



*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: August 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 August 2021, the Executive Board met once via web conference, on the 10th.

Highlights, decisions, and action items from the month of August 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 NGECE technical subcommittee informed as the process is completed.

As of 8-31-21 – this item remains in a holding pattern.

- Executive Board review of NGECE documents to ensure there are no holes in the NGECE portfolio of specifications and other documents.

Development of a TSSSA template/primer:

In July 2021, the NGECE the Executive Board approved the TSSSA document as submitted by the Technical subcommittee with some minor edits/corrections. The document is now being finalized with the approved changes and will become a part of the NGECE inventory of documents. It will be distributed to all NGECE members once finalized and will be posted on the NGECE website.

As of 8-31-21, finalizing the TSSSA document remains an open action item.

- Treasurer's Report – 8-31-21:

Balance and Spend Rate

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

Amount Spent through June 2021: \$811,187.60

Balance remaining: \$ 438,812.40.

Estimated spend at current rate for the remaining grant period (through 9-30-23): \$384,246.76

Current Spend Rate per month (as info and used in calculating): \$14,231.36

Estimated Balance at the end of the Extension Period (Contingency): \$54,565.64

- 2021 NGECE two-pager:

The 2021 version of the NGECE two-page backgrounder/educational document remains available electronically or in hard copy by request - contact Steve Hewitt at [shewitt109@aol.com](mailto:shewitt109@aol.com).

To date approximately 555 electronic versions have been distributed.

In July, the Finance and Administrative subcommittee established a timeline and process to develop an updated two-pager for 2022. The goal is to publish/distribute hard copies of the 2022 version during the in-person NGECE Annual Meeting to be held in Washington, DC on 2-25-22.

- Update – Multi-State Rail Car Procurement (provided by Caltrans) as of 8-31-21:

Design review for the standard coach is complete. The Cab Car structure FDR has been approved and other system FDR meetings are complete. Several Cab Car FAIs are tentative for August and September. The Vending Car Interiors FDR occurred on August 3. The IDOT Café Car FDR is the completion stage. The Galley FAI took place in June and open items are being addressed. Several Cab Car FAIs are tentative for August and September. A wheelchair lift demonstration is confirmed for August 18<sup>th</sup> in Sacramento using an IDOT business class car.

The Cab Car Compression Test was successfully completed on July 23<sup>rd</sup>. Cab Car Collision and Corner Post is tentative for August in Germany. NEC testing for standard coach is complete and the report is accepted by FRA. Caltrans and IDOT 238.111 testing is complete and both reports have been submitted to Amtrak and FRA.

93 cars total are in production or have been produced at Siemens Sacramento Facility. IDOT has conditionally accepted 8 coach cars and is preparing for revenue service. The Caltrans cars are being prepared for Conditional Acceptance and revenue service while open items are addressed.

Metro-North Dual Mode Locomotive Equipment as of 8-31-21:

- Metro-North and Siemens continue working through the initial design review process going item by item.
- Amtrak Equipment Procurement Update – as of 8-31-21:

CAF Cars: The last two sleeper cars under the contract are expected to arrive at the end of the month (August 2021).

Acela: Progress continues on the new Acela. The first produced trainset should be out at the end of August or early September 2021.

ALC 42 (Charger) Locomotives: Two units are in Wilmington, DE. for commissioning.

Intercity Trainsets: Preparations are underway for Design Review.

- Connecticut DOT Rail Car RFP as of 8-31-21:

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 NGEC members and is posted on the NGEC website.

The next update is anticipated to take place around September 2021.

- Document Control Update - as of 8-31-21:

On 8-10-21, Tammy Krause provided the Executive Board with a mid-year (NGEC year) progress report. The report was provided as a power point presentation and will be distributed to Board members. The Presentation will also be posted to the NGEC website in the Executive Board section.

Decisions/Actions:

Tammy to make suggested edits to the presentation and provide to Steve Hewitt for distribution and posting.

Tammy will provide Larry Salci with the Trainset re-write DCRs so that he can prepare a scope and budget for AASHTO for this task order.

It was agreed/clarified that the Trainset DCRS will go through the regular document management process for adoption by the Executive Board.

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

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

- Reauthorizing the NGEC as of 8-31-21:

The Senate passed its Infrastructure bill including reauthorization on 8-10-21. It is not believed to have included an amendment to reauthorize the NGEC with funding.

If that is the case, the NGEC will continue its work with the funding included in its current grant which runs through 9-30-2023 and will look for other funding options (FRA/Amtrak) for the future.

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.

### **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 August 2021, the technical subcommittee met once, via web conference call, on the 5th.

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

- Backgrounder educational document:

The 2021 NGEC educational document. remains available in hard copy and/or in a PDF by sending a request to Steve Hewitt at [shewitt109@aol.com](mailto:shewitt109@aol.com).

Total distribution is approximately 555 as of 8-31-21. All distributions have been electronic to date.

- AWG/RVACC:

Technical subcommittee review of Access Board advance NPRM Accessibility Guidelines and compare with current NGEC Specifications

The intent of this effort is for states to submit their comments to the Access Board Docket on the Accessibility Requirement Guidelines (advanced) Notice of Proposed Rulemaking. Amtrak has submitted its comments already. Once the comments "have come back", the technical subcommittee will compare them with the NGEC specifications to ensure compliance.

As of 8-31-21 – the Access Board continues to be in a holding pattern on this review.

- Document Control Update as of 8-5-21:

Status – Trainset Specification Re-write:

This item was not discussed on today's call, but prior to the call, Tammy Krause had informed Steve Hewitt that it is nearly complete.

Update – Electronics on Trains Working Group - current activities – list of issues this group is working on:

Again, this item was not covered during the call today, but Steve Hewitt was provided with an update from the team leader – David Brabb – reporting on the most recent working group meeting held on 7-26-21:

*We received important feedback on how CAL IDOT (Siemens) used (and did not use) the old 919 hardware specification for their builds. We are going to get our latest 919 revision reviewed by Nicolas Brogue of Siemens to help identify how the new 919 can better be written to handle already built coaches for better interchangeability with what will be built in the future. Our next meeting is scheduled for August 31st.*

Review – DMU specification summary of changes – comments received and general discussion:

Tammy Krause led a review and walk through of comments received on most of the summary of changes initially distributed on 7-27-21 and revised and distributed on 8-5-21.

Several chapters were reviewed, and real time changes were made to the document after the discussion of each section. In most cases, there was general agreement on the proposed changes with some suggested

revisions being accepted as amended, and several items were to be taken back for further review and comment primarily by Stadler representatives.

The Structural chapters and those related to VTI have not yet been adjudicated by those respective technical working groups. Discussion of those related sections/chapters was tabled for today pending the working groups completing their review and adjudication.

As the walk through the document took place, Tammy Krause captured the changes suggested and the follow-up actions to be taken.

As the meeting ran beyond its allotted time, Chairman Hull suggested that the review be completed on the next call (8-19-21).

**Actions:**

Tammy Krause will update the document with the changes made today, and note the areas where agreement was not achieved, and will note what action was agreed to (such as further review by Stadler or others).

Tammy will provide an updated summary of changes document for distribution in advance of the next call, and the discussion will begin at the point where it left off on 8-5-21.

The two working groups that have not completed their review are asked to get their comments to Tammy as soon as possible so that she can update/revise the document accordingly.

Those who agreed to take a second look at proposed additional changes are asked to get their comments in to Tammy asap as well.

**Procurement Updates:**

- 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 8-31-21:

On 8-19-21, Hamid Sharif-Kashani provided a general update on the activities of the current study phase being performed by the University of Nebraska and the FRA:

*We continue our work in studying the characteristics of 160 MHz RF band. We are currently working on design and implementation of a computer simulation model to evaluate a number of path loss predictions to be used in our end-to-end transceiver design. Here, we want to determine the performance of a transceiver design – the transmitter and receiver pair – and through different the RF channel conditions for 160 MHz. Our focus is on a model that excels at representing different environment scenarios with high accuracy for this RF band. Hope to share our findings with the group next time.*

For any questions, please contact Hamid Sharif at [hamidSharif@UNL.edu](mailto:hamidSharif@UNL.edu).

- Working Group on Specification Wright Issues as provided by Jeff Gordon, FRA on 8-31-21:

The NGENC Vehicle Weight Working Group has its 7<sup>th</sup> meeting on July 12. There were 15 members in attendance.

The group has agreed on a definition for the baseline production weight for different types of equipment and allowable serial production vehicle weight deviations (including requirements for vehicle scales).

We discussed lateral imbalance and some ideas for how this parameter can be defined in a common way for all specifications.

We also discussed end-to-end imbalance requirements and how these should be defined. The group had much discussion about whether there was really a need for this requirement as it is not a safety issue. The group believes this is more a maintenance concern and we may incorporate proposed specification language addressing this.

Carbuilder members volunteered to review the various specification weights and propose revisions (if any) at the next meeting.

P2 limits for coaches will also be discussed during our next meeting which will be on August 9, 2021, at 1pm Eastern.

Reauthorizing the NGENC:

See Executive Board section of this report for an update on activities related to this topic.

#### **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 August 2021, the Finance and Administrative Subcommittee met on 8-18-21:

- Treasurer's Report as of 8-18-21:

Balance and Spend Rate

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

Amount Spent through June 2021: \$811,187.60

Balance remaining: \$ 438,812.40.

Estimated spend at current rate for the remaining grant period (through 9-30-23): \$384,246.76

Current Spend Rate per month (as info and used in calculating): \$14,231.36

Estimated Balance at the end of the Extension Period (Contingency): \$54,565.64

It was noted by Chairman Ziethen that the June invoices from AASHTO were a bit higher than usual and that has increased the spend rate somewhat.

Strat Cavros, AASHTO, pointed out that June and July usually outsize the normal rate as AASHTO closes their fiscal year out in June.

- Conveying the message as of 8-31-21:

2021 NGENC two-page educational document:

555 of these documents have been distributed electronically.

On the last call, a process and timeline was discussed for updating the two-pager to reflect the accomplishments that have taken place since the last update. The NGEC has a great story to tell as more and more we are seeing new passenger rail vehicles procured using NGEC specifications being placed into service. This is great news and is something that should be captured in the update for 2022.

The timeline would be for the FASC to begin its updating efforts on the next call (9-15-21). The timeline is to get it through the FASC and onto the Executive Board before the end of the year so that whatever the updates are they can be sent to MODOT graphic arts for formatting and printing. The new two-pager should be available for distribution at the NGEC Annual Meeting 2-25-22 in Washington, DC.

Update/Reauthorization of the NGEC - Tim/Steve:

Tim Ziethen opened the discussion noting that there have been significant efforts to add the NGEC reauthorization to the infrastructure bill recently passed by the Senate, but those effort did not come to fruition.

Steve Hewitt agreed. The Senate passed its infrastructure bill which includes reauthorizing federal surface transportation but does not appear to have added in reauthorization of the NGEC.

As has been reported previously – it seems that the NGEC does not have a sunset clause and has enough funding, through the current grant, to continue to operate through the grant period which ends on 9-30-23. FRA has informed the NGEC that as long as the committee exists, the funds in the current grant remain available until expended. Chairman Hessinger has stated that the NGEC will continue to conduct its activities as identified in its current scope and budget.

The issue now will be to find a funding source that will carry the NGEC beyond 9-30-2023. House T&I staff have told us that the NGEC “is covered in the budget”. What that means has not yet been determined – is it FRA? Is it Amtrak? No clarification or confirmation has been provided.

The NGEC can/should continue to seek additional funding either through FRA, Amtrak or consider other options to continue the work of the NGEC beyond 9-30-23.

Tim Ziethen concurred and elaborated that Ken Altman, Government Affairs, Amtrak, and Amtrak legal are of the opinion that there is no sunset provision, and the NGEC can continue to operate under the current grant agreement and that either FRA or Amtrak (potentially) can provide the funding to keep it going.

Amtrak included the NGEC as one of the kinds of things it would fund in its overall grant program but did not single it out as a line item in its grant request.

Tim went on to note that, while there has been significant positive feedback and support it has not translated into reauthorization within the infrastructure package. The NGEC continues to do its work and do it successfully but seems to continuously fly under the radar.

Tim believes it would be appropriate to confirm with FRA if there is funding available in its budget to support the FRA beyond the current grant agreement. It would also make sense to get some feedback from Amtrak on this as well.

Tim also suggested that it may be worthwhile looking into alternative solutions to funding the NGEC such as subscription membership.

Steve Hewitt mentioned, and Jeff Gordon, FRA, confirmed, that several years ago, the NGEC had looked extensively into alternative ways to fund and structure the NGEC in the future. The Executive Board, at that time, established a working group to look at what the NGEC should be “when it grows up”.

Ultimately, after looking at several structural options and various funding options, the working group concluded and th Executive Board agreed that the NGEC was a federal responsibility and should be funded by federal funds. The benefits of the work of the NGEC are national in scope, the work is done by a tremendous coalition of state, and federal partners as well as members of the rail manufacturing and supply industry all on a voluntary basis with minimal actual dollars invested.

Steve Hewitt reviewed the history of funding that has been provided to the NGEC noting that it was originally authorized to receive \$5 million but has received a total of \$4 million through two appropriations (the initial appropriation of \$2 million and a second one for \$2 million the following year due to a simple Continuing Resolution of federal transportation appropriations that year). Over its nearly 12 years operating the NGEC has conducted its business astutely managing its limited resources and receiving so much in kind and voluntary services that it has managed to function without any additional money being provided.

In many ways, the NGEC was a casualty of its own efficiency and was hard pressed to get another appropriation when it still had funds remaining.

After nearly 12 years, the NGEC will need to explore all options to obtain additional funds to continue the work of the Committee beyond 9-30-2023.

It was agreed the FASC Chair Tim Ziethen will bring this discussion to the NGEC executive Board on its next call on 9-7-21 and try to get some confirmation from FRA and/or Amtrak in the meantime if possible.

- Annual By-Laws Review:

It was agreed on 7-21-21, that, in September, FASC Secretary, John Oimoen and Steve Hewitt begin the annual review of the NGEC By-Laws and make any suggestions they may have to the FASC by the end of October. If the FASC agrees, the By-Laws as revised (or not) will be sent to the Executive Board where they will be required to have them for 30 days before considering any changes that may be suggested. This will enable the Board to vote for consideration of approval by December 2021 and fulfill the annual review requirement.

- Quarterly Grant Progress Report:

The quarterly report for the period ending 6-30-21 was submitted by the deadline of 7-31-21.

Next Report will be on the period ending 9-30-21 and will be due to FRA on 10-31-21.

**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.**

As of 8-31-21 – there were no changes in the activities of the Review Panels, however, the Technical subcommittee will continue discussing and possibly considering approval of the DMU summary of changes as adjudicated within the technical working groups on 9-2-21. If approved out of the Technical subcommittee, the Executive Board chair will direct them to the DMU Specification Review Panel per NGEC procedures.