



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

Section 305 Next Generation Corridor Equipment Pool Committee (NGEC)

Monthly Activities Report: December 31, 2021

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 December 2021, the Executive Board met twice via web conference, on the 14th and the 28th.

Highlights, decisions, and action items from the month of December 2021 include:

- Technical subcommittee review of the Access Board Advance Notice of Proposed Rulemaking regarding accessibility guidelines for Rail vehicles:

The intent of this effort is for states to submit their comments to the Access Board Docket on the Accessibility Requirement Guidelines Advance Notice of Proposed Rulemaking. Amtrak has submitted its comments already and will share them with the Executive Board. Once the comments have come back (The comment period has been extended) and there is ultimately a Final Rule, the technical subcommittee (through its technical working groups) will compare them with the NGEC specifications to ensure compliance and make any necessary changes by utilizing the NGEC DCR process.

The comment period on the advanced NPRM which had been extended until July 14, 2020, has ended. As of 8-20-20, the FRA reported that the Access Board is reviewing comments received. On 8-20 -20, Melissa Shurland, FRA, reported to the technical subcommittee, "we are in a holding pattern to see what the comments were and what the Access Board's disposition of them will be." Melissa will keep the NGENC technical subcommittee informed as the process is completed.

As of 11-30-21, nothing new has been reported.

This item has been removed as there has been no activity during the 2021 calendar year.

- Treasurer's Report – 12-31-21:

Balance/ Spend Rate:

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

Amount Spent through October 2021: \$850,314.73

Balance remaining: \$ 399,685.27

Estimated spend at current rate for the remaining grant period (through 9-30-23): \$320,610.47

Current Spend Rate per month (as info and used in calculating): \$13,939.59

Estimated Balance at the end of the Extension Period (Contingency): \$79,074 (this would carry the NGENC about 5 months beyond the end of the grant period)

- 2021 NGENC two-pager:

The 2021 version of the NGENC two-page backgrounder/educational document continues to be available electronically or in hard copy by request - contact Steve Hewitt at shewitt109@aol.com. To date 615 electronic copies have been distributed.

- 2022 NGENC two-pager:

On 12-28-21, the Executive Board reviewed a mock-up DRAFT of the 2022 NGENC Two-Pager provided by Missouri DOT Graphic Arts. The Board recommended several revisions. Steve Hewitt sent the revisions to MODOT. A revised mock-up will be reviewed by the Executive Board on its call on 1-11-22.

- Annual By-Law Review/Update:

On 11-30-21, the Executive Board adopted revisions as proposed by the Finance and Administrative subcommittee on 10-13-21. The adopted revised By-Laws document was distributed to all Executive Board members and to AASHTO for posting to the NGENC website on 12-1-21.

- Update – Multi-State Rail Car Procurement (provided by Caltrans) as of 12-31-21:

Design review for the standard coach is complete. The Cab Carshell final design has been approved and the first cab structures are in production. Remaining Cab Car FDRs are in the final submittal and review stage and the cab car Clearance information has been submitted to Amtrak. IDOT Café Car FDRs are in the closure stage and Galley open items are being addressed.

The Cab Car Collision and Corner Post Appendix F testing is complete with the test report in work and the cab car compression test report review is nearly complete. FAIs will continue for café and cab car subsystems after the first of the year.

99 cars are in production or have been produced at Siemens Sacramento Facility. IDOT and Caltrans cars are being prepared for Conditional Acceptance and revenue service while open items and relevant FMIs are being addressed.

IDOT has reached final acceptance with Amtrak on four cars and has started on rail testing of Wi-Fi and passenger information systems, along with crew training on those cars.

- Metro-North Dual Mode Locomotive Equipment as of 11-30-21:

Siemens submitted IDRs for all thirty-nine topics. Metro-North agreed and told them to proceed on thirty-four of the IDRs Siemens submitted four revised IDRs and there is one that remains open.

In December 2021 there were no updates presented. Next update 1-11-22

- Amtrak Equipment Procurement Update – as of 11-30-21:

On the Chargers (ACL 42) – 4 are on the property for testing

On the Acela – testing and qualification processes continue.

On the Intercity Passenger Rail equipment – preliminary Design Review continues.

In December 2021 there were no updates presented. Next update 1-11-22

- Connecticut DOT Rail Car Procurement as of 12-31-21:

This procurement remains in the “cone of silence” period.

- VIA Rail Equipment Procurements:

On 2-23-21 at the Annual Meeting a comprehensive overview/update of the VIA Rail procurement was presented by Mario Bergeron, Bruce Cacciola, Ron Bartels, and Joe DiLiello. This full presentation was distributed to NGECC members and is posted on the NGECC website.

The next update is anticipated to take place at the NGECC Annual Meeting 2-25-22.

As of 12-31-21, VIA Rail representatives have been invited to the NGECC 2022 Annual meeting to attend and provide an update on their passenger rail vehicle procurements underway. No response has been received to date. A reminder will be sent by Steve Hewitt in January 2022.

- Document Control Update - as of 12-31-21:

Due to the Holidays, there is not much update for Document Control. I have met several times with the Technical Writer, and we have finalized all the non-technical changes to the Trainset specification. The reformatting is almost done and will hopefully be submitted at the next Executive Board meeting.

- DMU Revision A – Status:

Review panel Consultant Larry Salci briefed the Board on the Review panel Report and Recommendations on 12-28-21.

On 12-28-21, the NGECC Executive Board determined that they would consider approval of the Review Panel Report and its recommendations on 1-11-22.

- Updates: States and Amtrak – Charger Locomotive and Rail Car Experience:

In-depth updates were provided during the 2021 Annual Meeting and were distributed to NGECC members and can be found on the NGECC website.

Updates on the Charger Locomotives experience will be provided during the 2022 NGECC Annual Meeting scheduled for 2-25-22 in Washington, DC

- Exploring/confirming funding options beyond 9-30-2023:

On 10-5-21, Mike Murray, FRA, reported that the FRA is looking at options and briefing leadership in the Office of Railroad Policy and Development. This will take a couple of months and Mike suggested that the Board not carry this as an agenda item for the bi-weekly meetings as it will take some time. When he has more information, he will let the Board know.

Tim Ziethen reported that he has reached out to Ken Altman, Amtrak Government Affairs to follow-up with him on previous discussions that an option could be Amtrak funding the NGEC through its grant. It was the general thinking that this would be a possibility as the NGEC was included as a potential type of recipient in the overall Amtrak grant request. Tim will report back once he hears from Ken Altman.

Ray Hessinger suggested that the FASC follow these issues and keep this on their monthly agenda, and report back to the NGEC Executive Board as more information is forthcoming.

The NGEC will explore potential grant opportunities and potential appropriations requests for funding beyond 2023.

Nothing new to report as of 12-31-21.

NGEC Annual Meeting 2022:

As announced previously, the NGEC will hold its 2022 Annual Meeting in-person at the Hyatt Regency, Capitol Hill on February 25, 2022. The meeting will begin at 8:30am and conclude around Noon (Eastern). More details will follow as an agenda is developed and the time for the meeting draws nearer. All NGEC members have been informed of the date and location of the meeting.

It has been decided that the meeting will be held in-person and virtually. Steve Hewitt has provided all NGEC members with a DRAFT agenda and the Hotel room block information.

- Establishing Priorities and developing updated work plan for 2022:

On 12-28-21, Chairman Hessinger confirmed the following priorities for 2022:

Review/update NGEC Reference and Drawings series 305-900 and 305-800.

Review/Update the Bi-level specification currently in Revision C.4. With Amtrak looking at using some of the funding from the new IJJA for its western fleet, it makes sense for the NGEC to review and update the Bi-Level car specification.

Review the car body materials issue from a broader perspective for all NGEC equipment not only DMUs. Ray would like to take a look at developing a consistent approach for all of the NGEC vehicle specifications.

Review "emerging technologies": On the last technical subcommittee call (12-9-21) the topic of emerging technologies for propulsion was raised. Ray believes that the technical subcommittee should conduct a scan of the industry regarding emerging technologies for propulsion and how they relate to the NGEC.

Review and consider using the Metro-North Dual Mode Locomotive Specification organizational changes to determine if they should be adopted by the NGEC and applied across the board to all NGEC specifications. This would be an administrative change not impacting technical content of any of the specifications and could be resolved by the Executive Board.

At the NGEC Annual Meeting, Tammy Krause, Document Control Manager, is asked to provide a progress report on activities and accomplishments from Document Control over the past year and to provide an action plan for the year ahead which should be based on the priorities as identified by the Chair.

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 December 2021, the NGEC Technical Subcommittee met twice – on 12-9 – 21 and 12-23-21.

Key decisions and action item updates from the month of October 2021, included:

- Backgrounder educational document:

The 2021 NGENC educational document. remains available in hard copy and/or in a PDF by sending a request to Steve Hewitt at shewitt109@aol.com.

Total distribution is approximately 615 as of 12-31-21. All distributions have been electronic to date.

The 2022 NGENC two pager is under review by the NGENC Executive Board.

- Document Control Update as of 12-31-21:

See update in the Executive Board section of this report.

Update: Electronics on Trains working group activities:

On 12-9-22, Chairman Hull asked that this effort be assigned to the Electronics on Trains Working Group as he believes it is the best suited working group to address this topic.

Tammy Krause will inform Team Leader, David Brabb on the next Working Group call.

No activities were reported in the month of December 2021.

- Multi-State Car Procurement - Caltrans (Lead State): Progress reports from the lead state on the PRIIA multi-state car procurement is provided on each technical subcommittee call and each Executive Board call.

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

- Metro North Dual Mode Locomotive Procurement:

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

- Amtrak Equipment Procurement Updates: Progress reports are provided by AMTRAK Acting CMO and NGENC Vice Chair George Hull on a regular basis.

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

- Connecticut DOT Rail Car Procurement:

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

- University of Nebraska study on High Speed wireless technology as of 10-31-21:

Hamid reported that work is continuing with the results of propagation modeling on the 160Mega Hertz channel and performance modeling on different channels including propagation and velocity in different rail environments (such as going through tunnels). Two abstracts have been produced and will be presented.

For any questions or more information, please contact Hamid Sharif-Kashani at hamidSharif@UNL.edu.

There were no updates provided on this study during the month of December 2021.

- Working Group on Specification Wright Issues as of 12-23-21:

The last update was provided on 9-2-21:

The NGENC Vehicle Weight Working Group has its 8th meeting on August 9. There were 11 members in attendance.

We discussed lateral imbalance and some ideas for how this parameter can be defined in a common way for all specifications. Some carbuilders expressed concern that the clearer definition of the vehicle condition(s) under which the imbalance is evaluated is required. Discussions ensued about clearance issues and that lateral imbalance is most often corrected by ballasting.

It was noted that the specifications do not explicitly require that production cars must be vertically plumb (although carbuilders achieve this by ballasting as required). Some carbuilders do not consider imbalance until all requirements related to wheel load equalization, derailment safety, ride quality and clearance are addressed.

It was noted that generally food service (café) cars pose the greatest challenge as it relates to lateral imbalance.

The Working Group lead proposed to assemble the information the group has deliberated upon to date and synthesize this into a single document for review at the next WG meeting on September 27 at 1pm ET. This document will eventually become the Working Group's report to the Technical Subcommittee.

No meetings were held by the working group in December 2021.

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 December 2021, the Finance and Administrative Subcommittee met on 12-8-21:

- Treasurer's Report :

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Follow up Discussion regarding future funding options beyond 9-30-2023:

Mike Murray, FRA, had reported to the Executive Board on 10-5-21 that the FRA is looking at options and briefing leadership in the Office of Railroad Policy and Development. This will take a couple of months and Mike suggested that the Board not carry this as an agenda item for the bi-weekly meetings as it will take some time. When he has more information, he will let the Board know. Ray Hessinger suggested, at that time, that this information be reported to the FASC on its next call (today) and that the FASC keep track of it.

On today's call, Mike Murray reiterated that it would take several months and that he does not feel it should be discussed on every call. It was agreed that once FRA has a response Mike Murray will report it to either the Executive Board or the FASC whichever meets first.

Tim Ziethen reported that he has reached out to Ken Altman, Amtrak Government Affairs, and Tim has confirmed that Amtrak is supportive of the work of the Committee (NGEC) and that funding through either Amtrak or FRA are the best options, but other options could also be explored.

For now, this item will be carried as an open item to be tabled until such time as additional information is forthcoming.

There was nothing new to report on this item in December 2021.

- Conveying the message as of 12-31-21:

The NGEC two-pager educational document was updated by the FASC on 12-8-21 and was sent to MODOT Graphic Arts to prepare a mock-up. The mock-up was discussed by the Board on its call held on 12-28-21. The Board provided MODOT with additional changes. A revised mock-up will be discussed on the 1-11-22 Executive Board call.

- Quarterly Grant Agreement Progress Report to FRA

All reports this year have been submitted on time. The next report will be for the period ending 12-31-21 and will be due to FRA on 1-31-22.

- Developing a plan to increase NGEC awareness:

Tim Ziethen had a discussion with Amtrak Senior Associate Counsel about what the NGEC could do, legally, to increase the general awareness of the NGEC. Tim asked whether the NGEC could legally issue press releases; be proactive with congress by providing staff with periodic updates on NGEC activities - unsolicited; and potentially attend trade shows or advertise in trade publications.

The Senior Associate Counsel reviewed the By-Laws and noted that currently authority to do so is not spelled out in the NGEC By-Laws. He suggested that the Committee could amend the By-Laws to allow for such outreach. He also noted that in most cases material is submitted to congress upon request – normally it is not sent unsolicited.

Tim Ziethen noted that he expects to receive the recommendations in writing from Amtrak counsel and suggested that, even though the By-Laws have just been revised/updated; he (Tim) and Steve Hewitt could draft a paragraph that for consideration that would amend the By-Laws to allow for activities that will increase awareness of the NGEC activities.

Steve pointed out that an amendment or revision to the By-Laws can be proposed any time by any member of the Board, however, by NGEC procedures, such an amendment would go first to the FASC and once approved by that body, would be required to be provided to the Executive Board in writing. The proposed amendment would have to be in the hands of the Board members in writing for 30 days before the Board could vote on it.

Steve suggested that Tim report on this during his FASC update to the Executive Board on 12-14-21.

Tim agreed and will raise the issue with the Board on 12-14-21.

The next step would be to draft the proposed paragraph to be submitted as a revision to the By-Laws and include it on the agenda of the next FASC call 1-5-22. If approved there it could go to the Executive Board and be in its possession for 30 days and be considered for approval on the Executive Board call on 2-8-22. This would be ample time to have the latest By-Laws revision included in the meeting materials for the Annual meeting of the NGEC on 2-25-22.

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 DMU Specification Review panel met on 12-13-21 and approved the Review Panel Report with Recommendations for submittal to the NGEC Executive Board. On 12-28-21, the Board was given an overview of the report and will consider its approval on 1-11-22.