittconsulting.my.webex.com/meet/shewitt109>

by phone: 1-415-655-0001

Access code: 126-073-1531

#### **Agenda**

**6-8-23**

- |                        |              |
|------------------------|--------------|
| 1. Roll Call           | Steve Hewitt |
| 2. Review Action Items | Steve Hewitt |



3. Approve Minutes from 5-25-23 George Hull
4. Update: Multi-State Venture Rail Car Procurement Jodi Lehmkuhl
5. Document Control Management – Tammy Krause  
  
Status: Current activities:
  - Finalizing Bi-Level Spec Revision D
  - Review of reference specs and drawings (305-800 and 900 series)
  - Follow-up with Communications on Rail Cars working group.
  - Preparing Document Management SOW and budget for potential 12-month "bridge".
6. Status: NGEC Funding Steve Hewitt
7. NGEC 2024 Annual Meeting Steve Hewitt
8. Adjourn George Hull

**Next Meeting 6-22-23**