

# SECTION 305 TECH SUB COMM

MINUTES

APRIL 1, 2021

3:00PM EASTERN

CONFERENCE CALL

<b>FACILITATOR</b>	<i>Joe Paul, Vice Chair, NGEC Technical Subcommittee</i>
<b>ATTENDEES</b>	<b>Core Team Members:</b> Joe Paul, Jeffrey Gordon, Matthew Simmons, Momo Tamaoki, Jason Biggs, Charlie Poltenson for Ray Hessinger, Troy Hughes, Jennifer Bastian, Steve Hewitt, Art Peterson, Melissa Shurland, Tarek Omar, Larry Salci, Tammy Krause <b>Industry Members:</b> Paul Jamieson, Josh Coran, Jack Madden, Kevin Sudano, James Michel, Rich Bowie, William Saddler, Donald Sandala, Ed Golitko, Martin Bloedt, Richard Curtis, Paul Arnone, Ken Woodard, Steve Ojalvo, Joe Quigley, Matt Sibul, Leonel Sanchez
<b>ABSENTEES</b>	<i>George Hull, Ray Hessinger, Marci Petterson, Mike Jenkins, Edward Engle, Curtis McDowell, Mike Murray, Blair Slaughter, Mike Kraft, Oscar Bermudez</i>

## DISCUSSION/DECISIONS MADE

### 1.

In the absence of Chairman George Hull, 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 [shewitt109@aol.com](mailto:shewitt109@aol.com).**

### 2.

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

**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)

Steve Hewitt noted that the two-pager is a great tool for educating the new Congress on the NGEC and its' activities. He pointed out that the new Congress is using the last Congress' House bill as the basis in developing its Federal Surface Transportation authorization proposal. In the previous House DRAFT, reauthorization of the NGEC was not included. While staff developing that bill, noted that the NGEC not being included was simply an oversight, it is important to make sure it gets included this time around.

Steve added that he will provide additional information to industry members in an email and encouraged them to support the reauthorization of the NGEC during any communications they may have with Congressional staff or committees of jurisdiction.

**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 Update: The Passenger ECP Final Test Report:**

Update: On 11-12-20, Paul Jamieson provided the following update on the ECP Final Test Report – Steve Hewitt read it into the record:

*"The Passenger ECP Final Test Report has been submitted to the FRA observer and docket. The docket reference is FRA-2015-0078 for all information that was formally submitted to the FRA. Draft ECP regulatory language was submitted to the FRA observer and the text will appear in a future NPRM.*

*NGEC technical specification's recommended changes will be submitted separately for inclusion in future revisions. These changes will include the two performance standards APTA PR-M-S-20-17 Emulation Performance Requirements and APTA PR-M-S-21-17 ECP Passenger Performance Requirements are issued and available of the APTA*

website <https://www.apta.com/research-technical-resources/standards/passenger-rail-equipment-safety-standards/> . An APTA PRESS standard to address ECP Ready requirements, as addressed in the NGENC technical specification, will be issued as APTA PR-M-030-21, and is in final publication preparation.

APTA will be issuing a standard to address passenger vehicle piping requirements. This standard will be APTA PR-M-S-029-21 and is in final publication preparation.”

If anyone has any questions, please feel free to contact Paul at:

Paul E Jamieson, PE Retired  
Mobile: 18643236956  
jamiespe@outlook.com

Paul also recommended that the NGENC, as one of the project sponsors, may want to post this report on the website.

**This item is complete and will be removed as an open/ongoing item.**

**Establish process and timeline for Tech SC review of Access Board NPRM Accessibility Guidelines and compare with current NGENC 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 NGENC 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, and she would not be providing a presentation at the Annual Meeting.

**Next Update: As appropriate**

**3. Approval of the Minutes from 3-18-21– Joe Paul, Amtrak:**

On a motion offered by Jennifer Bastian, IDOT, and seconded by Momo Tamaoki, Caltrans, the minutes from 3-18-21 were approved as presented.

**4. Update: Multi-State Railcar Procurement as of 4-1-21 –Momo Tamaoki, Caltrans:**

On 4-1-21, 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 April. FDR meetings for the Caltrans Vending Car Electrical and Water/Waste are scheduled for April 7 and 14. IDOT Café Car reviews are nearly complete and open items are being addressed.*

*The Cab Car Compression Test setup will begin late April in Sacramento. 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 review.*

*75 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. Additional cars are scheduled to ship in April. The initial consists for Caltrans and IDOT are being prepared for Conditional Acceptance and revenue service.*

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

George Hull was unavailable for today’s call, so this item was tabled until the next call.

**6. Update: Document Control Management as of 4-1-21- Tammy Krause:**

*The Equipment Acquisition and Ownership Best Practices Document final version is complete, and I will be sending it to Steve today and the request to add it to the documents on the web site.*

*I have been creating the DMU specification DCRs proposed by Stadler Rail. I have sent out the Electrical, Interiors, Mechanical, Propulsion and Cab DCRs to the WG leaders. I hope to finish the rest by the end of this week.*

*I have received additional DCRs for the Trainset and those will be going out to the Working Group leaders this week also.*

**7.**

**Update: Working Group on Specification Weight Issues – Jeff Gordon, FRA:**

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.*

*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)

**8.**

**Update: Electronics on Trains working group:**

No report was provided by David Brabb prior to the meeting today, therefore, this item was tabled until the next meeting (4-15-21).

**9.**

**Update: University of Nebraska/FRA High Speed wireless Study as of 4-1-21 – Steve Hewitt for Hamid Sharif-Kashani:**

Hamid Sharif-Kashani was unavailable but provided the following update for inclusion in the minutes of today's meeting:

*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).

**10.**

**Other Issues:**

With no other issues forthcoming, Technical Subcommittee Vice Chair, Joe Paul, adjourned the meeting at 3:19pm Eastern.

**Note:** At the conclusion of the meeting, Charlie Poltenson, NYSDOT, informed Steve Hewitt that he is retiring from state service in May 2021. Charlie is a legacy member of the NGENC Technical subcommittee and will be missed. We appreciate all that Charlie has done over the years to advance passenger rail in NY and in the nation and we thank him for his interest and involvement in the work of this subcommittee. Thank you - Charlie! All the best in your retirement – Congratulations!

**Next Tech subcommittee Call: 4-15-21– 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.

Since the 2021 NGEC Annual Meeting, there have been several new members joining from the industry. We welcome them to the NGEC and thank them for their interest and participation.

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 3-18-21:**

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

On 4-1-21, 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 April. FDR meetings for the Caltrans Vending Car Electrical and Water/Waste are scheduled for April 7 and 14. IDOT Café Car reviews are nearly complete and open items are being addressed.*

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### **Document Control Update – 4-1-21:**

Update provided by Tammy Krause on 4-1-21:

*The Equipment Acquisition and Ownership Best Practices Document final version is complete, and I will be sending it to Steve today and the request to add it to the documents on the web site.*

*I have been creating the DMU specification DCRs proposed by Stadler Rail. I have sent out the Electrical, Interiors, Mechanical, Propulsion and Cab DCRs to the WG leaders. I hope to finish the rest by the end of this week.*

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### **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.*

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Next Update: 4-29-21

#### **Electronics on Trains Working Group activities as of 2-4-21:**

The following update was provided by David Brabb on 1-26-21 – Steve Hewitt read it into the record:

*On 1-26-21, we had a call with a fairly good-sized group today (for us) at 3pm eastern. We are looking at finishing up the first revision to 305-919 hardware spec., by moving appropriate firmware info to that spec from 305-920. We will reach out to you when we are ready to follow the appropriate procedure for issuing a revision.*

*We do have a couple of new team members that are eager to share lessons learned and what/how they are doing with some of their designs/ builds. The two new gentlemen are Kevin Sudano (Transit Consultant) and Fabio Cussigh of VDS Rail in Italy. Ken Martin (Sharma) and I plan to meet with them in a separate call, in early February 2021 to gather whatever information that they want to share. Of course, all information gathered will be shared/vetted with our group.*

*Our next NGENC Electronics call is scheduled for March 2nd at 3pm eastern.*

Next Update 4-15-21

#### **University of Nebraska High Speed wireless study as of 2-4-21:**

Hamid Sharif-Kashani was unavailable but provided the following update for inclusion in the minutes of today's meeting:

*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: 4-29-21

#### **Metro North Dual Mode Locomotive Procurement – 3-18-21:**

On 3-18-21, Ray Hessinger reported that Metro-North held its "kick-off" meeting with Siemens following award of the contract. They are just getting started with discussions on various design topics.

Update: 4-15-21

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

On 3-18-21, Marci Petterson, CTDOT, reported that this procurement is in the "cone of silence" period.

Next Update: 4-15-21

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

CAF: Progress continues – with 2 more Cab cars are complete – there are 7 sleeper cars left to be completed.

Charger Locomotive – Also continues to progress well. The first unit is in testing and it is going well.

AmFleet replacement – is in the “cone of silence” period with discussions continuing with vendors.

Next Update: 4-15-21

**Establish process and timeline for Tech SC review of Access Board NPRM Accessibility Guidelines and compare with current NGEN 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 NGEN 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 – status as of 3-18-21:**

On 3-18-21, George Hull reported that Mike Kraft, Amtrak Mechanical, has provided him with a DRAFT TSSSA primer which he has started to review. George hopes to complete his review soon and get the DRAFT to Tammy Krause.

Next Update: 4-15-21

Next call: 4-15-21

**ATTACHMENTS**



*Our Vision: The NGEN 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

**4-1-21**

The agenda for the meeting is below:

- |   |              |
|---|--------------|
| 1. Roll Call                                | Steve Hewitt |
| 2. Review Action Items                      | Steve Hewitt |
| 3. Approve Minutes from 3-18-21             | George Hull  |
| 4. Update: Multi-State Rail Car Procurement | Momo Tamaoki |
| 5. Status/Discussion - DRAFT TSSSA Primer   | George Hull  |

- |  |                      |
|--|----------------------|
| 6. Update: Document Control Management   | Tammy Krause         |
| - Status: Working Groups Review of Stadler DMU specification changes                                     |                      |
| - Status: Completing of Technical formatting of Single Level Trainset Specification 305-007 – Revision B |                      |
| - Status: Review of PRIIA Use Of APTA PRESS Standards  |                      |
| - Status: Finalizing 305-200 as adopted on 2-23-21   |                      |
| 7. Update: working group on specification weight issues  | Jeff Gordon          |
| 8. Update: Electronics on Trains working group   | Steve Hewitt         |
| 9. Update: University of Nebraska/FRA High Speed wireless study  | Hamid Sharif-Kashani |
| 10. Other  | All                  |
| 11. Review this meeting:   | Steve Hewitt         |

**Next call – 4-15-21**