

SECTION 305 TECH SUB COMM

MINUTES

MAY 27, 2021

3:00PM EASTERN

CONFERENCE CALL

FACILITATOR	<i>George Hull, Chair, NGENC Technical Subcommittee</i>
ATTENDEES	Core Team Members: <i>George Hull, Joe Paul, Jeffrey Gordon, Curtis McDowell for Matthew Simmons, Jon Mullin for Momo Tamaoki, Ray Hessinger, Jason Biggs, Steve Hewitt, Mike Murray, Tarek Omar, Larry Salci, Tammy Krause, Dave "Emeritus" Warner, Industry Members:</i> <i>Richard Curtis, Paul Jamieson, Juan Pablo Barahona, Josh Coran, Paul Arnone, Jack Madden, Ed Golitko, Tom LaMano, Dick Bruss, Martin Bloedt, Kevin Sudano, Bill Saddler, Darrell Smith, Rich Bowie, James Michel, Richard Stegner</i>
ABSENTEES	<i>Ed Engle, Marci Petterson, Jennifer Bastian, Troy Hughes, Mike Jenkins, Matthew Simmons, Blair Slaughter, Mike Kraft, Melissa Shurland, Art Peterson, Oscar Bermudez</i>

DISCUSSION/DECISIONS MADE

1.

Chairman George Hull called the meeting to order and asked Steve Hewitt to call the roll of core team members.

After calling the roll, Steve Hewitt could not confirm the presence of a quorum.

It was agreed the meeting would be held with no votes being taken.

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:

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

Over 500 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.

This week we added to additional members (from Talgo) to the industry participants group – welcome!

Connecticut DOT Rail Car Procurement:

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

Next Update – as appropriate

Working Group on Weight Issues – last update – 5-13-21:

On 5-13-21 – the following update was provided by Jeff Gordon, FRA:

The NGENC Vehicle Weight Working Group held its fifth meeting on May 3. Of the 24 members, 16 were in attendance.

Items of discussion included, in part:

- *a brief presentation by Stadler on how it weighs articulated trainsets,*

- *Siemens presented information on production weight variances for its locomotives. Based on those data, it appears that the proposed $\pm 2\%$ weight tolerance for coaches (as it relates to the "production" vehicle(s)) could also be applicable to locomotives,*
- *lateral imbalance and how this might also be related to requirements in the FRA Low-Speed Wheel Climb Safety Advisory,*
- *allowable scale tolerances. The group is discussing including a reference to a relevant AREMA standard on this.*
- *how the vehicles should be configured when weighed. It appears that different criteria need to be applied to coaches and locomotives to account for required items such as DEF and fuel, and*
- *a member provided some suggested language to define the baseline "production" vehicle against which the weight tolerances would be applied.*

The next meeting of the group is on June 9 at 1pm ET.

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

Next Update: 6-10-21

University of Nebraska High Speed wireless study as of 5-13-21:

We completed our first phase of our modeling and simulations for the sub -1-GHz frequency bands for rail applications. We modeled and studied the 160 MHz band with the performance consideration focusing on the impact of signal propagation related to different rail track locations. We are in the process of verifying our simulation results based on the channelization and the availability of neighboring channels for reliable communications.

I will be happy to share our results with the group and receive any comments, suggestions, or simulate any specific application of interest for our group.

For any questions, please contact Hamid Sharif at hamidSharif@UNL.edu.

Next Update: 6-10-21

3. Approval of the Minutes from 5-13-21– George Hull, Amtrak:

This item was tabled due to the lack of a quorum.

4. Update: Multi-State Railcar Procurement as of 5-27-21 –Jon Mullin for Momo Tamaoki, Caltrans:

On 5-27-21, Jon Mullin, on behalf of 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 Interiors FDR occurred on May 25. The remaining cab car FDR sessions are being planned with Caltrans and Siemens. FDR meetings for the Caltrans Vending Car Water/Waste system and Electrical Systems occurred in April. IDOT Café Car FDR releases are ongoing, and the Galley FAI is scheduled for June 23 in Texas.

The Cab Car Compression Test setup is in process in Sacramento with testing planned for July. Cab Car Collision and Corner Post testing is tentative for August in Germany and the test specimen is being prepared for shipment. 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 has also been provided to FRA.

82 cars total are in production or have been produced at Siemens Sacramento Facility. Car deliveries are ongoing to Chicago and Beech Grove for IDOT, and Stockton for Caltrans. The initial consists for Caltrans and IDOT are being prepared for Conditional Acceptance and revenue service while open items are addressed.

5. Update: Amtrak Vehicle Procurements – George Hull:

On the Intercity Passenger Rail Trainset – Siemens has previously been announced as the preferred bidder and has entered into negotiations with Amtrak – this process continues.

On the Long-Distance Locomotives – the first unit should be ready by mid-June to be shipped for use on the East Coast.

**6.
Update: Metro-North Dual Mode Locomotive Procurement – Ray Hessinger:**

Ray Hessinger, NYSDOT, reported that Metro-North and Siemens have just wrapped up initial Design Review meetings with the focus on Charger systems that will remain unchanged. Additional Design Review documents and meetings are forthcoming.

**7.
Update: Document Control Management as of 5-27-21- Tammy Krause:**

On 5-27-21, Tammy Krause provided the following update for inclusion in the minutes from today's (5-27-21) call:

The rewrite of the trainset specification continues. All the chapters have been reviewed. The non-technical specification change sheet is now complete. Camren and I are now working on the DCRs for the missing sections. I will be reaching out to a few WG leaders to get their input on missing sections.

I have reached out to the WGs that are working on the DCRs for the DMU and I have received the status on the comments from two of the four groups.

I attended the Electronics on Trains WG. The revision of the DTL Hardware specification has been sent to the WG for final review and it will be finalized at the next WG meeting. The next task for this WG is the DTL software specification.

**8.
Update: Electronics on Trains Working Group:**

Following today's meeting, David Brabb provided the following working group update:

1. *We submitted the 305-919 DTL Hardware to the group Tuesday. Once received back, will submit for a Revision A.*
2. *We are beginning on 305 -920 Software spec now.*
3. *Met with Amtrak (Mr. Matt Sidden and Mr. Jesse Whaley) and will be addressing the following list of items, one at a time, starting during next month's call.*

The list includes:

- *Evolving Security in Onboard Technology and the Groundside Systems that support them.*
- *Establishing Standards for Train to Ground communications.*
- *Establishing standards for Train Telemetry, both from a Metadata and Data perspective.*
- *Establishing Standards for Integration that promote modern integration architectures*
- *Aligning Onboard Passenger Information Systems with Digital ADA Standards*

We are not yet sure of the order in which we will address them. The results of the discussions will need to be incorporated into 919 and 920 where appropriate.

Best regards,

David

**9.
Reauthorizing the NGEC – Steve Hewitt:**

Efforts continue to be made on behalf of the NGEC to have it included in the next Federal Surface Transportation Authorization.

The bill is currently being developed in the House and Senate, and SPRC, AASHTO, MPRIC, Amtrak and members of the industry (specifically Siemens) have reached out to House and Senate staff to request that the NGEC be reauthorized for the

life of the bill and that it be funded at \$2.5 million over that time.

The House staff (Frances Bourne) has had a conversation with SPRC Chair Arun Rao, and with Shayne Gill, AASHTO trying to understand why the NGEC should be continued. Both have provided feedback on the importance of the NGEC's work. Arun has pointed out the NGEC Specifications are not only used widely – all across the country and beyond our borders (VIA Rail) – but are being relied upon by the states.

NGEC Chairman Ray Hessinger met with FRA and reiterated the same points as well as emphasizing that maintaining and updating/improving the specifications is critical going forward. The NGEC is also developing best practices and documents such as a TSSSA primer that can be utilized by states during the procurement process.

Ray also gave a presentation on the NGEC (5-4-21) to the RSAC Passenger Rail Safety Working Group. He provided an overview of what it is, how it is structured and what it has accomplished.

The presentation given during the 5-4-21 meeting with the working group has or will be provided to Frances Bourne as a part of Arun's follow up with her. It has also been widely distributed to the industry and other NGEC members to add as a tool to be utilized along with the SPRC letter to House and the NGEC two-pager.

SPRC has also interacted with the Senate Commerce committee staff to request the inclusion of the NGEC with funding in their authorization legislation.

Steve also emphasized that at this point, through early discussions with congressional staff of preliminary drafts. It is apparent that neither the House nor Senate has included the reauthorization of the NGEC in those initial drafts. It is critical that SPRC and others continue to press for its inclusion as the drafting process continues. As noted above, SPRC and others have been providing vocal and written feedback to the House and Senate, as well as to FRA to get the NGEC on their radar and express the importance of its continuation.

Steve Hewitt emphasized that he continues to keep this discussion on the agendas of the various NGEC subcommittees to be sure to keep the issue on the radar of those who can go to congressional staff and FRA and press the issue. The NGEC, as a whole, cannot "lobby" because of its membership (FRA, Amtrak, and States), but the individual members of the NGEC – including the industry – can certainly appeal to congressional staff and members and to FRA.

10.

Other:

- George Hull raised the issue of a lack of terminology around cellular reception inside of trains and the need to develop a specification for it.

George suggested that it may fit best within the work of the Electronics on Trains working group.

Ray Hessinger agreed that developing a specification/terminology around cellular communications would be of value and noted that it would be a specification that would be equally applicable across all of the passenger rail vehicle specs.

Steve Hewitt agreed that the Electronics on Trains working group was the appropriate place to take this up and asked Tammy Krause, Document Control Manager if she agreed. Tammy did agree and said she would speak to David Brabb, Team Leader of the working group, about it.

- Jack Madden asked Ray Hessinger if Siemens and Metro-North had come to agreement on a description of the new Dual Mode Locomotives. Ray knew that they had but could not remember what it was. Martin Bloedt, Siemens, reported that it was M42-DMC.

11.

Adjourn:

With no other business forthcoming on today's call, George Hull adjourned the meeting at 3:24PM.

Next Tech subcommittee Call: 6-10-21– 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

Over 500 copies have been distributed.

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.

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PRIIA Multi-State Procurement Update 5-13-21:

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

On 5-27-21, Jon Mullin, on behalf of 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 Interiors FDR occurred on May 25. The remaining cab car FDR sessions are being planned with Caltrans and Siemens. FDR meetings for the Caltrans Vending Car Water/Waste system and Electrical Systems occurred in April. IDOT Café Car FDR releases are ongoing, and the Galley FDR is scheduled for June 23 in Texas.

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locomotives,

- *lateral imbalance and how this might also be related to requirements in the FRA Low-Speed Wheel Climb Safety Advisory,*
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Next Update: 6-10-21

Electronics on Trains Working Group activities provided by David Brabb on 5-27-21:

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Next Update: 6-24-21

University of Nebraska High Speed wireless study as of 5-13-21:

Hamid was unavailable for this call, but provided the following update read into the record by Steve Hewitt:

We completed our first phase of our modeling and simulations for the sub -1-GHz frequency bands for rail applications. We modeled and studied the 160 MHz band with the performance consideration focusing on the impact of signal propagation related to different rail track locations. We are in the process of verifying our simulation results based on the channelization and the availability of neighboring channels for reliable communications.

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Metro North Dual Mode Locomotive Procurement –5-27-21

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Next Update: 6-24-21

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 5-27-21:

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Next Update: 6-24-21

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 5-13-21, the technical subcommittee approved the DRAFT TSSSA document for submittal to the NGEC Executive Board for its review and consideration.

Task Complete

Reauthorizing the NGEC in the next Federal Surface Transportation Authorization Act as of 5-27-21:

Efforts continue to be made on behalf of the NGEC to have it included in the next Federal Surface Transportation Authorization.

The bill is currently being developed in the House and Senate, and SPRC, AASHTO, MPRIC, Amtrak and members of the industry (specifically Siemens) have reached out to House and Senate staff to request that the NGEC be reauthorized for the life of the bill and that it be funded at \$2.5 million over that time.

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Next call: 6-10-21

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

5-27-21

The agenda for the meeting is below:

- | | |
|---|---------------|
| 1. Roll Call | Steve Hewitt |
| 2. Review Action Items | Steve Hewitt |
| 3. Approve Minutes from 5-13-21 | George Hull |
| 4. Update: Multi-State Rail Car Procurement | Momo Tamaoki |
| 5. Update: Amtrak Vehicle Procurements | George Hull |
| 6. Update: Metro-North Dual Mode Locomotive Procurement | Ray Hessinger |
| 7. Update: Document Control Management | Tammy Krause |
| 8. Update: Electronics on Trains working group | Steve Hewitt |
| 9. Reauthorizing the NGEC | Steve Hewitt |
| 10. Other | All |

11. Review this meeting:

Steve Hewitt

Next call – 6-10-21