



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: November 30, 2020

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 November 2020, the Executive Board met twice, via web conference, on the 3rd^h and the 17th.

Highlights, decisions, and action items from the month of November 2020 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 NGEC technical subcommittee informed as the process is completed.

As reported to the Technical subcommittee on 10-1-20, the Access Board review is currently in a holding pattern. As of 11-30-20 – this pattern continues.

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

Development of a TSSSA template/primer:

In April it was agreed that developing a TSSSA template/menu of potential options would be undertaken by the Technical subcommittee.

As expressed by Chairman Hessinger, the intent is to have an "a la carte" menu of options when considering a TSSSA as a part of the procurement process.

Once the DRAFT is prepared, it will be provided to Tammy Krause to get it ready to be included as an NGEC document for Technical subcommittee approval and, ultimately for Executive Board review and approval.

As of 10-30-20 - progress has slowed due to the many changes that have taken place at Amtrak. On 10-1-20, Technical subcommittee Chair, George Hull reported to the subcommittee that there were no updates on the progress of this activity.

As of 11-30-20 there has been no new activity on this item.

- Treasurer's Report:

Balance/Spend Rate:

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

Amount Spent: \$669,646.87.

Balance remaining: \$ 580,353.13.

Estimated balance remaining at the end of FFY 2020 (9-30-20): \$580,353.13.

Estimated spend at current rate for the next 36 months (through 9-30-23) - \$524,071.46.

Current Spend Rate (as info and used in calculating) - \$14, 557.54

Estimated balance at the end of the Extension Period – 9-30-23 – (Contingency) - \$56,281.67.

- Status: Contract extensions Amtrak/AASHTO, and AASHTO/Sub-contractors (Hewitt, Krause, Casamar, Salci):

Tim Ziethen reported that the Amtrak/AASHTO 36-month contract extension has been fully executed by Amtrak and AASHTO. In turn, AASHTO has fully executed 36-month contract extensions with each of the subcontractors (Hewitt, Krause, and Casamar). NGEC Technical Consultant, Larry Salci's, contracts are individual task orders, and he has provided a statement of work (SOW) and budget for the DMU specification update review panel effort. AASHTO is processing that task order now.

- Updating NGEC two-page handout/backgrounder:

On 11-16-20, the FASC two-pager update working group (Tim Ziethen Ray Hessinger, Troy Hughes, and Steve Hewitt) met for the second time via web conference.

On the call on 11-16-20, the working group prepared a rough draft mark-up of the two-pager with proposed changes in content and in design format. The intent, today, (11-17-20) is to get a general sense from the Board about the direction they are taking. The next step would be to have Laura Seabaugh, MODOT graphics arts, format it and smooth it. It would then be presented to the FASC for its review before coming back to the NGEC Executive Board for final approval.

Steve Hewitt provided a brief overview of the suggested changes/updates as prepared by the working group.

Ray Hessinger commented that he would like to add to the Charger information on the timeline column on page 1. Ray's change would be to add the number of Chargers in service and how many are on order.

Ray also noted that MARC should be added to the list of entities that are using NGEC specs.

Steve Hewitt added that John Oimoen, IDOT, sent him some suggestions just prior to this call (see below). They are good suggestions and will also be included in the next DRAFT.

John Oimoen was not available for the meeting, but provided the following suggestions for inclusion in the two-pager:

- Safety Enhancements – both the locomotives and cars, for example the CEM system among many other features.
- ADA Enhancements (cars) – intensive involvement with the ADA community and numerous improvements made.

Steve Hewitt also noted that the group is looking for a new picture (Single Level Coach Car) for the front page and asked states, preferably from the Mid-West, to provide one to Steve Hewitt and MODOT along with permission to use it.

Ray Hessinger and Tim Ziethen encouraged Board members to provide any comments/edits/suggestions they have to Steve Hewitt in advance of the next FASC call – 12-9-20. Meanwhile, the working group will move forward and make the formatting improvements and confirm some of the information contained in the DRAFT.

- Status and next steps: Annual By-Laws Review

On 11-17-20, the NGEC Executive Board adopted the proposed changes to the By-Laws, with all members present voting in the affirmative.

Following the adoption of the changes – Steve Hewitt finalized the document and provided it to all Executive Board members and to AASHTO for posting on the NGEC website.

- Update – Multi-State Rail Car Procurement (provided by Caltrans) as of 11-17-20:

Design review for the standard coach is complete. The Cab Car structure FDR is complete and the structural test plans have been reviewed and are in revision. IDOT Café Car releases are ongoing. The FDR for Cab Car Safety Appliances is scheduled for November 18 and the documents are in review. The Café Car IDR has been approved. The new emergency egress windows are now being installed on cars in California and Illinois.

Workstation table testing is ongoing in Spain and though some parameters have not passed, overall results are positive. A repeat test is scheduled for Thursday, November 12. NEC testing for standard coach is complete and report reviews are ongoing with FRA. Caltrans 238.111 testing is complete, and the report is in final review. The IDOT 238.111 test runs on the IDOT corridors is pending results of the 213 report discussions.

Cab Car Compression Test Preparation is ongoing, and test setup is being planned. 60 cars total are in production or have been produced at Siemens Sacramento Facility. System-level FAIs and the Complete Coach FAI are now approved for the standard coach. There are nine cars delivered to the Stockton facility. Four more CALTRANS cars are scheduled to ship on November 20th. A shipment of 5 cars is scheduled to ship to IDOT this week.

- Metro North Dual Mode Locomotive Procurement – Update as of 11-30-20:

The procurement effort remains under the “cone of silence”.

- Amtrak Equipment Procurement Update – as of 11-3-20:

The Charger locomotives are progressing on track with 12 locomotives online in production at Siemens.

The Trainsets – Amfleet replacement – continue to be in negotiation with vendors and there is not much more he can add at this time.

- Connecticut DOT Rail Car RFP as of 11-30-20:

Proposals were due by 11-2-20. There is nothing new to report at this time.

- VIA Rail Equipment Procurements:

On 10-20-20, Ron Bartels, VIA Rail, provided the NGEN Executive Board with an update on the VIA Rail vehicle procurement program.

He gave an overview of an exciting program that will result in 32 trainsets - each with 1 locomotive, 4 coaches and a cab car. Ron provided a general overview of milestones and an anticipated timeline for delivery.

He also described the great level of progress that has taken place, even with a tight schedule and the challenges presented by the COVID 19 pandemic.

VIA Rail will provide an update to the NGEN Board in 6 months or, potentially during the NGEN Annual Meeting to be held virtually in February 2021.

- Document Control Update - as of 11-17-20:

Tammy Krause provided the following update on 11-17-20:

"I have sent out requests for contact information to members of the Structural, Interiors and Mechanical Working Groups. I have received many replies so far and I am currently building those membership lists. I will send out requests to the remaining working groups after I finish these lists.

The final draft of the Equipment Acquisition and Ownership document (Recommended Practices) was received from the technical writer and has been sent to that working group.

I am now meeting with the technical writer weekly to work on the outstanding documents. The Trainset specification work is the next to work on once the Equipment Acquisition and Ownership document has been completed.

I have received notice that Stadler intends to submit some proposed changes to the DMU specification revision. Stadler has put together an internal review schedule of each chapter and should be finished December 4th. They are a DMU manufacturer so I think that they may have some valuable proposed changes. I can send the changes out when I get them and maybe we can vote on the changes at the TSC meeting of 12/17/2020."

Discussion:

Steve Hewitt noted that, in light of the fact that Stadler's changes were not going to be considered by the Technical subcommittee until 12-17-20, the intended timeline for adoption of DMU specification Revision B was going to have to be revised. The original intent was to complete the DMU update by the end of 2020, but that timeline cannot be met. Steve emphasized that it was understandable, especially since Stadler builds DMUs, and their input is important. So, even though the plan was to complete the update in this calendar year, it is far more important to get it right than rush it to fit into a timeline.

Steve noted that this point segued into the next agenda topic which is Larry Salci and the DMU review timeline status.

Ray Hessinger agreed that it was better to wait and get the DMU revision right and he echoed Steve's sentiments that since Stadler builds DMUs it will be interesting to see what their changes are, and it would not be prudent to go forward without getting those changes/DCRs adjudicated.. He then called on Mr. Salci to provide his thoughts on the impact of this on his review.

Revised Timeline and status – Review of proposed changes to the DMU specification:

On 11-17-20, Larry Salci reported that he has reviewed the 82 DCRs and the supplemental comments received from FRA and the mechanical working group on the recent Technical subcommittee call. He noted that there are a number of issues in need of clarification.

Larry provided several examples of issues needing clarification – most of them related to defining weight.

Larry added that wheels are also an issue with 2 conflicting DCRS having been included in the summary of proposed changes.

Additionally, Larry noted that this review is more time consuming and more complicated than others he has done for the NGEC due to the fact that in doing his review he has to look at and compare three specs – including the DMU spec and the Locomotive specification to ensure consistency and compliance.

Larry added that he knows that AASHTO is working on completing the contract process, and he may need to contact Strat Cavros, AASHTO, to revise the scope because his estimate of time to be spent on the review is understated.

Larry has had a recent discussion with Document Control Manager Tammy Krause about these issues and others that need clarification going forward. He believes that a working group should be established by the NGEC technical subcommittee to reconcile the weight issue and ensure FRA compliance.

He also noted that, while Stadler builds DMU's, they are primarily running under waivers from FRA compliance because they are operating on freight railroad rights of way and under an agreement to run when there are no freight trains running at the same time.

Larry added that it will be interesting to see what Stadler provides and that whatever the changes are – they will need to be FRA compliant.

As of 11-30-20, the Stadler comments have not been submitted and they have requested more time to develop those comments internally before submitting through the NGEC Document Control process as DCRs. The timeline now is anticipated to be sometime in January 2021.

- METRA Equipment Procurement Effort:

As of 4-9-19, an RFP was on the street for 200-400 bi-level cars. They were going through the process now. Interested parties were to respond by August 2019.

METRA has the NGEC specification, but it was unknown if the plan to use it or if they will be in contact with the NGEC or not.

John Oimoen, IDOT, is scheduled to provide an update on this procurement to the Executive Board in a future Board call.

- Updates: States and Amtrak – Charger Locomotive Experience:

In-depth updates were provided during the Annual meeting and were included in the minutes. Presentations were distributed and posted to the website.

Next Update – as appropriate

- Distribution of the NGEC two-pager – educational document as of 10-30-20:

The updated NGEC two-pager remains available in hard copy and PDF. To date about 420 copies have been distributed.

Copies are available in either version by request from Steve Hewitt at shewitt109@aol.com

As noted above, the Finance and Administrative subcommittee has begun a review and update of the NGENC two-pager which will be completed and available for distribution by mid to late January 2021.

- NGENC Annual Meeting – 2021:

Note – on December 1, 2020, the Executive Board agreed to hold the NGENC “virtual” Annual Meeting on February 23, 2020 from 11:30AM-1:30PM Eastern. Steve Hewitt has sent a Save the Date notice and a calendar appointment out to all NGENC members/participants.

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 November 2020, the Technical subcommittee met once, via conference call, on the 12th. The second monthly meeting landed on Thanksgiving and was cancelled.

Key decisions and action item updates from the month of November 2020, included:

- Backgrounder educational document:

The current NGENC two-page background document remains available in hard copy and/or in a PDF version. Copies can be obtained by sending a request to Steve Hewitt at shewitt109@aol.com

The Finance and Administrative subcommittee continues to make progress on updating the document with the intent being to have it ready for distribution in mid to late January 2021.

- AWG/RVACC:

Technical subcommittee review of Access Board advance NPRM Accessibility Guidelines and compare with current NGENC 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 NGENC specifications to ensure compliance.

On 5-28-20, Melissa Shurland, FRA, informed Steve Hewitt that The US Access Board extended the comment period for Recommendations on Access for Rail Vehicles until July 14, 2020.

The comment period deadline has passed. Melissa Shurland reported on 8-20-20 that the Access Board is reviewing the comments received. She will keep the Tech subcommittee apprised as this effort progresses.

As noted in the Executive Board section of this report – as of 11-30-20 – the Access Board appears to continue to be in a holding pattern on this review.

- Document Control Update:

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

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 NGEC 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.

- METRA Equipment Procurement:

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

- AAR Update on the TAG Committee on LED Headlights Phase 4 as of 6-25-20:

On 8-20-20, Tarek Omar noted that the LED testing is complete except for ice melting – which will need to wait a few months on. Steve Hewitt asked if he should remove this item as a regular update. It was agreed that he would take it off as a monthly standing agenda item and will make a note to check in with Tarek in December 2020.

- University of Nebraska study on High Speed wireless technology as of 10-29-20:

On 10-29-20, Hamid Shari-Kashani reported that they are continuing to progress the current phase in which they are studying frequency performance issues for the different band widths. They are looking to find a way to resolve saturation. Their focus is on 160 Mega Hertz. They are looking at their previous modeling to see if they can adapt it for 160 Mega Hertz.

For more information, please contact Hamid Sharif (HSHARIF@UNL.EDU)

There was nothing new reported in November as the meeting scheduled for the 26th was cancelled. An update will be provided in December 2020.

- Update: Electronics on Trains Working Group as of 11-30-20:

The following update was provided by David Brabb on 11-12-20:

“We met on Tuesday, November 10th. We are buttoning up the DTL 305-919 Hardware spec. We discussed moving a few items from the original 920 draft to 919 because they are related more to hardware. We plan to stop the current 919 revision now and will add the firmware and the other items discussed when we are able. We are at a stopping point due to contractual issues at this time but still plan to hold our next meeting on December 15th.”

- Update: The Passenger ECP Final Test Report:

On 11-12-20, Paul Jamieson provided the following update on the ECP Final Test Report:

“The Passenger ECP Final Test Report has been submitted to the FRA observer and docket. The docket reference is FRA-2015-0078 for all information that was formally submitted to the FRA. Draft ECP regulatory language was submitted to the FRA observer and the text will appear in a future NPRM.

NGEC technical specification’s recommended changes will be submitted separately for inclusion in future revisions. These changes will include the two performance standards APTA PR-M-S-20-17 Emulation Performance Requirements and APTA PR-M-S-21-17 ECP Passenger Performance Requirements are issued and available of the APTA website <https://www.apta.com/research-technical-resources/standards/passenger-rail-equipment-safety-standards/> . An APTA PRESS standard to address ECP Ready requirements, as addressed in the NGEC technical specification, will be issued as APTA PR-M-030-21, and is in final publication preparation.

APTA will be issuing a standard to address passenger vehicle piping requirements. This standard will be APTA PR-M-S-029-21 and is in final publication preparation.”

If anyone has any questions, please feel free to contact Paul at:

Paul E Jamieson, PE Retired
Mobile: 18643236956
jamiespe@outlook.com

Paul also recommended that the NGEC, as one of the project sponsors, may want to post this report on the website.

Steve Hewitt provided the link to AASHTO and asked that the report be posted on the Technical subcommittee section of the NGEC website.

The Finance and Administrative Subcommittee

Chair: Tim Ziethen, Amtrak

Vice Chair: Brent Thompson, Washington State 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 November 2020, the Finance and Administrative Subcommittee met on the 10th.

- Treasurer's update as of 11-17-20:

See the Executive Board section of this report.

- Conveying the Message (as of 10-14-20):

Congress extended the FAST Act for one year and that extension includes the NGEC. It remains to be seen, when the next Congress will take up reauthorization of the Fast Act in the next session.

Prior action taken by other organizations with regard to NGEC organizations in the bill prepared by the House in the current Congress:

The States for Passenger Rail Coalition (SPRC), which earlier informed House and Senate members of its' support for reauthorizing the NGEC by including it in its authorizing principles, submitted a letter further expressing its support for reauthorizing the NGEC and provided proposed language including scope and funding. (The SPRC request included an authorization for \$2.5 million over the life of the bill).

Tim Ziethen, Amtrak contacted Ken Altman, Amtrak Government Affairs, to ensure that this continues to be a part of Amtrak's reauthorization requests. Ken confirmed that they included it and would continue to do so.

Shayne Gill, AASHTO, confirmed that NGEC reauthorization was included in its authorization request and he agreed that it is helpful to make the request to Senate Commerce and to also send the request to the House T&I Committee. He also noted that it was likely left out of the House bill simply because it was missed rather than intentionally left out.

- Status Update as of 11-30-20 - NGEC Equipment Acquisition and Ownership Best Practices Working Group:

The technical writer finished with all of the new edits and the inclusion of acronyms in the front section. All formatting of the draft document is complete and, once approved it will be added to the NGEC documents as PRIIA 305-200 Recommended Practices.

The document was sent to all working group member on 11-17-20 to allow ample time for review and comment. A meeting is scheduled for 12-8-20 to reconcile any comments working group members may have and, hopefully, approve the draft for submittal to the Executive Board for its review and consideration.

- **Quarterly Grant Progress Report:**

The 4th quarter report was submitted to FRA on time – 10-30-20.

The next report will be for the period ending 12-31-20. It will be due to FRA on 1-31-21.

- **Annual Review of NGEC By-Law:**

As noted earlier in this report, on 11-17-20, the Executive Board adopted the FASC approved By-Laws changes.

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 Trainset Specification Review Panel met on October 17, 2019 and approved the Trainset Specification 305-007 Revision B Review Panel Report and recommendations as presented by consultant Larry Salci. On 10-22-19, the NGEC Executive Board accepted the Review Panel's Report and Recommendation and formally adopted PRIIA Single Level Trainset Specification 305-007 Revision B.

In October 2020, NGEC Executive Board Chairman, Ray Hessinger re-convened the DMU Specification Review Panel and tasked Technical consultant Larry Salci with reviewing the changes approved by the Technical subcommittee on 10-15-20 and preparing a Review Panel report with recommendations.

As of 11-30-20, additional comments submitted on weight, by the mechanical working group have not yet been adjudicated. Industry members from Stadler (builders of DMUs) have come in late to the process and requested time to develop and submit more changes through the NGEC DCR process. As noted above, Mr. Salci emphasized that any changes requested by Stadler must be FRA compliant. As of 11-30-20, the Stadler comments have not been submitted and they have requested and were provided more time to develop those comments internally before submitting through the NGEC Document Control process as DCRs. The timeline for consideration of the additional DCRs by the Technical subcommittee is now anticipated to be sometime in January 2021. The view is that it is better to get it right than rushed.

Additionally, the broader issue of weight across the vehicle procurements will likely be taken up by a working group being established to look at that issue and report back to the NGEC technical subcommittee with recommendations. Establishing the working group will be on the 11-10-20 Technical subcommittee agenda.