

SECTION 305 TECH SUB COMM

MINUTES

DECEMBER 7,
2023

3:00PM EASTERN

CONFERENCE CALL

FACILITATOR	<i>Joe Paul, Vice Chair, NGEC Technical Subcommittee</i>
ATTENDEES	Core Team Members: Joe Paul for George Hull, Jeff Gordon, Ryan Sharpe, Curtis McDowell, Ray Hessinger, Ed Engle, Art Peterson, Matt Hensley, Curt Massie, Melissa Shurland, Tammy Krause, Tarek Omar, Larry Salci, Dave Warner, Blair Slaughter, Steve Hewitt, Barley Fields Industry Members: Ed Golitko, Rich Stegner, Jack Madden, Kevin Myles, Dick Bruss, Kevin Sudano, Brian Ley, Stephen Mark, Steve Ojalvo, Frank Pazcazio, Jonathan Michel, Allen Meeks, Marcin Taraszkiewicz, Jack Martinson, Paul Arnone, William Loebke, Ken Martin, Mehrad Samani, Josh Coran, Gary Wagner
ABSENTEES	<i>George Hull, Mike Jenkins, Matthew Simmons, Troy Hughes, Marci Petterson, Mike Murray, Jennifer Bastian</i>

DISCUSSION/DECISIONS MADE

1.

Technical subcommittee Vice Chair Joe Paul, 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, NGEC Program Manager:

2023 NGEC Backgrounder educational document:

The 2023 NGEC two-pager is available in hard copy by request of Steve Hewitt at shewitt109@aol.com.

To date 368 copies have been distributed.

The FASC has recommended updates for the 2024 version and the Executive Board is reviewing them and hopes to finalize the document by the Board next meeting – 12-19-23. MODOT Graphic Arts will format and print the final version. The intent is to have it ready for distribution by the time of the Annual Meeting on 2-2-24.

Maintaining Industry Participation List:

There are currently about 206 industry participants.

Steve Hewitt noted that after sending the list out to all members following the 11-9-23 tech subcommittee, quite a few change/updates were provided. Dabe Warner took the list and put it in alphabetical order (thank you Dave!). If you have any changes or updates please provide them to Steve Hewitt by the end of December, so that the roster list is up top date by the Annual Meeting and posted on the website.

Any updates or changes to this list should be sent to Steve Hewitt at shewitt109@aol.com.

CtDOT Rail car Procurement:

CTDOT's contract was awarded to Alstom on 8/3/23. Base order is for sixty cars – 19 cabs and forty-one trailers. There are options for up to an additional 272 cars. We are expecting a prototype 4-car consist in mid-2026. The delivery rate is four cars per month. Manufacturing is in Sahagun, Mexico.

On 10-12-23, Marci Petterson reported that the kick-off meeting was held and they have begun pre-design meetings.

Next Update: As Appropriate – Marci has been invited to give an update presentation during the Annual Meeting

University of Nebraska/FRA High Speed Wireless Study as of 11-9-23:

Hamid Sharif, University of Nebraska, provided an update on the High-Speed Wireless Study. He gave a brief background/overview of the study and the progress thus far in its current phase:

The University of Nebraska Advanced Telecommunications Engineering Lab has been studying the sub-giga-Hertz frequencies for rail applications to ease the current spectrum saturation for railroads, under the direction of FRA. We have studied the 160 MHz frequency as an example of these sub-giga Hertz bands. Theoretical and computer models were designed to represent a typical Transmitter, a Receiver, and a channel model for this frequency band. Then, different applications and rail scenarios were simulated, and performance data were collected.

After conducting modeling and simulation testing, they began to conduct field testing. Up to now the data from the field testing is close to the modeling and simulations.

They will continue on this phase through the end of December and will look to FRA for funding to continue the study in different areas.

Additionally, as they plan for the next phase of this project, they are interested in hearing any suggestions for implementing any other sub-giga frequencies or any specific rail application utilizing the 160 MHz.

Hamid also noted that he has been invited by Steve Hewitt to give a presentation on the study during the Annual Meeting of the NGENC in Washington, DC on 2-2-24.

Next Update – 2-2-24 NGENC Annual Meeting

3. Approval of the Minutes from 10-26-23 and 11-9-23:

On a motion by Art Peterson for IDOT, and a second by Ed Engler, Iowa DOT, the minutes from 10-26-23 and 11-9-23 were approved as submitted.

4. Update: Multi-State Venture Rail Car Procurement as of 11-9-23 – Ryan Sharpe, Caltrans:

Ryan Sharpe, Caltrans, provided the following update for inclusion in today's minutes:

The remaining Cab Car FDR items are in the final closure stage. The Cab Car MCAT simulation report has been approved by the states and the FRA. IDOT Café Car system level FDR reviews are complete, and the requested Café Car MCAT simulations have also been approved by FRA.

The Cab Car Complete FAI and FRA sample car inspection occurred in July with open items in review and closure.

137 cars are in production or have been produced at Siemens Sacramento Facility. IDOT coaches are currently in revenue service and Caltrans and Amtrak have completed shakedown testing of the first trainset, with revenue service pending some final maintenance items.

Next Update: 12-21-23

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

Ray Hessinger reported that he has not received an update from Metro-North since September, so he had nothing to add for today's update.

Next Update: 12-21-23

6. Update: Amtrak Vehicle Procurements – Joe Paul:

On the Charger Locomotive:

42 long-distance locomotives have been accepted for service and have been deployed on more than half of the routes with the expectation that service will be expanded to routes by 2025.

TSSA action has have been mobilized on almost all.

On the Airo Trainset:

The Rabbit – test car continues with its testing. There are 21 in production – 19 railcars and 2 locomotives. Several FAI's are under way.

On the Acela:

There was no update provided.

Next Update: 1-4-23

7.

Document Control Update- Tammy Krause:

Tammy Krause provided the following updates for inclusion in today's minutes:

- *Update Specification 305-901 is ready to be signed again. I had neglected to remove the signature line for Amtrak's CMO. Should be with Ray this week for his signature.*
- *The Materials Working Group continues to meet and work their way through the Single Level Specification. Last week they worked on Dissimilar Metals, Aluminum Corrosion Protection and Aluminum Finishing.*
- *The Weight Working Group plans on submitting their final recommendations to the TSC next week so that it can be discussed at the next TSC meeting of 12/21/23.*
- *I am updating the WG Member Lists and I will be sending them to the Working Group Leaders. I did have a few additions and if anyone wants to join a Working Group, please let me know. Melissa Shurland will replace Jeff Gordon on the Mechanical Working Group.*

8.

Status/Update – Working Group on Weight Issues – Jeff Gordon, FRA:

Jeff had nothing new to report beyond what Tammy had referenced in her Document Control Update.

9.

NGEC Annual Meeting – Steve Hewitt:

Review of DRAFT agenda -

Steve Hewitt provided a brief overview of the current DRAFT agenda and noted that he will be sending it out again along with today's minutes. The agenda is pretty well set with the final actions being to confirm speakers. Hopefully that will occur at the next Exec Board meeting on 12-29-23.

Invites to speak were sent to Metro-North, VIA Rail and CTDOT as well as Amtrak, FRA, the states and Hamid Sharif-Kashani, University On Nebraska (confirmed).

Setting timelines for registering to attend – in-person or virtually January 10th -

Steve asked that members planning to attend the Annual Meeting let him know by 1-10-24 and inform him whether they will attend in-person or virtually. Steve must send any materials to be printed, including name badges to Kamasha Hendrickson, AASHBTO, by 1-12-24.

Reviewing updated link for reserving a room at the Hyatt in the AASHTO Room Block -

AASHTO is attempting to extend the room block deadline of 1-5-24 – they advise that members planning to register under the Block rate at the Hyatt Regency on Capitol Hill, Washington, DC do so before going away for the holidays.

Below is an updated link for the 2024 Winter Rail Meeting provided by Kamasha Hendrickson, AASHTO Senior Meeting Planner:

The per diem rate is now \$193 per night (Single/Double rooms). Please share this updated link with your attendees.

<https://www.hvatt.com/en-US/group-booking/WASRW/G-HTO4> - the Cut-Off Date: January 5, 2024.

Set timeline for presentations to be submitted -

Speaker presentations need to be sent to Steve Hewitt by 1-29-24 so they can all be loaded on a thumb drive and brought to the meeting by Steve and Dave Warner – who has graciously agreed to be Mr. PowerPoint once again at the meeting – Thank you Dave!

**10.
Status – Changing from WebEx to Teams – Steve Hewitt:**

It is agreed that the NGEC will switch from WebEx to Teams – likely beginning in January 2024.

**11.
Other/Adjourn – Joe Paul, Amtrak:**

Steve Hewitt commented that while he initially had thought there would be no need for a meeting on 12-21-23, he now believes that if the Weight Issues Working Group is going to be ready to submit and report on its document, the meeting should take place with this as its primary topic of discussion.

With no other business forthcoming, Joe Paul adjourned today's meeting at 3:24pm.

Next meeting – 12-21-23

Decisions and Ongoing Action Items

2023 NGEC Backgrounder educational document:

The 2023 NGEC two-pager is available in hard copy by request of Steve Hewitt at shewitt109@aol.com.

To date 368 copies have been distributed.

The FASC has recommended updates for the 2024 version and the Executive Board is reviewing them and hopes to finalize the document by the next meeting – 12-19-23. MODOT Graphic Arts will format and print the final version. The intent is to have it ready for distribution by the time of the Annual Meeting on 2-2-24.

Maintaining Industry Participation List:

As of 12-7-23, there are currently about 206 industry participants.

Steve Hewitt noted that after sending the list out to all members following the 11-9-23 tech subcommittee, quite a few change/updates were provided. Dave Warner took the list and put it in alphabetical order (thank you Dave!). If you have any changes or updates please provide them to Steve Hewitt by the end of December, so that the roster list is up to date by the Annual Meeting and posted on the website.

Any updates or changes to this list should be sent to Steve Hewitt at shewitt109@aol.com.

Update: Multi-State Railcar Procurement as of 12-7 -23:

Ryan Sharpe, Caltrans, provided the following update for inclusion in today's minutes:

The remaining Cab Car FDR items are in the final closure stage. The Cab Car MCAT simulation report has been approved by the states and the FRA. IDOT Café Car system level FDR reviews are complete, and the requested Café Car MCAT simulations have also been approved by FRA.

The Cab Car Complete FAI and FRA sample car inspection occurred in July with open items in review and closure.

137 cars are in production or have been produced at Siemens Sacramento Facility. IDOT coaches are currently in revenue service and Caltrans and Amtrak have completed shakedown testing of the first trainset, with revenue service pending some final maintenance items.

Next Update: 12-21-23

Document Control as of 12-7-23:

- *Update Specification 305-901 is ready to be signed again. I had neglected to remove the signature line for Amtrak's CMO. Should be with Ray this week for his signature.*
- *The Materials Working Group continues to meet and work their way through the Single Level Specification. Last week they worked on Dissimilar Metals, Aluminum Corrosion Protection and Aluminum Finishing.*
- *The Weight Working Group plans on submitting their final recommendations to the TSC next week so that it can be discussed at the next TSC meeting of 12/21/23.*
- *I am updating the WG Member Lists and I will be sending them to the Working Group Leaders. I did have a few additions and if anyone wants to join a Working Group, please let me know. Melissa Shurland will replace Jeff Gordon on the Mechanical Working Group.*

Next Update: 12-21-23

Working Group on Weight Issues:

On 10-26-23, Jeff Gordon, FRA, reported that he is looking to set a meeting of the working group for 11-9-23 from noon to 1:00pm Eastern. He asked that anyone not on his list, but interested in participating on the working group to contact him at jeffrey.gordon@dot.gov.

Update: On 12-7-23, it was reported that the intent of the Working Group is to submit its final recommendations for discussion on the 12-21-23 NGECE Technical Subcommittee call.

Next Update: 12-21-23

University of Nebraska/FRA High Speed Wireless Study as of 11-9-23:

Hamid Sharif, University of Nebraska, provided an update on the High-Speed Wireless Study. He gave a brief background/overview of the study and the progress thus far in its current phase:

The University of Nebraska Advanced Telecommunications Engineering Lab has been studying the sub-giga-Hertz frequencies for rail applications to ease the current spectrum saturation for railroads, under the direction of FRA. We have studied the 160 MHz frequency as an example of these sub-giga Hertz bands. Theoretical and computer models were designed to represent a typical Transmitter, a Receiver, and a channel model for this frequency band. Then, different applications and rail scenarios were simulated, and performance data were collected.

After conducting modeling and simulation testing, they began to conduct field testing. Up to now the data from the field testing is close to the modeling and simulations.

They will continue on this phase through the end of December and will look to FRA for funding to continue the study in different areas.

Additionally, as they plan for the next phase of this project, they are interested in hearing any suggestions for implementing any other sub-giga frequencies or any specific rail application utilizing the 160 MHz.

Hamid also noted that he has been invited by Steve Hewitt to give a presentation on the study during the Annual Meeting of the NGECE in Washington, DC on 2-2-24.

*Hamid Sharif
Advanced Telecommunications Engineering Lab
University of Nebraska-Lincoln*

*Phone: 402-917-6363
Email: HSHARIF@UNL.EDU*

Next Update – 2-2-24 NGECE Annual Meeting

Metro North Dual Mode Locomotive Procurement:

On 10-12-23, Ray Hessinger presented the following update:

Metro North and Siemens conducted a First Article Inspection for the energy storage cubicle, the switchgear-and 3rd rail cubicle, the battery rack and 4 delta FAIs for changed cabinets on-site in Sacramento.

Metro North and Siemens agreed upon test values for a shock & vibration test for the 3rd rail current collector shoe mechanism.

MNR locomotive #301 is ready for low voltage cable tray installation (Q23) and is progressing in Final Assembly and MNR locomotive #302 is progressing per the DCS.

The FAI for the MNR traction converter was performed and the component was dispositioned as allowed to ship with minor open items.

On 11-9-23, Ray reported that he had not received an update from Metro-North for the month of October. He added that they are on schedule and the focus is on FAIs on "all sorts of components."

On 12-7-23 Ray Hessinger reported that he still has not received an update from Metro-North since September.

Next Update: 12-21-23

Connecticut DOT Rail Car Procurement:

Marci Petterson, CtDOT, provided the following update for inclusion in the 8-17-23 meeting minutes:

CTDOT's contract was awarded to Alstom on 8/3/23. Base order is for sixty cars – 19 cabs and forty-one trailers. There are options for up to an additional 272 cars. We are expecting a prototype 4-car consist in mid-2026. The delivery rate is four cars per month. Manufacturing is in Sahagun, Mexico.

Update – 10-12-23:

Marci Petterson reported that the kick-off meeting was held and they have begun pre-design meetings.

Next Update - As Appropriate (Marci has been invited to give an update at the Annual meeting on 2-2-24).

Amtrak Vehicle Procurements as of 12-7-23:

On the Charger Locomotives – 42 long-distance locomotives have been accepted for service and have been deployed on more than half of the routes with the expectation that service will be expanded to routes by 2025.

TSSSA action has been mobilized on almost all.

On the Airo Trainset:

The Rabbit – test car continues with its testing. There are 21 in production – 19 railcars and 2 locomotives. Several FAI's are under way.

On the Acela:

There was no update provided.

Next Update: 1-4-23

NGEC 2024 Annual Meeting:

Steve Hewitt reminded members that the NGEC Annual Meeting will be held on 2-2-24 at the Hyatt Regency Capitol Hill Washington, DC.

A DRAFT agenda has been prepared and is under review by Executive Board Members. It was presented as a first DRAFT on 10-31-23.

The format will be similar to last year's with presentations on the status of procurements, updates on experiences with the new equipment, as well as a Treasurer's report, NGEC elections for the State Board members and the officers, and more...

Registration will take place at 8:00am Eastern with the meeting kicking off at 8:30AM and ending around 12:30PM Eastern.

It will be a hybrid meeting – in-person and virtual – details to follow.

Tech SC members – please let Steve Hewitt know by 1-11-24 if you plan to attend and whether it will be in-person or virtually.

AASHTO has provided the hotel link for the rail meetings to be held during that week. As always, the NGEC is a part of several meetings held in conjunction with AASHTO's Council on Rail Transportation.

Below is an updated link for the 2024 Winter Rail Meeting provided by Kamasha Hendrickson, AASHTO Senior Meeting Planner:

The per diem rate is now \$193 per night (single/Double rooms). Please share this updated link with your attendees.

<https://www.hyatt.com/en-US/group-booking/WASRW/G-HTO4>

Cut-Off Date: January 5, 2024

Kamasha Hendrickson, CMP, CGMP

Senior Meeting Planner

American Association of State Highway and Transportation Officials (AASHTO)

555 12th St, NW, Suite 1000

Washington, DC 20004

Tel: 202-624-5403

E-mail: khendrickson@aaashto.org

Changing from WebEx to Teams:

It is agreed that the NGEC will switch from WebEx to Teams – likely beginning in January 2024.

Next Meeting – 12-21-23

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

12-7-23

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

- | | |
|---|--------------|
| 3. Approve Minutes from 10-26-23 and 11-9-23 | Joe Paul |
| 4. Update: Multi-State Venture Rail Car Procurement | Ryan Sharpe |
| 5. Update: Metro-North Dual Mode Locomotive Procurement | Ray Hessinge |
| 6. Update: Amtrak Vehicle Procurements | Joe Paul |
| 7. Document Control Update | Tammy Krause |
| <ul style="list-style-type: none">- Status – Finalizing 305-901 as adopted.- Status – Activities of the Carbody Materials working group.- Status- Activities of the Communications on Cars working group.- Status – Simultaneous review/update of the Single Level Car Specification and the Dual Mode Locomotive Specification- Finalize updates to the Technical Working Groups members/team leaders and filling vacancies. | |
| 8. Status/Update – Working Group on Weight Issues | Jeff Gordon |
| 9. Annual Meeting 2024 | Steve Hewitt |
| <ul style="list-style-type: none">- Review DRAFT agenda- Set timelines for registering to attend – in-person or virtually- Review updated link for reserving a room at the Hyatt in the AASHTO Rom Block- Set timeline for presentations to be submitted | |
| 10. Status: Changing from WebEx to Teams | Steve Hewitt |
| 11. Adjourn | Joe Paul |

Next Meeting
12-21-23