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*Our Vision: The NGEC provides national leadership in standardization, acquisition, and management of passenger rail equipment.*

## Section 305 Next Generation Corridor Equipment Pool Committee (NGEC)

**Monthly Activities Report: January 31, 2024**

**Submitted By: Steven J Hewitt, Program Manager, S305 NGEC**

**Public law 110-432 required Amtrak to:**

*...establish a Next Generation Corridor Equipment Pool Committee, comprised of representatives of Amtrak, the Federal Railroad Administration, host freight railroad companies, passenger railroad equipment manufacturers, interested States, and as appropriate, other passenger railroad operators.*

*"The purpose of the Committee shall be to design, develop specifications for, and procure standardized next-generation corridor equipment.*

*(b) Functions – the Committee may –*

- 1) Determine the number of different types of equipment required, considering variations in operational needs and corridor infrastructure.*
- 2) Establish a pool of equipment to be used on corridor routes funded by participating states; and*
- 3) Subject agreements between Amtrak and States, utilize services provided by Amtrak to design, maintain and remanufacture equipment."*

### **Executive Board**

**Chair: Ray Hessinger, NYSDOT**

**Vice Chair: George Hull, Amtrak**

**Secretary: Vacant**

**Treasurer: Tim Ziethen, Amtrak**

**The Executive Board will hold web- conference calls every 4 weeks on – Tuesdays at 11:30am Eastern.**

During the month of January 31, 2024, the Executive Board met once – on the 23rd.

Highlights, decisions, and action items status updates from the month of January 2024 include:

- Treasurer's Report – 1-31-24:

#### **Balance/Spend Rate Through November 2023**

Total Initial Grant Amount : \$1,510,000 (using the current budgeted amount along with the prior grant funds)  
 Expenses incurred through November 2023: \$1,281,798.13  
 Balance remaining: \$228,187.  
 Current Spend Rate per month \$14,904.

**Status – Contract Modifications Amtrak/AASHTO and AASHTO/Sub-Contractors:**

Tim reported that he had sent Strat Cavros, AASHTO, a notice of what to use for authorization on what is a valid and open purchase order and that he has asked Amtrak Procurement to re-issue the Purchase Order using the budgeted amount. (Strat confirmed receipt of the notice).

Tim noted that this should enable AASHTO to officially extend the contract with all of the sub-contractors as previously approved in the budget.

#### Seeking Long-Term Funding:

The intent is to continue to seek long-term funding for the NGEC. The interim funding being provided by Amtrak for FY 2024 is not intended to be long-term rather a stop-gap to keep the NGEC going while it explores funding options. Amtrak intends to apply again in the next round of CRISI Grant funding and will look into other potential options.

#### By-Laws Annual Review – FASC Recommendation

The 2023 review resulted in no changes being recommended. The By-Laws will next be reviewed in the Fall of 2024.

#### NGEC two-pager updates for 2024 version – FASC Recommendations:

The NGEC 2024 Background and Educational document has been finalized and will be distributed in hard copy at the Annual Meeting (2-2-24) and electronically to all members of the NGEC.

Thank you to Missouri DOT Graphic Arts (Laura Seabaugh) for once again formatting and printing the new version.

#### - Metro-North Dual Mode Locomotive Procurement:

Metro-North (MNR) has picked up options for 8 additional locomotives (Base is 19), CTDOT picked up options for an additional 6 locomotives.

Metro-North (MNR) and Siemens conducted the FAI for the truck completely assembled (with pre-series Schunk current collector installed) in the Siemens factory in Sacramento on 11-29-23.

On 11-29-23, Siemens and Metro-North performed the data maintenance demonstration of truck and collector assemblies.

MNR Locomotive #301 completed low voltage cable tray installation and is progressing towards machine room complete and ready for install.

MNR Locomotive #302 completed car shell painted and ready for final assembly and is progressing according to schedule in sub-assembly.

MNR, LIRR and Siemens started technical design clarification meetings and agreed on a monthly meeting going forward.

Metro-North will provide a detailed update during the Annual Meeting on 2-2-24.

#### - Multi-State Venture Rail Car Procurement:

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.

Cab Car complete FAI and FRA sample car inspections have occurred with final 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. The first Caltrans trainset is now in service on the Amtrak San Joaquins.

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Caltrans will provide a detailed update on the Venture Rail Car procurement and its experience with both the Charger locomotive and the Venture Rail Car during the Annual Meeting 2-2-24.

- Amtrak Equipment Procurement Update:

On the Charger Locomotive:

63 with 59 active of the state units are in active service. 39 ACL 42's are active. George Hull to confirm these numbers and follow-up with Steve Hewitt)

On the Airo Trainset:

There are 24 vehicles in production – 22 railcars and 2 locomotives - and it is on track.

On the Acela:

Waiting on FRA to finish review of Test Plan – expecting to begin re-testing next week.

Amtrak will provide a detailed presentation on its vehicle procurements, and experience with those that are in service during the NGEC Annual Meeting on 2-2-24.

- Connecticut DOT Rail Car Procurement:

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

No update provided in January.

CtDOT will provide a more detailed presentation on its procurement during the Annual Meeting on 2-2-24.

- VIA Rail Equipment Procurements:

A detailed update presentation was provided to the NGEC during the Annual Meeting on 2-3-23. The presentation is posted in the Meetings section of the website at [www.ngec.org](http://www.ngec.org)

VIA Rail will provide a detailed presentation on its procurement program during the NGEC Annual Meeting on 2-2-24.

- Document Control Progress Report:

The Materials Working Group met on 1-22-24 and are continuing their work on car body materials. Yesterday's discussion concerned bolt shear strength and slip resistant connections.

The Weight Working Group has submitted a document for review and approval by the technical subcommittee. Several last-minute comments on the Vehicle Weight specification were received at last Thursday's Technical subcommittee meeting.

The technical subcommittee voted to have the Vehicle Weight Working Group take additional time to evaluate the comments. The additional work will begin after the Annual Meeting. There is no estimate of a completion date because this is such a weighty matter.

Tammy Krause, Document Control Manager for the NGEC will provide a detailed presentation with a look at 2023 and a look ahead to what activities will be undertaken in 2024.

- Filling Vacancies:

IDOT has named Melina Lopez as its representative to the NGEC Executive Board and the NGEC FASC, effective 1-1-24. Todd Popish will be IDOT's alternate on both the Board and the FASC.

Art Peterson will remain as the IDOT rep on the Technical Subcommittee.

Specification Review Panels/Members: 2024

As of 1-31-24, these vacancies remain:

Consultants/ Technical Support to the Review Panels:

Review Panel Consultant – Larry Salci  
 NGEC Support – Steve Hewitt  
 Technical Support – Tammy Krause  
 Amtrak Technical Support – Mike Kraft

Bi-Level Car Review Panel:

Ray Hessinger, NYSDOT – Chair  
 Vacant Caltrans  
 Amanda Martin, Iowa DOT  
 Melissa Shurland, FRA

Locomotive Review Panel:

Ray Hessinger, NYSDOT – Chair  
 Vacant Caltrans  
 Vacant - IDOT  
 Jason Biggs, Washington State DOT  
 Melissa Shurland, FRA

Trainset Review Panel:

Ray Hessinger, NYSDOT – Chair  
 Ed Engle, Iowa DOT  
 Jason Biggs, Washington State DOT  
 Melissa Shurland, FRA

Single Level Rail Car Review Panel:

Ray Hessinger, NYSDOT -- Chair  
 Ed Engle, Iowa DOT  
 Jason Biggs, WSDOT  
 Melissa Shurland, FRA

DMU Review Panel Members:

Ray Hessinger, NYSDOT -- Chair  
 Melissa Shurland, FRA  
 Brian Beeler, for Maine DOT  
 Vacant - Caltrans

No one has yet been named to serve for IDOT on the Review Panels.

- NGEC 2024 Annual Meeting:

The NGEC 2024 Annual meeting will be held on 2-2-24 at the Hyatt Regency Hotel, Capitol Hill, Washington, DC. It will, once again, be held in conjunction with other rail-related meetings being held that week including SPRC, SAIPRC and AASHTO CORT.

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.

On 1-23-24, most speakers were confirmed with a few yet to be resolved.

All presentations were to be sent to Steve Hewitt by 1-29-24 and were asked to utilize the new NGENC PowerPoint Template as sent around recently by Steve Hewitt. As of 1-31-24, Steve Hewitt had received nearly all presentations.

- Considering the question of changing web-conference service provider from WebEx to Teams:

The move to Teams began with the 1-23-24 NGENC Executive Board meeting.

Officers & State Executive Board Member Elections:

The nominating committee met on 1-9-24 and coming out of the meeting, Amanda Martin, Iowa DOT has agreed to be nominated for Secretary of the NGENC Executive Board and second vice chair of the FASC.

**Process:**

The nominating committee will first nominate the states to be re-elected to the Executive Board.

After that, per NGENC By-Laws, the elected Board members elect the officers. A representative of the nominating committee will offer a slate of officers for nomination. The slate will include the Amtrak Reps appointed by the CMO – George Hull - to serve as vice chair of the NGENC Executive Board and chair of the Technical subcommittee (Dan Ruppert) and the reappointment of Tim Ziethen as Treasurer of the NGENC and chair of the FASC.

States, and the representatives to be nominated during the NGENC Annual meeting to new two-year terms as members of the NGENC Executive Board are:

New York State Department of Transportation  
Representative: **Ray Hessinger**  
[raymond.hessinger@dot.ny.gov](mailto:raymond.hessinger@dot.ny.gov) – 518 457-8075

Iowa Department of Transportation  
Representative: **Amanda Martin**  
[amanda.martin@iowadot.us](mailto:amanda.martin@iowadot.us) 515 239-1653

Illinois Department of Transportation  
Representative: **Melina Lopez**  
[Melina.lopez@illinois.gov](mailto:Melina.lopez@illinois.gov)

Missouri Department of Transportation  
Representative: **Troy Hughes**  
[troy.hughes@modot.mo.gov](mailto:troy.hughes@modot.mo.gov)

North Carolina Department of Transportation  
Representative: **Jason Orthner**  
[jorthner@ncdot.gov](mailto:jorthner@ncdot.gov) –

Washington Department of Transportation  
Representative: **Jason Biggs**  
[BiggsJr@wsdot.wa.gov](mailto:BiggsJr@wsdot.wa.gov)

Wisconsin Department of Transportation  
Representative: **Richard Kedzior**  
[Richard.kedzior@dot.wi.gov](mailto:Richard.kedzior@dot.wi.gov)

California Department of Transportation  
Representative: **Kyle Gradinger**  
[kyle.gradinger@dot.ca.gov](mailto:kyle.gradinger@dot.ca.gov)

Oregon Department of Transportation  
Representative: **Michael Jenkins**  
[Michael.I.jenkins@odot.state.or.us](mailto:Michael.I.jenkins@odot.state.or.us)

Maine Department of Transportation  
 Representative: **NNEPRA - Brian Beeler II**  
[brian@nnepra.com](mailto:brian@nnepra.com) – c. 207 899-6089 p.207-780-1000 ext. 102

The full slate of officers to be nominated is:

Chair: Ray Hessinger, NYSDOT  
 Vice Chair: Dan Ruppert, Amtrak  
 Treasurer: Tim Ziethen, Amtrak  
 Secretary: Amanda Martin, Iowa DOT

Nominating committee:

Amanda Martin, Iowa DOT  
 Mike Jenkins, Oregon DOT  
 Troy Hughes, Missouri DOT

### **Technical subcommittee**

**Chair: George Hull, Amtrak**  
**Vice Chair: Joe Paul, Amtrak**

During the month of January 2024, the subcommittee met twice – on the 4<sup>th</sup> and 18<sup>th</sup>:

Key decisions and action item updates from the month of January 2024, included:

- Backgrounder educational document:

The 2024 NGEC two-page educational will be released on 2-2-24 at the NGEC Annual meeting. It will be available in electronic or hard copy versions. Requests should be sent to Steve Hewitt at [shewitt109@aol.com](mailto:shewitt109@aol.com)

- Document Control Update as of 1-18-24:

See the update in the Executive Board section of this report.

- Communications on Rail Cars Working Group & the Carbody Materials Working Group's status - 10-12-23:

The Communications Working Group met last week and have finalized their changes to the DTL Section of the Single Level Specification. The Working Group decided to create the section for the Single Level and it will be applied to other specifications. They have submitted a DCR with all of the changes.

No update provided in January 2024.

- Multi-State Car Procurement - Caltrans (Lead State) update as of 1-31-24:

See Executive Board section of this report for the status of the Venture car multi- state procurement.

- Metro North Dual Mode Locomotive Procurement as of 12-31-23:

See the Executive Board section of this report for the status of this procurement.

- Amtrak Equipment Procurement Updates as of 1-31-24:

See the Executive Board section of this report for the status of this procurement.

- Connecticut DOT Rail Car Procurement:

See the Executive Board section of this report for the status of this procurement.

- University of Nebraska/FRA study on High Speed wireless technology as of 1-31-24:

On 11-28-23, 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 has confirmed his attendance (virtually) at the NGEN Annual Meeting 2-2-24 and give a detailed presentation on the study. As of 1-31-24, FRA had not approved funding for the next phase of the study.

Hamid Sharif  
Advanced Telecommunications Engineering Lab  
University of Nebraska-Lincoln

Phone: 402-917-6363  
Email: [HSHARIF@UNL.EDU](mailto:HSHARIF@UNL.EDU)

- Specification for Rolling Stock Weight:

On 1-18-24, Dave Warner, acting team leader of the Vehicle Weight working group, provided a background on when the Draft specification proposed by the weight working group was provided to Technical Subcommittee (TSC) members and what the plan forward should be.

"The NGEN Rolling Stock Vehicle Weights specification was sent to the entire TSC on 12-20-23 to provide ample review opportunity in advance of the 1-4-24." TSC meeting. The intent was to consider approval of the proposed specification on 1-4-24, but due to the lack of a quorum, consideration was tabled until the 1-18-24 meeting.

"At the 1-4-24 meeting, an industry member brought up some concerns he had with certain aspects of the document. He was asked to send those concerns to me, the Acting Team Leader of the Vehicle Weight Working Group. I received those comments, and requested he reach out to any of the members of the working group to discuss the concerns." Working group members should be able to provide the "insight, and background as to the reasons the document reads as it does. Further, he was requested to submit DCRs if he still contended items needed to be changed."

During this week I have been contacted by two additional individuals who disagree with various aspects of the document." In reviewing the concerns brought up by multiple industry members, Dave concluded that they "do need to be looked at by the Vehicle Weight Working Group".

"Therefore, I recommend, Mr. Chairman, that we do not move forward today with approval of the Rolling Stock Vehicle Weights specification."

"I have already told the industry members who have approached me to submit their concerns to Tammy Krause in the form of DCRs. While normally only used for approved documents, DCRs serve a valuable purpose to require the author to specifically identify both the language to be changed and provide the suggested replacement language. Having DCRs will enable the Vehicle Weight Working Group to focus the discussion at the next meeting."

"The end of January (2024) is a reasonable deadline for the submission of DCRs. In the meantime, I will 'go to the doodle poll' to find time in early February (2024) for the Vehicle Weight Working Group to reconvene. I'm counting on the participation of the persons' submitting the DCRs, as well as the current members of the Working Group who have already put in a significant effort to bring the document to a vote."

"Finally, as an industry member, I can't make a motion on which the TSC can vote, but I can recommend a motion. So, in keeping what I said a bit earlier, Mr. Chairman, I recommend you make a motion 'to send the Rolling Stock Vehicle Weights specification back to the Vehicle Weights Working Group to provide an opportunity for resolving the concerns recently presented by industry members'."

Technical Subcommittee Consideration of approval of the Specification for Rolling Stock Weight:

While agreeing with Dave's recommendation, George Hull noted that he would give members the opportunity to offer either a motion to send the spec back to the working group for further discussion, or a motion to consider the specification for approval as presented.

At this point, Art Peterson, IDOT, offered a motion to send the Rolling Stock Vehicle Weight Specification back to the working group for further discussion to resolve the concerns that have been raised. Ed Engle, Iowa DOT, seconded the motion.

George Hull asked if there was any further discussion or any objections to the motion. Hearing none, George Hull determined that consensus had been achieved and the motion is approved.

- 2024 NGEC Annual Meeting:

The Annual Meeting is set to take place on 2-2-24 at the Hyatt Regency Hotel, Capitol Hill, Washington, DC. It will also be held virtually for those who cannot attend in-person.

The agenda is primarily finalized with only a few speakers yet to be confirmed.

### **The Finance and Administrative Subcommittee**

**Chair: Tim Ziethen, Amtrak**

**Vice Chair: Brian Beeler II, NNEPRA for Maine DOT**

**Second Vice Chair: John Oimoen, Illinois DOT**

**Note:** The second vice chair position became vacant on 12-31-23 with the retirement from State service by John Oimoen, IDOT. Melina Lopez will be the IDOT rep on the FASC, and once elections are held on 2-2-24, the second Vice Chair will be the elected Secretary of the Executive Board – per the NGEC By-Laws. The nominating committee has recommended Amanda Martin, Iowa DOT for Secretary of the Executive Board and second vice chair of the FASC.

**The Finance and Administrative subcommittee (FASC) will hold a conference call every four weeks on Wednesdays at 3:00pm Eastern.**

During the Month of January 2024, the Finance and Administrative Subcommittee met once on the 3rd.

Key decisions and action item updates from the month of January 2024 included:

#### **Balance/Spend Rate Through November 2023**

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#### Seeking Long-Term Funding:

The intent is to continue to seek long-term funding for the NGEC. The interim funding being provided by Amtrak for FY 2024 is not intended to be long-term but rather a stop-gap to keep the NGEC going while it explores funding options. Amtrak intends to apply again in the next round of CRISI Grant funding and will look into other potential options.

- Conveying the message as of 12-31-23:

The NGEC 2023 backgrounder/educational document was released in January and formally introduced during the Annual Meeting. To date 368 copies have been distributed (hard and soft).

#### NGEC two-pager updates for 2024 version – FASC Recommendations:

The NGEC 2024 Backgrounder and Educational document has been finalized and will be distributed in hard copy at the Annual Meeting (2-2-24) and electronically to all members of the NGEC. description of the recommended changes and future action required to update the document for 2024.

The NGEC website is up and running at: [www.ngec.org](http://www.ngec.org). Steve Hewitt reviews the website periodically and sends updates and/or changes to AASHTO – the maintainer of the site.

- Quarterly Grant Agreement Progress Report to FRA

All reports have been submitted on time.

The report for the period ending 12-31-23 was submitted on 1-30-24.

The next report will be due on 4-30-24.

- Annual NGEC By-Laws Review:

The 2023 review resulted in no changes being recommended.

The By-Laws will next be reviewed in the Fall of 2024.

#### **NGEC Specification Review Panel(s):**

**For each PRIIA NGEC specification a Review Panel has been established to compare the specification (as developed by the technical subcommittee) against a Requirements document previously adopted by the Executive Board. As the Review Panel completes its work, it prepares a report with recommendations. This report is submitted to the Executive Board for its consideration. Once accepted by the Board, the specification is subsequently formally adopted by the Executive Board. As part of the Document Control process, any proposed revisions to a PRIIA NGEC specification must go through the Review Panel process as well. At such times, the Review Panel, previously established for a specification, is re-convened by the Executive Board chair.**

The NGEC Review Panels did not meet in January 2024. Vacancies are still being filled as discussed previously in this report.