

# SECTION 305 TECH SUB COMM

MINUTES

APRIL 29, 2021

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, Jeffrey Gordon, Curtis McDowell for Matthew Simmons, Momo Tamaoki, Jason Biggs, Jennifer Bastian, Steve Hewitt, Art Peterson, Larry Salci, Blair Slaughter, Tammy Krause, Dave "Emeritus" Warner <b>Industry Members:</b> Anthony Lucas, Ed Golitko, Matt Sibul, Kevin Sudano, Lorenzo Reffreger, Julie Derosiers, Donald Woodard, Jack Madden, Richard Stegner, Kevin Myles, Rich Bowie, Darrell Smith, Paul Arnone, Josh Coran, Paul Jamieson, Dick Bruss, Richard Curtis, Martin Bloedt, Stephen Mark
<b>ABSENTEES</b>	<i>George Hull, Ray Hessinger, Marci Petterson, Mike Jenkins, Edward Engle, Matthew Simmons, Troy Hughes, Mike Murray, Mike Kraft, Tarek Omar, Oscar Bermudez</i>

## DISCUSSION/DECISIONS MADE

### 1.

Vice Chair Joe Paul called the meeting to order and asked Steve Hewitt to call the roll of core team members.

After calling the roll, Steve Hewitt reported that he could not confirm 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:**

**2021 NGENC Backgrounder educational document:**

The 2021 version of the NGENC two-page backgrounder/educational document has been released and is available electronically or in hard copy by request - contact Steve Hewitt at [shewitt109@aol.com](mailto:shewitt109@aol.com)

Over 450 electronic copies have been distributed to date.

**Maintaining Industry Participation List:** There are approximately 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](mailto:shewitt109@aol.com).

**Status: Electronics on Trains Working Group:**

**On 4-29-21, Steve Hewitt provided the following update received from Team Leader David Brabb:**

The last report Steve Hewitt received from David Brabb, provided on 4-12-21, he noted that the NGENC Electronics sub (working group) was to have its periodic meeting on 4-13-21. They are just ramping back up and will be issuing the PRIIA 305-919 DTL Hardware Spec. Rev. A. shortly.

**Connecticut DOT Rail Car Procurement:**

This procurement remains in the "cone of silence" period.

**Next Update – as appropriate**

**University of Nebraska/FRA High Speed wireless Study:**

On 4-1-21, Hamid Sharif-Kashani provided the following update:

*We continue our effort in designing and implementing our computer models and simulations for the sub-1-GHz frequency bands for*

rail applications. Currently, we are investigating the 160 MHz band with the consideration of propagation model for different rail environments. The 160MHz band is of interest since it provides good communication range but has the three main challenges of: (1) channelization, (2) availability of neighboring channels, and (3) lack of characterization of system performance at higher layers. We hope with the computer models and simulation results, the performance limitations of this band and the impact on different rail application could be determined.

For any questions, please contact Hamid Sharif at [hamidSharif@UNL.edu](mailto:hamidSharif@UNL.edu).

**Next Update – 5-13-21**

**Working Group on Weight Issues as of 4-1-21:**

Jeff Gordon provided the following update for inclusion in the 4-1-21 minutes:

*The group met on March 26. 11 participants.*

*Had good discussion led by Siemens regarding car-to-car production weight issues.*

*Group seems to agree that a  $\pm 2\%$  tolerance is reasonable for coaches.*

*Siemens to provide additional information to help make determination of whether that is also applicable for locomotives.*

*Also, to be determined, is the baseline (the weight against which the tolerance is applied): first pilot car, first production car, etc.*

*Next meeting has not yet been scheduled but will be during week of 4/19.*

*Always looking for more participants.*

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

**Next Update: 5-13-21**

**3. Approval of the Minutes from 4-1-21– George Hull, Amtrak:**

Due to the lack of a quorum, the approval of the minutes from the last call was tabled until the next call - 5-13-21.

**4. Update: Multi-State Railcar Procurement as of 4-29-21 –Momo Tamaoki, Caltrans:**

On 4-29-21, Momo Tamaoki, Caltrans, provided the following update:

*Design review for the standard coach is complete. The Cab Car structure FDR is complete and the structural test plans are being coordinated with Caltrans, Siemens, and FRA. The Cab Car IDR phase is complete and FDR meetings are scheduled to resume in May. FDR meetings for the Caltrans Vending Car Water/Waste system occurred April 7, and the Electrical review took place on April 14. IDOT Café Car are ongoing, FAIs are being planned, and open items are being addressed.*

*The Cab Car Compression Test setup will begin in May in Sacramento. A follow-up Maintainability Demonstration is scheduled for the week of May 5<sup>th</sup>. NEC testing for standard coach is complete and the report is accepted by FRA. Caltrans 238.111 testing is complete, and the report has been submitted to Amtrak and FRA. IDOT 238.11 testing is complete, and the test report is under final review.*

*78 cars total are in production or have been produced at Siemens Sacramento Facility. There are currently twelve Caltrans cars at the Stockton Facility and twenty-six IDOT cars delivered to Chicago and Indiana and an additional eight IDOT cars were shipped last week. The initial consists for Caltrans and IDOT are being prepared for Conditional Acceptance and revenue service while open items are addressed.*

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

Following the call today, (4-29-21) Steve Hewitt received the following update from Ray Hessinger for inclusion in the minutes:

*Siemens is submitting system descriptions for initial design review, focusing initially on systems which remain unchanged from the*

*conventional Charger.*

**6.  
Update: Amtrak Vehicle Procurements – Joe Paul, Amtrak:**

On the Charger Locomotives: The first Unit #300 was delayed for 4 weeks due to issues with the fuel system. The problem has been identified and rectified. They will likely wait until the second unit is ready and ship them both together.

On the Intercity Passenger Rail Trainset – Siemens has been announced as the provider and has entered into negotiations with Amtrak.

CAF: Nothing new to report.

**7.  
Status/Discussion DRAFT TSSSA Primer:**

On 4-13-21, Steve Hewitt distributed the initial DRAFT TSSSA primer developed by Amtrak Mechanical.

Joe Paul asked that all members review the document and send any comments or suggested changes to George Hull [HullGJ@amtrak.com](mailto:HullGJ@amtrak.com) with a CC to Joe Paul, [joseph.paul@amtrak.com](mailto:joseph.paul@amtrak.com).

Steve Hewitt noted that he anticipated George Hull would want this as a discussion/review item in the next agenda and a possible vote out of the subcommittee depending on the number of comments received.

Whenever it is approved by the subcommittee, the next step is to send it to the Executive Board for its review and eventual consideration of approval.

**8.  
Update: Document Control Management as of 4-21-21- Tammy Krause:**

*The only update I have for Document Control is that all the Stadler DMU proposed changes have been sent to the WG leaders. The changes involve the Mechanical, Interiors and Propulsion groups.*

*The rewrite of the trainset specification continues. No technical changes are being made, just rearranged to match the other PRIIA specifications. I am now having weekly meetings with Camren Cordell to review the chapters and the changes. I have gone through four chapters so far.*

Larry Salci reminded Tammy Krause to send him the list of Stadler DCRs so that he can submit a revised scope of work to AASHTO.

Larry also asked Tammy if she had received the few (4 or 5) DCRs from Caltrans for the single level passenger rail car. Tammy said she believes that she did see an email from John Cummins but had not looked at it yet.

**9.  
Expanded Access to Recommended Practices Document – PRIIA 305-200 – Ray Hessinger, NYSDOT:**

Per Ray Hessinger and the NGEC Executive Board, the Recommended Practices document 305-200 is posted on the NGEC website and is available there or through Steve Hewitt. The intent is to make this document as readily available and accessible as possible.

**11.  
NGEC Reauthorization – Steve Hewitt:**

Steve Hewitt reported that the States for Passenger rail Coalition (SPRC) sent a letter (4-12-21) requesting the reauthorization of the NGEC and providing suggested language, scope, and funding.

After sending the letter, SPRC chair, Arun Rao, received a call from the House Railroad subcommittee staff (Majority) Frances Bourne, asking about the NGEC:

Are the specs being used? Isn't the work done if specifications have been completed and standardization is occurring? Why not ask that states be required to use NGEC specifications if using federal dollars?

Arun responded that the specifications are not only being used widely across the country and beyond (VIA Rail, Canada) but they are being relied upon. They have saved millions of dollars as they are used as the baseline specification and there is no need to start from scratch which would be at a cost estimated to be about \$2 million.

Arun also noted that the work is not complete – the specifications need to be maintained and updated constantly as they are used, and changes are developed that will keep them current and useful and if the NGEC is not reauthorized the specs would become obsolete. He also noted there may be additional specs yet to be developed as technology changes.

The last question, Arun did not specifically respond to as there are different views on this – the specs are being widely used now without there being a federal requirement which could potentially add more onerous requirements where not necessary.

Steve Hewitt commented on the fact that there is some back and forth on whether there should be a requirement that the NGEC specifications be used when federal dollars are involved. The fact that the specs are already being utilized so widely is a testament to their quality as well as cost savings they provide. Steve noted that if a state is required to use the specs, when document change requests (DCRs) are brought forth during a procurement it triggers what is called the Urgent DCR process whereby NGEC procedures for accepting or rejecting changes to the specification based on those changes being in- compliance with the Specification's requirements document. While this is done in a relatively expedited manner, it still can slow the procurement process down. If there is no requirement to use the specs, the entities are still using them as the baseline spec – provide free to them by the NGEC – and are asked to provide the as built spec to the NGEC at the end of the procurement so that it can be reviewed and changes that have been made can go through the complete document control process to determine if they should be included as a revision to the specification if it makes it better and is in compliance.

Shayne Gill, AASHTO, had reported on the NGEC FASC call on 4-28-21, that he also had received a call from Frances Bourne. He was asked pretty much the same questions and provided similar responses. Shayne emphasized that the NGEC is needed, that it has worked well towards the goal of revitalizing the passenger rail manufacturing and supply industry in the US, and it has been successful in achieving the objectives of developing and maintaining standardized specifications.

Shayne also emphasized that AASHTO supports the NGEC and its continuation (reauthorization) and recognizes the value it has added in cost savings and job creation.

The word is getting out, and it is a positive that the House Rail Subcommittee has reacted to the SPRC letter and language and has reached out to ask questions and gain an understanding of what the NGEC is and what value it brings. The effort will need to continue, but the NGEC is, at least, on their radar now with a raised profile.

Steve Hewitt also noted that he has distributed the letter along with the agenda for this call and encouraged states and industry members to weigh in with congressional staff as well.

## **12.**

### **Other Issues:**

With no other issues forthcoming, Technical Subcommittee Vice Chair Joe Paul, adjourned the meeting at 3:37pm Eastern.

**Next Tech subcommittee Call: 5-13-21– 3:00pm Eastern**

## **Decisions and Action Items**

### **2021 NGEC Backgrounder educational document:**

The 2021 version of the NGEC two-page backgrounder/educational document has been released and is available electronically or in hard copy by request - contact Steve Hewitt at [shewitt109@aol.com](mailto:shewitt109@aol.com)

Action: Use of this document as an educational tool to inform states, industry and, in particular congressional staff of the accomplishments of the NGEC and the benefits derived from its activities and products. Emphasize the need for reauthorizing the NGEC with funding in the successor to the FAST Act.

**Maintaining Industry Participation List:** There are approximately 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](mailto:shewitt109@aol.com).

**PRIIA Multi-State Procurement Update 4-29-21:**

**Multi-State Car Procurement - Caltrans (Lead State):** Progress reports from the lead state will be provided on each subcommittee call.

On 4-29-21, Momo Tamaoki, Caltrans, provided the following update:

*Design review for the standard coach is complete. The Cab Car structure FDR is complete and the structural test plans are being coordinated with Caltrans, Siemens, and FRA. The Cab Car IDR phase is complete and FDR meetings are scheduled to resume in May. FDR meetings for the Caltrans Vending Car Water/Waste system occurred April 7, and the Electrical review took place on April 14. IDOT Café Car are ongoing, FAIs are being planned, and open items are being addressed.*

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**Document Control Update – 4-29-21:**

The Stadler DMU proposed changes have been sent to the Working Group leaders. The changes involve the Mechanical, Interiors and Propulsion groups.

The rewrite of the trainset specification continues. No technical changes are being made, just rearranged to match the other PRIIA specifications.

Tammy is having weekly meetings with Camren Cordell (technical writer) to review the chapters and the changes.

Tammy agreed to provide the list of Stadler DCRs to Larry Salci so that he can revise the scope of work in his task order with AASHTO.

**Working Group on Weight Issues as of 4-1-21:**

Jeff Gordon provided the following update for inclusion in today's (4-1-21) minutes:

*The group met on March 26. 11 participants.*

*Had good discussion led by Siemens regarding car-to-car production weight issues.*

*Group seems to agree that a  $\pm 2\%$  tolerance is reasonable for coaches.*

*Siemens to provide additional information to help make determination of whether that is also applicable for locomotives.*

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Next Update: 5-13-21

**Electronics on Trains Working Group activities:**

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Hardware Spec. Rev. A. shortly.

Steve Hewitt asked Tammy Krause to reach out to David to ensure that he is aware of and following NGEC procedures, and that he sends the proposed Revision A DCRs to Tammy.

Next Update: 5-27-21

**University of Nebraska High Speed wireless study as of 4-1-21:**

On 4-1-21, Hamid Sharif-Kashani provided the following update:

*We continue our effort in designing and implementing our computer models and simulations for the sub-1-GHz frequency bands for rail applications. Currently, we are investigating the 160 MHz band with the consideration of propagation model for different rail environments. The 160MHz band is of interest since it provides good communication range but has the three main challenges of: (1) channelization, (2) availability of neighboring channels, and (3) lack of characterization of system performance at higher layers. We hope with the computer models and simulation results, the performance limitations of this band and the impact on different rail application could be determined.*

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**Metro North Dual Mode Locomotive Procurement –4-29-21:**

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*Siemens is submitting system descriptions for initial design review, focusing initially on systems which remain unchanged from the conventional Charger.*

Next Update: 5-27-21

**Connecticut DOT Rail Car Procurement:**

As of 4-29-21, this procurement is in the “cone of silence” period.

Next Update: As appropriate

**Amtrak Equipment Procurement as of 4-15-21:**

On the Charger Locomotives: The first Unit #300 was delayed for 4 weeks due to issues with the fuel system. The problem has been identified and rectified. They will likely wait until the second unit is ready and ship them both together.

On the Intercity Passenger Rail Trainset – Siemens has been announced as the provider and has entered into negotiations with Amtrak.

CAF: Nothing new to report.

Next Update: 5-27-21

**Establish process and timeline for Tech SC review of Access Board NPRM Accessibility Guidelines and compare with current NGEC Specifications**

On 8-20-20, Melissa Shurland, FRA, reported that the comment period ended on 7-14-20 (after having been extended to that date) and the Access Board is now processing those comments received. Melissa stated, “we are in a holding pattern to see what the comments were and what the Access Board’s disposition of them will be.” Melissa will keep the NGEC technical subcommittee informed as the process is completed.

In January 2021 Melissa Shurland informed Steve Hewitt that there still was no update from the Access Board on this activity – it remains in a holding pattern.

Next Update: As appropriate

**Developing a TSSSA spec/menu/template:**

On 4-13-21, Steve Hewitt distributed the initial DRAFT TSSSA primer developed by Amtrak Mechanical.

On 4-29-21, Joe Paul asked that all members review the document and send any comments or suggested changes to George Hull [HullGJ@amtrak.com](mailto:HullGJ@amtrak.com) with a CC to Joe Paul, [joseph.paul@amtrak.com](mailto:joseph.paul@amtrak.com).

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**Next call: 5-13-21**

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

**4-29-21**

The agenda for the meeting is below:

- |  |               |
|--|---------------|
| 1. Roll Call   | Steve Hewitt  |
| 2. Review Action Items   | Steve Hewitt  |
| 3. Approve Minutes from 4-1-21                                       | George Hull   |
| 4. Update: Multi-State Rail Car Procurement                          | Momo Tamaoki  |
| 5. Update: Metro-North Dual Mode Locomotive Procurment               | Ray Hessinger |
| 6. Update: Amtrak Vehicle Procurements                               | George Hull   |
| 7. Status/Discussion/Approval Process - DRAFT TSSSA Primer           | George Hull   |
| 8. Update: Document Control Management                               | Tammy Krause  |
| 9. Expanded Access to Recommended Practices Document – PRIIA 305-200 | Ray Hessinger |
| 10. NGEC Reauthorization   | Steve Hewitt  |
| 11. Other  | All           |
| 12. Review this meeting:   | Steve Hewitt  |

**Next call – 5-13-21**