

SECTION 305 TECH SUB COMM

MINUTES

APRIL 27, 2023

3:00PM EASTERN

CONFERENCE CALL

FACILITATOR	<i>George Hull, Chair, NGENC Technical Subcommittee</i>
ATTENDEES	Core Team Members: <i>George Hull, Jeff Gordon, Jodi Lehmkuhl, Ray Hessinger, Curtis McDowell for Matthew Simmons, Jennifer Bastian, Jason Bigg, Mike Jenkins, Art Peterson, Blair Slaughter, Steve Hewitt</i> Industry Members: <i>Richard Stegner, Paul Jamieson, Ed Golitko, James Michel, Kevin Sudano, Kevin Myles, Paul Arnone, Jack Madden, Frank Pascazio, Richard Curtis, William Luebke, Rich Bowie, Bill Saddler, Dick Bruss Yves Laperriere</i>
ABSENTEES	<i>Joe Paul, Marci Petterson, Matthew Simmons, Ed Engle, Troy Hughes, Tarek Omar, Mike Murray, Tammy Krause, Barley Fields, Larry Salci</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, 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.

To date 330 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.

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

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".

Next Update – As Appropriate

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:

Next Update – As Appropriate

3. Approval of the Minutes from 4-13-23 – George Hull, Amtrak:

On a motion by Curtis McDowell, for NCDOT, and a second by Jennifer Bastian, IDOT, the minutes from 4-13-23 were approved as submitted.

4. Update: 4-27-23 - Multi-State Rail Car Procurement – Jodi Lehmkuhl, Caltrans:

Jodi Lehmkuhl, Caltrans, provided the following update for inclusion in today’s (4-27-23) minutes:

- *The remaining Cab Car FDR submittals are in the final closure stage and the Cab Car dynamic framing representative approach has been submitted to FRA for review, with comments from FRA under review. 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 for Cab Car is tentatively scheduled for July, to be followed by the FRA Sample Car Inspection.*
- *128 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 first half of 2023 once all necessary agreements are in place.

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

Ray Hessinger, NYSDOT provided the following update:

Production on car shells 301 and 302 is progressing ahead of schedule with car shell 301 being ready for the first FAI inspection.

Metro-North and Siemens closed the FDR on third rail current collection and have scheduled FAI's for several components.

Ray also reported that there has been a change at the Project Engineer Level, but it should not impact the project.

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

On the new Acela:

Work continues on completing qualification and acceptance.

On the Charger Locomotives:

Twenty-four are in service. They are averaging about two per month.

On the Airo trainset:

They are finishing Final Design Review (FDR).

The first car shell is in production.

7. Update Document Control Management - Steve Hewitt/George Hull:

Current activities – Steve Hewitt for Tammy Krause:

Tammy Krause is on leave with her return anticipated on 5-2-23. Steve Hewitt provided the updates on issues related to Document Control:

On the Bi-level specification update:

The technical writer's incorporation of the adopted changes to the Bi-Level specification Revision D continues. The timeline for completion remains on schedule for May 2023.

On the work plan for the next six months:

The PRIIA sub specifications – reference specs/drawings (305-900 and 305-800 series) are all going to be reviewed by the technical working groups. Tammy planned to send them out to the working group team leaders by the end of the day on 4-13-23. (To Steve Hewitt's knowledge this occurred). Tammy set 5-20-23 as the deadline for comments from the working groups after their review and has asked that they use the DCR form for submitting their comments.

After these are reviewed, she planned to send out the APTA standards for review. Following the technical subcommittee call on 4-13-23, industry member Paul Jamieson contacted Steve Hewitt to volunteer to give some time to review of the APTA PRESS standards in relation to the PRIIA specs. (Thank you Paul) We appreciate Paul's willingness to begin the review and Steve sent a message to Tammy to let her know. Work on both items can begin simultaneously. Although the working groups will not receive the comments on the APTA Press standards until after the review the 305-900 and 305-800 series is complete.

Developing a plan to acquire specifications from entities that used the PRIIA specs as a baseline and made changes:

Next Steps:

1. Developing a list of entities that have used PRIIA specs and made changes:

Steve Hewitt noted that, in the minutes, he would include a list of the entities that he is aware of Steve asked that others let him know if he has missed any:

Amtrak, VIA Rail. All Aboard Florida, CtDOT, Metro-North/LIRR, NCDOT as well as the Mid-West states, Caltrans, WSDOT and Oregon.

2. Begin with the Charger Locomotive Specification as the first – next update/revision.

It was previously agreed that the next spec update/revision will be the Charger Locomotive. This would be the first where the NGEC should gather DCRs from entities that have used the specs and made changes, and incorporate those changes, where appropriate, into an updated revision of the current specification.

3. Develop a plan to reach out.

The Executive Board has tasked the tech subcommittee to begin the effort of developing a plan to reach out to the entities that have used the PRIIA specs as baseline and ask that they provide those changes to the Document Control Manager – using the NGEC DCR form.

4. Utilizing the NGEC DCR process:

It was pointed out on the last call that all changes should use the PRIIA DCR process and provide those DCRs. Steve Hewitt reiterated this on today's call 4-27-23.

Steve asked for questions and/or comments from those on the call. Hearing none, he noted that this work is under the purview of Tammy Krause as Document Control Manager and she will be asked to begin the effort. It is understood that due to the limited amount of funds remaining in the current grant, the bulk of this work will take place under the next grant or funding source after the current grant has expired. However, beginning to develop a plan and a list of contacts for outreach to entities to provide DCRs on changes made to the PRIIA specs should begin now.

8.

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

Steve Hewitt reported since the FRA timeframe for announcing CRISI Grant awards has been pushed back to the August-September timeframe, the NGEC will need bridge funding to continue its work between the time the current funds are expended and a new grant is announced and obligated. The period of time from awarding the grant and obligating the funds is about 6 months. He noted that this effort is being led by the NGEC Finance and Administrative subcommittee (FASC).

The FRA and Amtrak are in discussions regarding funding options. One possibility being explored is for Amtrak to provide the bridge funding from its Annual Grant.

The NGEC FASC is also talking to Amtrak Legal about other possible funding sources if it is not awarded a CRISI Grant, but no new option has been identified to date.

9.

Adjourn:

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

Next meeting – 5-11-23

Decisions and Ongoing Action Items

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For any questions, please contact Hamid Sharif at:

hsharif@UNL.edu

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).

Next Update – As Appropriate

Metro North Dual Mode Locomotive Procurement –4-27-23:

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Next Update: 5-25-23.

Amtrak's NGEC CRISI Grant Application:

As of 4-13-23:

The anticipated timeline for hearing whether the application is approved is now August-September 2023.

The NGEC Executive Board is aware of this timeframe change and has asked the Finance and Administrative subcommittee (FASC) to look into options for bridge funding if the NGEC is awarded a CRISI Grant as well as other funding options if a CRISI Grant is not awarded.

The FRA and Amtrak are in discussions regarding funding options. One possibility being explored is for Amtrak to provide the bridge funding from its Annual Grant.

The NGEC FASC is also talking to Amtrak Legal about other possible funding sources if it is not awarded a CRISI Grant, but no new option has been identified to date.

Next Meeting – 5-11-23

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

4-27-23

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|---|---------------|
| 2. Roll Call | Steve Hewitt |
| 3. Review Action Items | Steve Hewitt |
| 4. Approve Minutes from 3-30-23 | George Hull |
| 5. Update: Multi-State Venture Rail Car Procurement | Jodi Lehmkuhl |
| 6. Update: Metro-North Dual Mode Locomotive Procurement | Ray Hessinger |
| 7. Update: Amtrak Vehicle Procurements | George Hull |
| 8. Document Control Management – | |

Current activities

Next Steps - Developing a plan to acquire specifications from entities that used the PRIIA specs as a baseline and made changes:

- | | |
|---|-------------|
| <ol style="list-style-type: none">1. List of entities that have used PRIIA specs and made changes.2. Begin with the Charger Locomotive Specification as the first – next update.3. Plan to reach out.4. Utilizing the NGEC DCR process | |
| 9. Status: NGEC Funding – CRISI Grant Timeline – potential next steps | Ray/Steve |
| 10. Adjourn | George Hull |

Next Meeting 5-11-23