



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: June 30, 2019

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, taking into account 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: Eric Curtit, Missouri DOT

Vice Chair: Charles King, Amtrak

Secretary: Ray Hessinger, NYSDOT

Treasurer: Tim Ziethen, Amtrak

The Executive Board holds bi-weekly conference calls – Tuesday's at 11:30am Eastern

During the month of June 2019, the Executive Board met twice, via conference call, on the 4th and the 18th.

Highlights, decisions, and action items from the month of June 2019 include:

- Equipment Procurement Updates:
- Status Update - Multi-State Rail Car Procurement as of 6-18-19 - provided by Caltrans to the NGEC Executive Board:

All FDR System Level and related submittal approvals for the standard coach are at a Conditional Approval level or greater.

The IDOT Café Car is being reconfigured to meet the new design requests. Updates to the design include ATR Toilet Room, new standing table design, additional storage and an alternate refrigeration concept.

Action items from the Caltrans Cab Car Coupler, Carshell and Cab Layout reviews have been distributed and are in process with Siemens Engineering team. The intermediate design review for the Cab Car Electrical System is scheduled for June 28.

The first 21 carshells are in production at Siemens Sacramento Facility. Carshells #1 and #2 are in the final assembly phase. Carshell #3 is ready for Water Testing. Interior Insulation and window side panels have been installed in Carshell #4. Underframe cabling and piping continues in Carshell #5. Carshell #7 is staged for final assembly. Carshells 8 through 21 are in various stages of welding, integration, painting or storage.

The FAI process continues and most system-level FAIs have occurred. Recently completed FAIs include Exterior Doors and Electrical Switch Cabinets. The FAI for Vestibule Lining is scheduled for July 21st. A complete vehicle FAI is tentatively planned for August or September. Siemens continues to work with CALIDOT SMEs to address the open items.

- Status Update: Metro North Dual Mode Locomotive Procurement as of 6-18-19:

Metro-North is currently doing its due diligence in reviewing submissions received from vendors, and it remains on schedule for selection this year.

- Amtrak Locomotive Procurement – 6-18-19:

On the Acela procurement:

This procurement for the NEC is continuing. There are some challenges with the schedule, but they are being worked through, and the first prototype is anticipated to be ready by the end of summer (2019).

On the Locomotives:

The contract with Siemens on the Charger – P42 replacement continues on schedule.

On the passenger trainset:

On 6-27-19, Amtrak CMO and NGEC Vice Chair, Charlie King reported to the NGEC Technical subcommittee that at the request of the industry, the deadline for bids has been extended until November 2019.

- METRA Equipment Procurement status:

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

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

There will be future updates as appropriate. Nothing new reported in June 2019.

- Document Control Update – 6-18-19:

Revision B2 of the single level specification is now available by requesting it through the NGEC website.

Later this week I will be sending out the proposed changes to the Trainset specification going out to the entire technical subcommittee for their comments. This will include all the DCRs that have been either accepted or rejected by the working groups. I will request that any comments be received within two weeks. I will then send all the comments to the TSC for discussion.

All working group leaders are happy to remain in place, and I am waiting on one final membership list.

The Electronics on Trains working group held their first meeting with David Brabb as the leader. They are still working through their agenda and at this point have nothing to report.

- VIA Rail Equipment Procurement:

In June 2019, Chairman Curtit invited VIA Rail to provide periodic updates on its equipment procurement (following up on the presentation VIA Rail provided to the NGEC at its Annual Meeting in February 2019).

On 6-4-19, Robert Becker and Ronal Bartels, VIA Rail, provided the first such update:

VIA Rail is advancing the concept design review which is about 30% complete and is expected to be finished in July 2019. On schedule.

They are consulting with internal Stakeholders – including locomotive engineers and train crews. Additionally, VIA Rail is working with accessibility customers to review the interior layouts.

Vigilance is needed to control a tendency by technical people to want to correct past issues – when the focus is on the future and the new equipment going forward.

There have been some challenges with the manufacturer – Siemens. Expectations on documentation have not been met, but Siemens is improving in that area and is showing a willingness to change. Robert noted that Siemens may simply be a bit overwhelmed with the VIA Rail order and the ongoing multi-state order in the US all at the same time – so they are being pulled a bit in different directions.

Some challenges: Seats – executives are very involved in seats and their wish list is all over the place. The VIA Rail team is doing its best to control the scope as best as possible to keep it in line with what was in the bid.

Potential issues: The procurement is for trainsets – bi-directional – similar to those being purchased for California. This is the first time VIA Rail will be operating this type of equipment and there are some concerns being expressed by train crews. The team will be conducting risk assessments to help mitigate any issues they may come up.

A project to deal with maintenance facilities has been initiated to adapt them to the new equipment and modernize them. They are hiring an engineering firm for this effort, and it will take some coordination with Siemens on the equipment side with the engineering firm once it has been hired.

VIA Rail has bought training simulators.

Robert and Ronald have been invited to join each of the NGEC Executive Board calls as their schedule permits and will be asked to provide an update every 4th call or so.

The next update is scheduled for July 30, 2019.

- The Equipment Acquisition and Ownership Working Group activities as of 6-30-19:

The Equipment Acquisition and Ownership Working Group last met on 4-18-19.

Following that call, Eric Curtit reached out to Amtrak and Caltrans to get an ETA for getting the missing sections or parts of sections, completed and out for review.

Since then we have received Amtrak's input on the Revenue section of the report (thank you Joe Paul). As of today, we still have not received the DRAFT Implementation Section of the report from Caltrans.

Once Caltrans has submitted its' section, we will have all 4 sections in DRAFT form and will reconvene the working group to review the sections and make sure there are no duplications and that the report is written in consistent voice.

On 6-28-19, Chairman Curtit reached out to Caltrans requesting an ETA on the DRAFT Implementation Section. Caltrans responses that it was close to ready for distribution in DRAFT form to the working group.

- The Charger Experience States and Amtrak:

Background:

In October 2018, NGEC Chairman Eric Curtit requested summary updates on the Chargers since they had been placed in service. At the NGEC Annual Meeting (2-22-19) states and Amtrak provided updates to their Charger experience. The full presentations can be found in the Minutes from the Annual Meeting and on line at on the NGEC website.

In summary, the experience has been very positive among all entities, and collaboration and cooperation among the states, Amtrak, FRA and the OEM has been a key factor in the successful implementation of the Charger into service.

No updates provided in June – updates will be requested periodically. It is anticipated that Chairman Curtit will request an update be provided late July, early August 2019.

- 2019 NGEC two-pager educational document:

The 2019 NGEC two=page educational document was formally released on 2-22-19 at the NGEC Annual Meeting (distributed to all attendees.

As of 6-30-19 the NGEC program Manager, Steve Hewitt, has distributed 240 hard copies and 353 electronic copies.

Additional copies can be obtained by contacting Steve Hewitt at shewitt109@aol.com

- Treasurer's Update – Current Balance and Spend Rate as of 5-21-19:

Total Grant amount: \$1,250,000

Spent (through April 2019) = \$420, 860.50

Balance = \$829,139.50

Talks continued with FRA with regard to an extension beyond the current grant period (9-30-2020). Amtrak has received a nominal "nod of the head" from FRA and will begin looking at the steps to make a formal request as we get closer to the end of the current grant period (about 6 months or so prior).

In June, the Finance and Administrative subcommittee continued to discuss with Amtrak and others various messaging activities related to the NGEC and its future.

Technical Subcommittee:

Chair: Charles King, Amtrak

Vice Chair: George Hull, Amtrak

The Technical subcommittee holds bi-weekly conference calls on Thursday's at 3:00pm Eastern

During the month of June 2019, the Technical subcommittee met twice, via conference call, on the 13th and the 27th.

Key decisions and action item updates from the month of June 2019, included:

- Status of the activities to update ECP Standards: This is an ongoing item which the Technical subcommittee is tracking. Status as of 5-30-19:

ECP Project:

The test committee met on May 29, 2019 with some minor edits requested to the final FRA report. The report will be submitted by APTA under docket no. FRA-2015-0078. The report will be made available to the NGEC after APTA submittal. The revenue service demonstration resulted in 1,039,740 ECP fleet miles and 2,126,747 Emulation (BP operation) fleet miles. The total mileage for ECP and emulation was 3,166,541 fleet miles. A total of five incidents were reported the revenue service demonstration. Two incidents were

related to electronic hardware, there were no software incidents and three incidents related to training which occurred early in the ECP revenue service demonstration. The hardware incidents have been properly investigated and resolved. The APTA PRESS standards for the emulation 26C configuration and ECP configuration were approved and will be available on the APTA standard website. The equipment provided by New York Air Brake (Knorr) and Wabtec were approved under this project. Draft regulatory language has been prepared and provided to the FRA.

Amtrak will continue the revenue service demonstration.

In addition to developing the Passenger ECP system, an electronic valve replacement for the 26C service portion was developed.

The test committee and APTA PRESS Mechanical technical working group appreciates the support provided by the NGECC. This project would not have been possible without the dedication of Amtrak, APTA, NYAB and Wabtec personnel, and the support of FRA observers.

On 6-27-19, Paul Jamieson reported that the requested revisions to the report to FRA were approved (today) by the test committee and they are in the hands of APTA for final preparation. Paul anticipates the report will be made available in about two weeks, and, once that happens, he will provide it to Steve Hewitt for distribution to the NGECC.

- Backgrounder educational document:

On 2-22-19, at the NGECC Annual Meeting, the updated two-page educational document was officially released. Hard copies were provided to all meeting attendees and are available by request through Steve Hewitt – shewitt109@aol.com

As of 6-30-19, 240 hard copies have been distributed along with 353 electronic versions.

- AWG/RVACC:

Background:

At the 2018 annual meeting, Melissa Shurland, FRA, provided an update on the activities of the Accessibility Working Group and on the RVACC effort. The presentation is available on line on the NGECC website at www.ngecc305.org.

The last update provided to the Technical subcommittee was on 10-4-18 when Melissa Shurland reported that there still has been no word from the RVACC on the possible release of a rule for accessibility on Rail Vehicles.

As of June 30, 2019, no further updates have been provided.

- 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 CMO and NGECC Vice Chair, Charlie King on a regular basis.

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 as of 6-30-19:

FRA had reported in May that it was close to getting the contract in place for Phase 3 and 4. On the FRA side of things, all was reported as going well. No updates were provided in June 2019.

- University of Nebraska study on High Speed wireless technology as of 6-27-19:

On 6-13-19, it was reported that the team was busy with writing the test cases for the 4G and 5G field tests for high-speed wireless network. In parallel they are researching the right equipment and tools for our tests. With the 5G, some of the equipment are still not available and we try to build these in our lab.

On 6-27-19, it was reported that work is continuing on developing the field test infrastructure.

Contact Information:

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- Update: Electronics on Trains Working Group as of 5-30-19:

David Brabb, new working group leader, provide the following update On 6-27-19 for inclusion in the minutes of the Technical subcommittee call:

The Electronics group met on the 25th. Our survey of the group, meant for us at Sharma to understand what is understood as the goals of the group, and the groups thoughts on some of our findings has been consolidated, and was sent out for comment within the group.?? Based on our survey findings, it looks as though we are going to have to revisit the hardware spec 305-919 to make it clearer, and viable. I will have a better understanding after our next meeting on July 16th. Please feel free to contact me with any questions.

The Finance and Administrative Subcommittee

Chair: Tim Ziethen, Amtrak

Vice Chair: Brent Thompson, Washington State DOT

Vice Chair: Ray Hessinger, New York State DOT

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

During the Month of June 2019, the Finance and Administrative Subcommittee did not meet, due to scheduling conflicts but had met as recently as 5-29-19 and had met twice in May.

- Treasurer's Report to the NGEC Executive Board as of 6-18-19:

Total Grant amount: \$1,250,000

Spent (through April 2019) = \$420, 860.50

Balance = \$829,139.50

Talks continued with FRA with regard to an extension beyond the current grant period (9-30-2020). Amtrak has received a nominal “nod of the head” from FRA and will begin looking at the steps to make a formal request as we get closer to the end of the current grant period (about 6 months or so prior).

In June, the Finance and Administrative subcommittee continued to discuss with Amtrak and others various messaging activities related to the NGEC and its future.

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 Single Level Car Specification Review Panel met on February 7, 2019 to consider the Review Panel Report and Recommendations for Single Level Car Specification 305-003 Revision B.2 as prepared by consultant Larry Salci. The report was approved on 2-17-19 and submitted to the NGEC executive Board. On 2-12-19, the Executive Board accepted the report and its recommendations and formally adopted the Single Level Car Specification 305-003 Revision B.2.

In June 2019, the Technical writer completed incorporation of all adopted changes to create 305-003 Revision B.2 and it is available upon request through Steve Hewitt and/or the NGEC website.

The Specification Review Panel(s) did not meet in June 2019, however, as the Technical subcommittee is preparing to consider approval of changes to the Single Level Trainset Specification in July 2019, the Review panel will be reconvened once the proposed changes have been sent on to the Executive Board Chairman.

Milestones – Quarterly update (April 1, 2019 through June 30, 2019)

Bi-weekly meetings:

Throughout the quarter, the NGEC Executive Board and the Technical subcommittee held bi-weekly conference call meetings. Exceptions – during the month of May, the Technical subcommittee met three times due to the way the calendar worked out, and the Executive Board met once due to schedule conflicts around the Memorial Day holiday.

Monthly meetings:

During the quarter, the Finance and Administrative Subcommittee (FASC) met every four weeks on Wednesdays with there being two meetings occurring in May and, because of a schedule conflict, the June meeting was canceled.

Dissemination of educational/informational pieces:

During this quarter, the 2019 NGEC two-page educational document continued to be available in hard copy and electronically by request through NGEC Program Manager Steve Hewitt. The document is also posted on the opening page of the NGEC website at www.ngec305.org. As of 6-30-19, 240 hard copies and 353 electronic copies have been distributed to NGEC members, Congressional staff, stakeholders, and transportation organizations.

NGEC Annual Meeting:

The NGEC's 9th Annual Meeting took place on 2-22-19 at the Hyatt Regency, Capitol Hill with 70 NGEC members present.

The next Annual Meeting will take place in Washington, DC in February 2020. Final date and hotel location as yet to be determined.

Annual Review of NGEC By-Laws and Operating Procedures:

In October 2018 (10-17-18) the Finance and Administrative subcommittee approved changes to the NGEC By-Laws after having conducted its Annual By-Laws Review. The changes were primarily minor in nature – grammatical/punctuation type changes. In November (11-20-18) the NGEC Executive Board adopted the recommended changes to the By-Laws as approved by the Finance and Administrative subcommittee. The updated By-Laws have been posted to the NGEC website and distributed to the NGEC Executive Board in final form. They were also distributed in hard copy during the NGEC 2019 Annual Meeting on 2-22-19.

The next annual review (2019) will begin at the direction of the Finance and Administrative subcommittee in Fall, 2019.

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.

The first such quarterly report included the period from October 1, 2016 through December 31, 2016, was submitted by Amtrak by January 31, 2017.

The second quarterly report included the period from January 1, 2017 through March 31, 2017 and was submitted by April 30, 2017.

The third such quarterly report included the period from April 1, 2017 through June 30, 2017 and was submitted by Amtrak to FRA by July 31, 2017.

The fourth such quarterly report included the period from July 31, 2017 through September 30, 2017 and was submitted by Amtrak to FRA by October 31, 2017.

This first quarterly report for 2018 included the period from January 1, 2018 through March 31, 2018 and was submitted by Amtrak to FRA by April 30, 2018.

The second quarterly report for 2018 includes the period from April 1, 2018 through June 30, 2018 and will be submitted by Amtrak to FRA by July 31, 2018.

The third quarterly report for 2018 includes the period from July 1, 2018 through September 30, 2018 and will be submitted by Amtrak to FRA by October 31, 2018.

The fourth quarterly report for 2018 includes the period from October 1, 2018 through December 31, 2018 and will be submitted by Amtrak to the FRA by January 31, 2019.

The first quarterly report for 2019 includes the period beginning January 1, 2019 through March 31, 2019 and will be submitted by Amtrak to FRA by April 30, 2019.

The second quarterly report for 2019 will include the period beginning on April 1, 2019 and ending on June 30, 2019. The report will be submitted by Amtrak to FRA by July 31, 2019.

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 in synch 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.

During the quarter ending June 30, 2019, the NGEC Finance and Administrative subcommittee, through its chair, (the NGEC Treasurer) has 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. FRA has recommended that Amtrak (and the NGEC) make the formal request around 6 months prior to the current grant period end date.

As of this quarter, (ending 6-30 -19) all NGEC subcontractor/consultant contracts are current.

Review/Update of NGEC Specifications (Document Control):

This activity is ongoing and on track:

Activities specific to this quarter:

During the quarter ending June 30, 2019 the NGEC specification technical writer completed the incorporation of all adopted changes to the PRIA Single Level Car Specification 305-003 Revision B.2. The specification is available by request through the NGEC website or directly from Program Manager Steve Hewitt.

The update to PRIIA Single Level Trainset Specification 305-007 progressed significantly this quarter with most technical working groups completing their review of the Document Change Requests (DCRs) that will comprise Revision B. In June, a DCR summary sheet of the technical working group's recommendations to date has been distributed to the NGEC technical subcommittee members and is currently under review. Two working groups are processing additional changes, and those will be included in an additional summary over the next few weeks for full subcommittee review. Following this, the subcommittee will take up the changes for the specification revision and, once approved they will be submitted (per NGEC document management procedures) to the Executive Board which will then begin its review process.

During the quarter ending June 30, 2019, a new team leader for the Technical subcommittee's Electronics on Trains Working Group was appointed and is in the process of updating/developing a work plan for completing the development of the Digital Trainline Software (DTL) Specification and an update/revision of the DTL hardware specification. This working group provides status updates once a month to the technical subcommittee.