



www.ngec.org

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: June 30, 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 June 2023, the Executive Board met two times - on the 13th and the 27th.

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

Treasurer's Update as of 6-27-23:

Balance/Spend Rate Through April 2023

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

Expenses Incurred through April 2023: \$1,173,648.37

Balance remaining: \$76,351.67.

Estimated spend at current rate for balance of the Grant: \$74,281.54

Current Spend Rate per month (as info and used in calculating): \$14,856.31.

Estimated Balance at the end of the Grant Period: 2,070.13

Tim added that there are a couple of outstanding invoices which “might push it over a bit...but should not be a problem.”

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.”

Update: NGENC 12-month Interim funding Proposal:

In regard to funding, Tim reported that he had met with Mike Murray and Jeff Gordon, FRA, and he has “great news!” FRA reviewed the Amtrak proposal to fund the ongoing work of the Committee out of its Annual Grant that it receives through Appropriations. He noted “we have the green light to move forward with what we have proposed.” Tim added that they are still looking at whether it will be identified as a Capital Project or an operating expense. He termed this as “more of an accounting question.”

He added that the is “super news!”

Tim Ziethen further reported that he is still putting together the Exell spreadsheet “to lay out for all of you to see” that would include the AASHTO expenses, Casamar TLK, etc. He noted that he will be contacting Steve Hewitt to discuss the spreadsheet as he still has a few questions.

Tim also noted that there “is a placeholder for this in the AOP (Amtrak Operating Plan) with George Hull and Amtrak’s support.

- 2023 NGENC two-pager:

The NGENC 2023 backgrounder/educational document was released in January and formally introduced during the Annual Meeting. To date 334 copies have been distributed (hard and soft).

- Multi-State Rail Car Procurement (provided by Kyle Gradinger, Caltrans) as of 6-27-23:

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.

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

129 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.

Following his formal update, Kyle Gradinger added “we are getting close to revenue service in California.”

- Metro-North Dual Mode Locomotive Equipment as of 6-13-23:

Ray Hessinger, NYSDOT, provided the following update for inclusion in today’s minutes (6-13-23):

Metro North confirmed finalization of the Final Design Review (FDR) Phase on May 8th.

Production for Metro-North Charger #301 and #302 is progressing ahead of DCS schedule. Carshells for both locomotives have completed Q14 (ready for blast) and have been put into storage until finishing begins.

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

First Article Inspection (FAI) for the MNR carshell has been successfully completed with zero open items.

FAI for truck frame welding has been successfully completed.

- Amtrak Equipment Procurement Update – as of 6-22-23:

On the new Acela:

Work continues on the qualification requirements.

On the Airo Trainsets:

Final Design Review continues.

On the Charger Locomotives:

29 are in-house, 28 and 29 will be commissioned this week. Service on the Capital between Washington and Chicago has begun. Silver Service in Washington is scheduled to begin on 6-29-23 as the ATC hurdle was passed.

- Connecticut DOT Rail Car Procurement as of 6-31-23:

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

- VIA Rail Equipment Procurements:

A detailed update presentation was provided to the NGEN during the Annual Meeting on 2-3-23. The presentation is posted in the Meetings section of the website at www.ngec.org

Next Update: 2024 NGEN Annual Meeting

- Document Control Progress Report – 5-30-23:

As reported by Document Control Manager Tammy Krause on 5-30-23:

Tammy Krause provided the following update to the Technical subcommittee on 6-22-23.

“I have received ten comments on the PRIIA sub specs and I will be creating DCRs from them and submitting them to the entire Technical Subcommittee (TSC) for review. The next group of documents to be reviewed are the APTA Standards and Recommended Practices.

The Materials Working Group has not completed their review of the EN Welding Standards yet but will give a report/summary to the TSC when they do.”

On 6-13-23, the NGEN Executive Board approved the 12-month SOW and Budget for Document Control and Technical Writing for the period beginning on 10-1-23 through 9-30-24.

- NGEN CRISI Grant Application Status:

On 12-13-22, Tim Ziethen reported that the CRISI Grant for funding for the NGEN 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.

- NGEN 2024 Annual Meeting:

The NGEN 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

To date 334 copies have been distributed.

- Document Control Update as of 5-30-23:

Please go to the Executive Board section of this report for the update as provided to the Executive Board on 6-27-23.

- 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.

- Multi-State Car Procurement - Caltrans (Lead State) update as of 6-22-23:

See Executive Board section of this report for the status of the Venture car multi- state procurement as of 6-27-23.

- Metro North Dual Mode Locomotive Procurement as of 6-27-23:

See Executive Board section of this report for the status of this procurement as of 6-27-23.

- Amtrak Equipment Procurement Updates as of 5-25-23 reported by George Hull, Amtrak:

See Executive Board section of this report for the status of this procurement as of 6-27-23.

- Connecticut DOT Rail Car Procurement:

This procurement has advanced to the “cone of silence” phase.

- University of Nebraska study on High Speed wireless technology as of 4-13-23:

“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

- Working Group on Specification Weight Issues as of 6-30-23:

On 3-30-23, Jeff Gordon, FRA, and the working group team leader, reported 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 June 2023

- Status: NGEC Funding – CRISI Grant Timeline – potential next steps:

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 June 2023, the Finance and Administrative Subcommittee met on the 21st:

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

- Treasurer’s Update as of 6-27-23:

Balance/Spend Rate Through April 2023

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

Expenses Incurred through April 2023: \$1,173,648.37

Balance remaining: \$76,351.67.

Estimated spend at current rate for balance of the Grant: \$74,281.54

Current Spend Rate per month (as info and used in calculating): \$14,856.31.

Estimated Balance at the end of the Grant Period: 2,070.13

Tim Ziethen noted that the base line spend estimates do not include the Casamar/TLK expenditures, and “it could push us over” but it depends on the next few months of spending – while the average spend rate is around \$15,000, it often comes in lower.

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.”

Update: NGEC 12-month Interim funding Proposal:

In regard to funding, Tim reported that he had met with Mike Murray and Jeff Gordon, FRA, and he has “great news!” FRA reviewed the Amtrak proposal to fund the ongoing work of the Committee out of its

Annual Grant that it receives through Appropriations. He noted “we have the green light to move forward with what we have proposed.” Tim added that they are still looking at whether it will be identified as a Capital Project or an operating expense. He termed this as “more of an accounting question.”

He added that the is “super news!”

- Conveying the message as of 6-30-23:

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

To date 334 copies have been distributed.

The NGEC website is up and running at: www.ngec.org.

- Quarterly Grant Agreement Progress Report to FRA

All reports have been submitted on time. The report for the period ending 6-30-23 is due to FRA by 7-31-23.

- 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 is 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 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 Bi-Level Rail Car Specification Review Panel was convened by the Chair in January and on February 14th 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 17th 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 June 2023.

Milestones – Quarterly update (January 1, 2023, through June 30, 2023)

Bi-weekly meetings:

Throughout the quarter, the NGEC Executive Board and the Technical subcommittee held bi-weekly conference calls with exceptions as noted due to schedule conflicts.

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

Monthly meetings:

During the quarter, the Finance and Administrative Subcommittee (FASC) met once per month.

Dissemination of educational/informational pieces:

The 2023 two-page educational/backgrounder was released in February 2023. To date, 334 hard and soft versions have been distributed to NGEC members and various associations.

The website is up and running at www.ngec.org.

NGEC Annual Meeting:

The (13th) Annual Meeting of the NGEC took place virtually on 2-3-23 and was the NGEC's second Hybrid (in-person and virtual) meeting. The meeting was attended by approximately 110-115 members.

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

Annual Review of NGEC By-Laws and Operating Procedures:

The 2022 By-Laws review has been conducted. On 12-13-22, the NGEC Executive Board adopted revisions recommended by the Finance and Administrative subcommittee.

The By-Laws revisions, as approved on 12-13-22 have been incorporated into the document and it was distributed to all Board members in January 2023 and is posted to the NGEC website at www.ngec.org.

The 2023 Annual review of the NGEC By-Laws will begin in the Fall of 2023.

Grant reporting:

As required by the Grant Agreement, Amtrak will submit a quarterly report to the FRA. 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.

All quarterly reports to date have been submitted on time to FRA.

The first quarterly report for FFY 2023 for the period covering 10-1-22 through 12-31-22 was submitted to FRA by 1-31-23.

The second quarterly report for FFY 2023 for the period ending March 31, 2023, was submitted to the FRA on time by the due date of 4-30-23.

The third quarterly report for FFY 2023 for the period beginning on 4-1-2023 and ending on 6-30-2023 is due by 7-31-23.

Fiscal and contractual actions:

During the April 1 to June 30, 2017, quarter, the Finance and Administrative subcommittee, and, subsequently, the Executive Board, adopted a motion that expressed the intent to extend the contracts of AASHTO and the subcontracts coordinated with the Grant Agreement and consistent with the budget and SOW. Currently, Amtrak and AASHTO are in the process of developing their contract extension and, following its execution, AASHTO has been directed to do the same with the sub-contracts identified in the SOW and noted in the adopted motion inserted below.

"As was intended in past NGEC budget approvals and to ensure compliance with the Audit of Grant Agreement of March 27, 2013, and the NGEC's updated Procedure of Establishing Contract Support adopted August 6, 2013, the NGEC authorizes Amtrak to contract with AASHTO for administrative support services as well as subsequent sub-contracts per the statement of work for entities such as; with Hewitt Consulting for Manager of Support Services, and with SalciConsult for Specification Consultant services. In addition, with the Federal Railroad Administration's June 8th, 2015, approval of the NGEC's Supplemental Statement of Work and related budget extension through September 30, 2017, and its subsequent approval of the Statement of Work and Budget included in the Grant Agreement executed on October 26, 2016 for the period beginning October 1, 2016 through September 30, 2019,

Amtrak is authorized to extend its agreement with AASHTO and AASHTO's sub-consultants in accordance with the Statement of Work."

Adopted by the NGEC Executive Board on 6-6-17.

On 9-26-17, AASHTO and Amtrak executed a contract extension for NGEC Support services to continue from 10-1-17 through 9-30-19. On 9-27-17 AASHTO executed a contract modification with Hewitt Consulting – (Steve Hewitt) extending the NGEC Manager's contract for the period 10-1-17 through 9-30-19.

In the fourth quarter, 2017 – AASHTO and Amtrak executed a contract extension for technical support (spec writing) with Casamar – extending the contract through 9-30-19.

During the fourth quarter, NGEC Revision Control Coordinator (RCC), Tammy Krause, Amtrak, accepted the separation agreement and announced her departure to the NGEC Executive Board – effective 12-31-17. To fill the void created by this change, Amtrak has temporarily assigned these responsibilities to Michael Burshtin, Amtrak, and has begun taking steps needed to potentially subcontract this work similarly to how the other NGEC support services are provided. The SOW was revised by the NGEC Executive Board during this quarter to provide the flexibility to have the duties of the RCC conducted in house – Amtrak – or be subcontracted to a consultant. The Amtrak and FRA grants offices are reviewing the proposed change and, if approved, a sole source contract will be executed per NGEC Contract Management procedures.

As of 3-31-18, and as noted previously in this quarterly report, the NGEC Grant Agreement SOW revisions have been submitted to FRA and are under review. It is anticipated that the revisions will be approved and executed in April 2018. Simultaneously, the actions necessary to execute a contract for the Document Control Manager (DCM) have progressed with a revised SOW and budget having been submitted by the prospective sole source contractor for review and approval of the NGEC Treasurer and the Technical Subcommittee Chair who will be responsible for managing the work of the DCM.

During the quarter ending June 30, 2018, per the NGEC process, AASHTO executed a contract with TLK Associates, LLC (Tammy Krause) to perform the Document Control Management responsibilities, as identified in the SOW and budget, and as previously approved by the NGEC Executive Board.

During the quarter ending September 30, 2018, the FRA and Amtrak executed a no-cost 12-month extension (as approved by the NGEC Executive Board and formally requested by Amtrak) of the NGEC Grant Agreement. This extends the grant performance period to 9-30-2020.

Subsequently, on 5-8-19 AASHTO executed contract modification #2 with Hewitt Consulting – (Steve Hewitt) extending the NGEC Manager's contract for the period 10-1-19 through 9-30-20.

In December, the Executive Board Chairman approved a contract modification extending the document control manager's contract through 9-30-20.

During the quarter ending June 30, 2019, the NGEC Finance and Administrative subcommittee, through its chair, (the NGEC Treasurer) clarified with Amtrak Grants and FRA Grants that the NGEC would be eligible for a further no-cost extension beyond the current grant period end date of 9-30-2020.

In the quarter ending December 31, 2019, the FRA confirmed that a no-cost NGEC grant agreement extension can be for multiple years and has recommended that Amtrak (and the NGEC) make the formal request by July ,2019 to fit within the window for extension requests (July -September). The NGEC Executive Board agreed with the FASC recommendation that the grant agreement extension be for a 36-month period (10-1-2020 through 9-30-2023) and will formalized its request in January 2020.

In January 2020, Amtrak submitted the formal request (GARF) for a 36-month no-cost extension. It is currently in the review process at FRA with the intent being to approve/execute the agreement extension sometime in May 2020.

As of 6-30-20 – the FRA is reviewing the grant extension request with consideration of approval anticipated to occur soon.

As of this quarter, (ending 6-30-20) all NGEC subcontractor/consultant contracts are current.

On 9-16-20, the FASC Chairman announced that the FRA and Amtrak had approved and executed a 36 month – no cost NGEC grant agreement extension. This would extend the NGEC grant agreement through September 30, 2023.

The scope and activities identified in the grant agreement remain the same and the work of the committee will continue as described there-in.

As of 9-30-20 – the subcontractor/consultant contracts are current. As of the end of business on 9-30-20, they will need to be extended coordinated with the 36-month extension. The first step in this process is for Amtrak and AASHTO to extend the AASHTO contract for the 36-month period. AASHTO would, in turn, extend the subcontractors contracts for the same period as per the motion adopted by the NGEN Executive Board on 6-6-2017 and per Chairman Ray Hessinger's instructions during the Executive Board web conference held on 9-22-20.

In October 2020, all contract extensions (Amtrak/AASHTO) and ASSHTO/Hewitt, AASHTO/Krause and AASHTO/Casamar) were executed and will run through 9-30-23.

As of 9-30-21, all contracts are up to date and active.

As of 12-31-21 all contracts are up to date and active.

As of 3-31-22 all contracts are up to date and active.

As of 6-30-22 all contracts are up to date and active.

As of 9-30-22 all contracts are up to date and active.

As of 12-31-22, all contracts are up to date and active.

As of 3-31-23, all contracts are up to date and active.

As of 6-30-23, all contracts are up to date and active.

Review/Update of NGEN Specifications (Document Control):

This activity is ongoing:

Activities specific to this quarter:

During this quarter, the Bi-Level Specification Revision D was adopted by the NGEN Executive Board and is with the technical writer to be finalized.

In June 2023, the technical writing was completed and the final Revision D has been added to the PRIIA document list and is available by request from Steve Hewitt via shewitt109@aol.com

The working group on weight issues is close to completing its work – Jeff Gordon, FRA, and team leader of the group will prepare the final report and provide it to the Technical subcommittee – likely during the final quarter of FFY 2023.

The 2022 By-Law Revisions were adopted by the Executive Board and have been posted to the website. The 2023 Annual By-Laws review will be conducted in the fourth quarter 2023 and completed in the first quarter 2024.

The website refresh was completed is up and running at www.ngec.org. Updates and new information are submitted regularly by Steve Hewitt to AASHTO for posting.

A CRISI grant application (Amtrak as the applicant) for new funding for the NGEN was submitted to the FRA prior to the due date of 11-30-22 and has been uploaded by FRA. The application was submitted with enthusiasm expressed by states, Amtrak, associations including AASHTO, States for Passenger Rail Coalition, (SPRC), the Rail Passengers Association (RPA) and the manufacturing and supply industry through letters of support. As of this date (7-5-23) the grant award announcements are expected to come in the August-September time frame.

In the last quarter, the NGEN Executive Board accepted the Finance and Administrative subcommittee's recommendation to continue its activities – funding permitted and closely monitor expenses.

In June 2023, the Board agreed to continue its ongoing activities and to continue to pursue interim funding for the 12-month period beginning 10-1-2023.

In June 2023, Amtrak submitted a 6 month no-cost GARF to FRA which is now under review. The GARF extends the period of performance and allows the NGEC to draw down expenses in the grant until exhausted.

In June 2023, the FRA reviewed the Amtrak proposal to fund the ongoing work of the Committee out of its Annual Grant received through Appropriations for the 12-month period beginning on 10-1-2023 through 9-30-2024. The hope continues to be that the NGEC will be awarded a CRISI grant and that this interim funding will keep the NGEC going until CRISI funds can be obligated.