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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: July 31, 2023**

**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: John Oimoen, IDOT**

**Treasurer: Tim Ziethen, Amtrak**

#### **The Executive Board holds bi-weekly conference calls – Tuesdays at 11:30am Eastern.**

- During the month of July 2023, the Executive Board met two times - on the 11th and the 25<sup>th</sup>.

Highlights, decisions, and action items from the month of July include:

- Treasurer's Update:

Balance/Spend Rate Through May 2023

Total Initial Grant Amount: \$1,250,000.

Expenses Incurred through May 2023: \$1,198,774.76

Balance remaining: \$51,225.24.

Estimated spend at current rate for balance of the Grant: \$59,938.74

Current Spend Rate per month (as info and used in calculating): \$14,984.68.

Estimated Balance at the end of the Grant Period: (8,713.50) over target.

Status – 6-month no-cost current grant agreement extension:

Amtrak has submitted a 6 month no-cost GARF to FRA which is now under review. The GARF extends the period of performance and will allow the NGEC to draw down expenses in the grant until they are exhausted. On 7-25-23, Tim reported that he still has not heard from FRA. He assumes it is working its way through the process.

Update: NGEC 12-month Interim funding Proposal (7-25-23):

NGEC Chair Ray Hessinger asked Tim Ziethen to review the proposed budget – which was sent to all Board members just prior to today's call. Ray asked if there were changes from the last budget proposal.

Tim walked through the spreadsheet and explained that he had “re-aligned it and cleaned it up to make it easier to read.” Tim met with Strat Cavros, AASHTO, to confirm the AASHTO anticipated costs and he noted there was no additional charge for website posting – it was included in the AASHTO professional service line.

Overall, the final number was adjusted down slightly to an even \$260,000.

Jason Biggs, WSDOT asked what the \$10,000 possible carry over was. Tim responded that, as of now, it is projected that the current grant will end with an \$8,700 negative balance and if that happens, Amtrak will pick it up “through this mechanism”. Tim has allowed \$10,000 as a contingency.

With no other discussion forthcoming, Ray Hessinger noted that on the 7-11-23 Executive Board call, FRA requested that the NGEC Executive Board go into Executive Session on this call to discuss the proposed interim budget.

Ray stated that to go into Executive Session it would take a motion and a second and a stated purpose.

Tim Ziethen stated that, as he understood it, the purpose was to allow discussion without contractors present as a part of the discussion to review and possibly revise the budget and consider it for approval.

Ray Hessinger asked for either a motion to go into Executive Session or to simply approve the budget as presented.

- Executive Session: 7-25-23:

Jeff Gordon, FRA, offered a motion to go into Executive Session for the purpose as stated by Tim Ziethen previously - to allow discussion without contractors present on the call before approving the proposed budget. The motion was seconded by Troy Hughes, MODOT, and, with no objections offered, the Executive Board agreed to go into Executive Session for the purpose as described above.

At 11:59 am, all contractors left the call and Steve Hewitt transferred the WebEx meeting control to Chairman Hessinger.

At the conclusion of the Executive Session – Chairman Hessinger sent the following email to Steve Hewitt:

*Steve,*

*The results of the executive session are as follows:*

*The 2024 Budget is approved as presented today by unanimous voice vote.*

*The Executive Board and both Subcommittees are to review and update, as appropriate, their meeting cadence. Please add that issue to the agenda for the next meeting for each.*

*Ray*

Steve Hewitt will follow-up as noted.

Along with the transmittal of the draft minutes from today's call, Steve will distribute the approved budget.

- 2023 NGEC two-pager:

The NGEC 2023 backgrounder/educational document was released in January and formally introduced during the Annual Meeting. To date 336 copies have been distributed (hard and soft).

- Multi-State Rail Car Procurement (provided by Caltrans) as of 7-20-23:

The remaining Cab Car FDR submittals are in the final closure stage with nearly all subsystems approved. The Cab Car MCAT simulation report has been submitted to Amtrak for review and transfer to FRA with clarifications made. IDOT Café Car system level FDR reviews are nearly closed and the requested MCAT simulation is in work.

The Cab Car Collision and Corner Post Appendix F test reports are approved. The Cab Car Complete FAI occurred on July 18, and the FRA Sample Car Inspection is scheduled for July 27.

131 cars are in production or have been produced at Siemens Sacramento Facility. IDOT coaches are currently in revenue service and Caltrans is targeting revenue start in 2023. Progress on agreements has been made with signatures expected in July or August.

- Metro-North Dual Mode Locomotive Equipment as of 7-11-23:

Production for Metro-North Charger #301 and #302 is progressing ahead of DCS schedule. Carshell for Metro North Charger #301 completed the finishing process and entered Final Assembly on June 30th.

Sub-assembly started in May and Final Assembly is on track to start in July 2023.

Metro North approved FAI #one carshell as well as FAI #five truck frame welded.

Payment milestone P1 carshell #1 was paid by MNR.

Siemens has notified Metro North via project letters of two potentially Excusable Delays for alternator supplier insolvency as well as supplier Lutze's global supply shortages for semiconductor parts.

- Amtrak Equipment Procurement Update – as of 7-20-23:

On the Charger Locomotives – Amtrak continues to take delivery of additional units.

On the new Acela – Work continues on qualification items.

On the Airo Trainset – the first car shell is almost complete and Final Design Review (FDR) continues.

- Connecticut DOT Rail Car Procurement as of 7-31-23:

This procurement continues to be in the “cone of silence” phase.

- 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)

Next Update: 2024 NGEC Annual Meeting

- Document Control Progress Report – 7-25-23:

From Tammy Krause – Document Control Manager – 7-25-23:

“I am working with the Technical Writer on identifying the Amtrak fleet references in the sub specifications. Mr. Warner reminded me that we also need to remove references to the two specs that we are sunseting, 305-911 “Replacement of Copper Waste Piping” and 305-919 “Digital Trainline Hardware”.

The APTA PRESS Electrical Working Group has been asked to work with the NGEC on the Digital Trainline spec. I let them know that we were no longer working on that and would not be updating 305-919 in the future. I offered to send them a copy of 305-919. They have been asked about DTL by some Commuter Railroads.

There were sixteen changes proposed for the PRIIA sub specifications, four of them were addressed at the last TSC meeting. The remaining twelve are located in the marked-up version of the 305-901 Intercom Systems. This document has been provided to the TSC and will be voted on at the August 3rd meeting.”

- NGEC CRISI Grant Application Status:

On 12-13-22, Tim Ziethen reported that the CRISI Grant for funding for the NGEC was submitted on time (early). He thanked the Board for its feedback – especially in light of the short turnaround time.

The timeline for announcing which CRISI Grant applications are approved is August-September 2023.

- NGEC 2024 Annual Meeting:

The NGEC Annual meeting for 2024 is scheduled for 2-2-24 at the Hyatt Regency Hotel Capitol Hill, Washington, DC.

More details to follow.

### **Technical subcommittee**

**Chair: George Hull, Amtrak**

**Vice Chair: Joe Paul, Amtrak**

**The Technical subcommittee holds bi-weekly conference calls on Thursdays at 3:00pm Eastern.**

During the month of June 2023, the subcommittee met on the 8th and the 22nd:

Key decisions and action item updates from the month of June 2023, included:

- Backgrounder educational document:

The 2023 NGEC two-page educational document/handout was released in January and distributed widely during the Annual Meeting on 2-3-23.

It remains available in electronic or hard copy versions. Requests should be sent to Steve Hewitt at [shewitt109@aol.com](mailto:shewitt109@aol.com)

To date 336 copies have been distributed.

- Document Control Update as of 7-25-23:

Please go to the Executive Board section of this report for the update as provided to the Executive Board on 7-25-23.

- Communications on Rail Cars working group – status as of 6-8-23:

On 6-8-23, Tammy Krause reorted the following update:

The Communications on Rail Cars Working Group is working on the communications chapter 12 of the single level specification. They were asked to bring the communications section up to current. They are currently working on the Digital Train Line section. The PRIIA sub specification was sunset but the concept is still needed. The new section being written by the communications group includes newer technology and options as opposed to the original ethernet cables. Their next meeting will be on June 20, 2023.

No update was provided in July 2023.

- Multi-State Car Procurement - Caltrans (Lead State) update as of 7-20-23:  
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 7-11-23:  
See Executive Board section of this report for the status of this procurement.
- Amtrak Equipment Procurement Updates as of 7-20-23 reported by George Hull, Amtrak:  
See Executive Board section of this report for the status of this procurement.
- Connecticut DOT Rail Car Procurement:  
This procurement has advanced to the “cone of silence” phase.
- University of Nebraska/FRA study on High Speed wireless technology as of 6-22-23:  
Report from Hamid Sharif:  
  
“We continued our field testing for verification of our transceiver design. This is to investigate a better utilization of some of the sub-giga-Hertz frequencies for rail applications to ease the spectrum saturation. We have been investigating 160 MHz which has been used primarily for voice communications but believe this band can be utilized more efficiently for some of the data rail applications and this is the core of our study. We have built computer models for the physical layer transmission of 160 MHz as well as the upper layers to simulate and field test different rail applications. Our developed transceiver has been implemented using software-defined radios for field tests. Hope to provide the results later in the summer.”  
  
For any questions, please contact Hamid Sharif at: [hsharif@UNL.edu](mailto:hsharif@UNL.edu)
- Working Group on Specification Weight Issues as of 7-31-23:  
  
Jeff Gordon, FRA, the working group team leader, reported in March 2023, that he intends to update the document based on working group feedback rather than schedule a meeting. He will then ask for input from the members via email. His issue is that he has been called for Jury duty and if enpaneled could be serving for 3 months and he would not be able to hold a working group meeting. If he is not enpaneled, this may change, but for now he intends to begin updating the document based on feedback received to date.  
  
No change in July 2023
- Status: NGENC Funding – CRISI Grant Timeline – path forward:  
  
See Executive Board section of this report for current status of this item.

### **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**

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

During the Month of July 2023, the Finance and Administrative Subcommittee met on the 21st.

Key decisions and action item updates from the month of July 2023 included:

- Treasurer’s Update as of 6-27-23:

### Balance/Spend Rate Through May 2023

Total Initial Grant Amount: \$1,250,000.  
Expenses Incurred through May 2023: \$1,198,774.76  
Balance remaining: \$51,225.24.  
Estimated spend at current rate for balance of the Grant: \$59,938.74  
Current Spend Rate per month (as info and used in calculating): \$14,984.68.  
Estimated Balance at the end of the Grant Period: (8,713.50) over target.

Tim noted that there is a fair amount of variance in invoices each month and historically these are "light months" so it is possible to go over budget slightly, but it will be close. If it does go over, Amtrak has agreed to pick up the "small overage." Tim also noted that he is not aware of anything "hanging out there."

Status – 6-month no-cost current grant agreement extension:

Amtrak has submitted a 6 month no-cost GARF to FRA which is now under review. The GARF extends the period of performance and "allows us to draw down expenses in the grant until exhausted."

As of 7-31-23 FRA continues its review process.

Update: NGEN 12-month Interim funding Proposal 7-19-23:

Tim Ziethen reported that Amtrak has a placeholder in the AOP to fund baseline operations of the NGEN with an adjustment for "known work already approved" by the Board based on estimates provided. The Draft includes built-in contingencies.

The current version of the DRAFT budget is (Tim shared it on the screen with the FASC members on the call) the same as what was discussed at the 7-11-23 NGEN Executive Board meeting. There may be some adjustments/refinements later today as he (Tim) is meeting with Strat Cavros, AASHTO, to go over the line items pertaining to AASHTO's professional services and other less defined line items such as website maintenance. Tim added that had put in a placeholder for \$500 per month for this website maintenance and asked Strat or Shayne if there could potentially clarify if this was a separate item. Shayne Gill clarified that the website maintenance costs are not separated out from other AASHTO activities – rather they are built in. The separate contract with the website designer did not include continued maintenance. The ongoing maintenance of the site is handled by AASHTO, but not as a separate cost.

Tim noted that he has developed the budget using the last 12-month average spend and will be confirming those numbers with Stat this afternoon.

Tim described one line item as including miscellaneous expenses and Annual meeting Travel. It also includes \$10,000 for reimbursing Amtrak for any carryover from the current grant.

Ray Hessinger mentioned that the House T&I Committee is talking about cutting Amtrak funds – "how will this impact us."

Tim responded, "good question – we are discussing this internally – but we are hopeful it will get worked out. I have no particular insight on this one - it is a concern, but no one has come back to me to say remove the NGEN placeholder." Tim added that he is monitoring this as closely as possible. Obviously if there is a shutdown – "all bets are off."

He did add "while some believe that IJA money solves everything – it does not – there is no ability to re-direct to operating support."

Tim asked if there were other questions. Steve Hewitt commented that the regular order of things would be for the FASC to consider the DRAFT Budget to move it forward to the executive Board as a recommendation. Steve noted that the Executive Board is expected to discuss the Draft Budget on its next call (7-25-23) in Executive Session. It would be appropriate to have the FASC recommend that it be moved to the Board for consideration with the understanding that FRA has asked for an Executive Session discussion.

Tim agreed, and called for a motion to recommend the DRAFT budget be moved forward to the Executive Board for its consideration with the understanding that after he has talked to AASHTO later there may be some tweaks or adjustments.

Steve Hewitt suggested that the FASC recommendation to the Board should include “a not to exceed” number and the understanding that it could be further refined (after Tim’s discussion with AASHTO later today).

John Oimoen, IDOT offered a motion to move it forward to the Executive Board with the understanding as described above. The motion was seconded by Amanda Martin, Iowa DOT.

Tim asked if there were any objections. Hearing none he determined that consensus was achieved and the motion was approved.

Tim will provide Steve Hewitt with the “refined/adjusted” Draft after his conversation with AASHTO today. Steve Hewitt will forward that draft to the FASC along with the meeting minutes and will send it to all Board members along with the 7-25-23 Executive Board agenda.

The recommended budget (adjusted) will be attached to the email transmitting these minutes to FASC members and will be sent to the Executive Board along with the 7-25-23 meeting agenda on Friday 7-21-23.

- Conveying the message as of 7-31-23:

The NGENC 2023 background/educational document was released in January and distributed widely during the 2-3-23 NGENC Annual Meeting. It can be requested in hard or soft copy by contacting Steve Hewitt at [shewitt109@aol.com](mailto:shewitt109@aol.com)

To date 336 copies have been distributed.

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

- Quarterly Grant Agreement Progress Report to FRA

All reports have been submitted on time.

The report for the period ending 9-30-23 is due to FRA by 10-31-23.

- By-laws changes to allow activities that will increase public awareness:

The By-Laws were updated in December 2022 and will again be reviewed in the Fall of 2023.

Note: It has been determined that no changes to the By-Laws will be required for the proposed new (interim) funding source.

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

**For each PRIIA NGENC 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 NGENC 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 NGENC Bi-Level Rail Car Specification Review Panel was convened by the Chair in January and on February 14<sup>th</sup> the Panel went through the DRAFT Review Panel Report and Recommendations prepared by technical consultant Larry Salci. The Panel recommended approximately twenty additional revisions and on February 17<sup>th</sup> approved the Report and its Recommendations as revised by Mr. Salci in an electronic vote. On 2-21-23, the Report and its Recommendations were adopted by the Executive Board and the changes that will comprise 305-001 Revision D were sent to the technical writer for incorporation into the spec.

The Bi-Level Specification 305-001 Revision D has been completed and is available by request through Steve Hewitt.

The NGEC Review Panels did not meet in July 2023.

On 8-8-23, the Executive Board will fill vacancies that have occurred on some of the Review Panels.