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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: March 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: Dan Ruppert, Amtrak**

**Secretary: Amanda Martin, Iowa DOT**

**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 March 2024, the Executive Board met once – on 3-19-24.

Highlights, decisions, updates from the NGEC during the month of March 2024:

- Treasurer's Report as of 3-27-24:

Balance/Spend Rate Through January 2024 - new funding (Amtrak AOP):

Amtrak AOP Funding - \$260,000

Invoiced through January – 57,343.07

Forecast/Accrual Amount to Reflect Billing Lag 60 days - \$30,000.

Invoiced and Accrual Expenses to date – 87,343.07.

Remaining funds (including 60 day forecast for billing) - \$172,656.93.

Estimated full year (YTD + FC + remaining months at Avg Spend TD) - \$162,061.69.

Current Average Monthly Spend - \$12,453.10

Strat Cavros, AASHTO, reported that he is about to submit the invoice for February in the amount of approximately \$16,488.

Tim noted that amount would keep the monthly spend rate right around the anticipated trend of around \$15,000. Tim will update the report once the invoice has been received from AASHTO.

Seeking Long-Term Funding – next steps:

FRA published its NOFO on 3-28-24. Tim Ziethen has been in communication with the Amtrak grants office to coordinate the application process.

Tim and the grants office will look at the application that was submitted last year to see where it can be strengthened. It was considered a very good application, so finding ways to improve it will not be easy. Tim will look for input from NGEN/FASC members as well. He does not want to simply re-submit the same app – rather submit a new application with improvements over the last one.

Status – Contract Extensions as of 3-27-24:

Steve Hewitt's contract extension has been executed between him (Hewitt Consulting) and AASHTO.

Tammy Krause's (TLK) contract extension has been executed with AASHTO.

Casamar has submitted its Scope of Work and Not to Exceed budget for the Technical Writer contract extension to AASHTO. It is expected to be executed soon.

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:

The NGEC 2024 Backgrounder and Educational document has been released and remains available by request from Steve Hewitt @ [shewitt109@aol.com](mailto:shewitt109@aol.com).

As of 3-31-24, 460 copies have been distributed (hard copies and electronic). The document is also available on the NGEC website.

- Metro-North Dual Mode Locomotive Procurement:

Metro-North's February update:

Locomotive 301 factory tests are complete. 302 has the engine and roof installed. Siemens is talking with Long Island Railroad (LIRR) about their options for additional locomotives. There has been lots of back and forth over the 3<sup>rd</sup> rail shoe with various testing and evaluation on accommodating over and under rail shoe.

- Multi-State Venture Rail Car Procurement as reported by Caltrans on 2-29-24:

*(There were no updates provided by Caltrans in March 2024)*

The Cab Car FDR is now approved, and all FDR stages are complete. The Cab Car and Café Car MCAT simulation reports have been approved by the states and the FRA.

The Cab Car Complete FAI and FRA sample car inspections have occurred with final open items in review and closure. The Cab Car 238.111(b) test plan is being revised based on recent comments for return to Amtrak and subsequent submittal to FRA. The first cab car and café car are being prepared for shipment.

All 137 cars are in production or have been produced at Siemens Sacramento Facility. IDOT coaches and Caltrans trainsets are currently in revenue service and additional cars are being added as they are commissioned and accepted.

- Amtrak Equipment Procurement Update as of 3-28-24:

On the Acela:

Testing and valuation continues in phase one.

Alstom and FRA to confirm testing process moving forward. There have been a few delays. The timeline was tight to begin with and some weather issues caused some delays with a decrease in evening testing. FRA is being kept up to speed on oscillation issues and mitigation. Overall the procurement is moving forward.

Trainsets: 10 Trainsets are largely completed – 6 are in the Penn Coach Yard and 2 are in Hornell or Alstom. Work on FMI is complete. Good progress overall.

On the Airo trainset: Progress is strong – there are 37 in production – 35 coaches and 2 locomotives. The first Locomotive is in the paint stage. Working on Cab cars. Some FAIs still need to be completed. The first trainset is anticipated to be on the corridor for testing in the Spring of 2025.

On the ALC 42:

They continue to get units delivered. Thus far 48 are in service. 6 are in commissioning or transit. 21 are in production and 50 are to be started.. Dan added that performance has been significantly improved. There were some train killer events but those are diminishing as they learn more and develop FMI to correct issues with component failures. Overall, moving in the right direction.

On the GP38 Acquisition:

There has been some improvement as they continue to work with the vendor. 19 are in production and a few are in transit. 15 have been conditionally accepted

On the Long-Distance Fleet:

It is in the middle of procurement. Bidders are working with the acquisition team on preliminary bids within the RFP process. They are looking at the end of this year or early next year for the award.

- Connecticut DOT Rail Car Procurement as of 3-28-24:

Preliminary Design Review (PDR) has begun. CTDOT will provide ongoing updates monthly to the NGEC Technical subcommittee.

- VIA Rail Equipment Procurements:

A detailed update presentation was provided to the NGEC during the Annual Meeting on 2-2-24.

The presentation is posted in the Meetings section of the website at [www.ngec.org](http://www.ngec.org)

- Document Control Update -3-28-24:

The Materials Working Group (WG) continues to meet regularly, their last meeting was 3-4-24 and their next meeting is 4-2-24. Please contact Michael Gill ([Michael.Gill@atkinsrealis.com](mailto:Michael.Gill@atkinsrealis.com)) if you are interested in joining.

The Communications WG will be meeting on 4-2-24. Please contact Ken Martin ([kmartin@sharma-associates.com](mailto:kmartin@sharma-associates.com)) if you are interested in joining.

Tammy Krause is working with the Technical Writer to create the DCRs for the single level document and will then submit them to the WGs.

Vehicle Weight Working Group update from Team Leader, Dave Warner on 3-28-24:

*“The Vehicle Weight Working Group met on Monday, March 11, 2024. There were three DCRs to be discussed, covering four topics. We came to an agreement on three of the four topics. The fourth, dealing with the amount of lateral and longitudinal imbalance to be allowed on a PRIIA vehicle is going to take a bit of time to resolve. What is in the current proposed document is definitely not correct, and finding the correct language is more complicated than simply changing one number. We had good carbuilder and technical expertise present in the meeting, and we’ve a plan in place with a goal of developing the correct language by the beginning of the summer.”*

- Filling Vacancies:

Vacancies exist on the Specification Review Panels

Current status as of 3-31-24:

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**

### Technical subcommittee

**Chair: Don Ruppert, Amtrak**  
**Vice Chair: Joe Paul, Amtrak**

During the month of March 2024, the subcommittee met once – on the 28th:

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

- Backgrounder educational document:

The 2024 NGEC two-page educational was released on 2-2-24 at the NGEC Annual Meeting. As of 3-31-24, 460 copies have been distributed. The document is 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 3-28-24:

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

- Multi-State Car Procurement - Caltrans (Lead State) update as of 2-29-24 (no updates were provided by Caltrans in March 2024.):

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 3-28-24:

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

- Amtrak Equipment Procurement Updates as of 3-28-24:

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 2-29-24:

Hamid Sharif, University of Nebraska, provided a summary presentation on the High-Speed Wireless Study during the NGEC Annual Meeting.

The presentation is available on the NGEC website at [www.ngec.org](http://www.ngec.org).

This study, as of 2-2-24 had not been granted funding from FRA for its next phase. The item will be tabled until further information is received.

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

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

- Discussion: Potential future presentations – developing a list of presentations/topics:

Dan Ruppert introduced this discussion as a follow-up from the Annual meeting. He was very interested in the University of Nebraska Study and the presentation given during the Annual Meeting and would like to have some similar presentations throughout the year. He believes that it is important to leverage the knowledge that this group has to help those who are new to this field or simply interested in learning more about new technologies.

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Ray Hessinger, NYSDOT, commented that when this was brought up at the last Executive Board meeting, there was interest. He added that not all of the Board members are on the Technical Subcommittee but would like to be informed when a presentation is to be given during a subcommittee call so that they would have an opportunity to attend.

Dan Ruppert added that he thinks such presentations are an opportunity to present technology discussions to a broad group. He believes the effort may have to be solicited to get input and involvement.

Ray Hessinger added that it will be important to be sensitive with regard to commercial propriety.

Blair Slaughter commented on the fact that the FRA has an activity around technology transfer and thinking outside of railroads to solve railroad issues.

Melissa Shurland, FRA, noted that they are trying to be pro-active in the field of technology transfer. "We are waiting to see hard technology on the trains and would welcome input from this group." Melissa added "We have a mandate to be more pro-active on technology transfer."

Action:

Melissa Shurland, FRA, will introduce Steve Hewitt to the Director of the FRA's program related to Technology Transfer issues. Steve is happy to have the introduction and would hope that someone from that group would give a presentation on what the FRA is doing in this area and what they are looking for. This would, hopefully, stimulate further discussions/presentations.

Dan Ruppert believes there is interest and desire to go forward with technology presentations and asked for input from members on topics or points that the NGEC should be discussing.

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

**Chair: Tim Ziethen, Amtrak**

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

**Second Vice Chair: Amanda Martin, Iowa DOT**

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

During the Month of February 2024, the Finance and Administrative Subcommittee met once on the 27th.

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

See Executive Board section of this report for details on this item.

Seeking Long-Term Funding:

Future funding options appear to be limited. The primary funding opportunity seems to be applying for a CRISI Grant. The NOFO was issued on 3-28-24. Amtrak will once again apply for CRISI funds for the NGEC in the upcoming round.

Other options previously discussed included subscription fees and/or annual federal appropriations.

In 2015, the Executive Board determined that the subscription fee concept would not work for a variety of reasons, and expressed the point of view that the NGEC's funding is a federal responsibility and should be funded accordingly.

Federal appropriation requests to date have not been enacted and the CRISI Grant application during the last round was well received but not awarded due to the number of applications vs available funding.

Contract Extensions – sub-contractors and AASHTO:

See Executive Board section of this report for details on this item.

- Conveying the message as of 3-31-24:

The NGEC 2024 backgrounder/educational document was released during the 2024 Annual Meeting. To date 460 copies have been distributed (hard and soft). Contact Steve Hewitt at [shewitt109@aol.com](mailto:shewitt109@aol.com) to request a copy.

- 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 is due on 4-30-24 but will likely be an internal NGEC report as opposed to a formal report to the FRA since the funding source has changed to Amtrak and the prior grant will be closed out by 3-31-24.

- Closing out the prior grant:

close out documents and instructions for the prior grant were received by Tim Ziethen on 3-27-24. He has sent copies to Steve Hewitt. Most of the information will be obtained from the quarterly activities reports generated by Steve Hewitt.

Steve and Tim will meet to discuss what needs to be done on 4-4-24 at 1:30pm.

- 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 March 2024. Several vacancies are yet to be filled as noted previously in this report.

#### **Milestones – Quarterly update (January 1, 2024, through 3-31-24)**

##### **Monthly meetings:**

Throughout the quarter, the NGEC Executive Board and the FASC held meetings every 4 weeks as agreed to under a discussion of meeting cadence earlier in 2023.

##### **Bi-weekly meetings:**

The Technical subcommittee holds bi-weekly calls except when it is deemed by the chair and the NGEC Manager that there is not a strong enough agenda for a particular meeting and it is then canceled.

All business of the Board, the Technical subcommittee and the Finance and Administration subcommittee continued to progress throughout the quarter.

**Dissemination of educational/informational pieces and “getting the message out”:**

The 2024 two-page educational/backgrounder was released in February 2024. To date, 460 hard and soft versions have been distributed to NGEC members and various associations.

The NGEC website is up and running at [www.ngec.org](http://www.ngec.org).

Updates and/or changes are provided to AASHTO by the NGEC Manager periodically.

**NGEC Annual Meeting:**

The (14<sup>th</sup>) Annual Meeting of the NGEC took place in-person and virtually on 2-2-24 and was the NGEC’s third Hybrid meeting. The meeting was attended by approximately 94-100 members.

The NGEC’s 2025 Annual Meeting is not yet scheduled but is anticipated to take place in February.

**Annual Review of NGEC By-Laws and Operating Procedures:**

The 2023 Annual review of the NGEC By-Laws was completed in October 2023 and there were no edits or changes recommended.

In the Fall of 2024, the required annual review will again begin with the FASC with recommendations to be made to the Executive Board no later than 10-31-24.

**Quarterly Reports:**

Grant Reports will continue, but will be internal only, as the current funding source is the Amtrak AOP for FY 2024. Information provided in the monthly NGEC Activities reports for the quarter, prepared by the NGEC Manager, will be utilized as a basis for the Quarterly Reports to the FRA.

The first quarterly report for FFY 2024 for the period covering 10-1-23 through 12-31-23 was completed and distributed by 1-31-24.

The next quarterly report for the period beginning on 1-1-24 through 3-31-24, will be completed by 4-30-24.

**Fiscal and contractual actions:**

The Amtrak Board of Directors approved an appropriation for \$260,000 from its AOP as interim funding with long-term funding to be yet to be identified. In 2023, Amtrak applied for a CRISI Grant for the NGEC but it was not awarded.

A NOFO for the next round of CRISI grants was issued on 3-28-24. Amtrak grants with NGEC input will revise/update the previous application and submit within the 60-day period as noted in the NOFO.

**Review/Update of NGEC Specifications (Document Control):**

This activity is ongoing.

Activities specific to this quarter:

The working group on weight issues continues to re-work its proposed specification since there were several DCRs offered from industry members and Amtrak in January 2024. This work will likely be completed in the third quarter of FY 24.

**On-Going Activities – status updates this quarter:**

The 2023 By-Law Review was completed and FASC recommendations for no changes this year was accepted by the Executive Board. The next annual review will take place in the Fall of 2024.

The website continues at [www.ngec.org](http://www.ngec.org). Updates and new information are submitted regularly by Steve Hewitt to AASHTO for posting.



The CRISI Grant application submitted earlier in 2023 was not awarded a grant by the FRA. The FASC is assigned to discuss other potential options for long-term funding and will be the place where a new CRISI Grant Application will be developed for submittal in the next round.

In the 1<sup>st</sup> quarter of FY 24, the NGECC began to operate under the 12-month budget of \$260,000 funded by Amtrak through its 2024 AOP.

In this first quarter FY24, the appropriate Technical working groups continued to review the Dual Mode Locomotive Specification and the Single Level Rail Car Specification.

In the first quarter 2024, the Technical subcommittee has begun to discuss adding agenda items which would provide opportunities for presentations on technological advances/emerging technology and lessons learned through the acquisition process.