



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: July 31, 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 July 2019, the Executive Board met three times, via conference call, on the 2nd, the 16th and the 30th

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

- Equipment Procurement Updates:
- Status Update - Multi-State Rail Car Procurement as of 7-25-19 - provided by Caltrans:

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

The Updated IDOT Galley PDR has been approved and the galley mock-up review is scheduled for October 2019. The IDOT Café Car IDR is scheduled for the week of September 2 in Sacramento. Action items for the Cab Car PDRs are in work and the Cab Car Brake System IDR is scheduled for September.

The first 27 carshells are in production at Siemens Sacramento Facility. Trucks on Carshell #1 have been updated to the requested legacy piping configuration and the car is being prepared for static testing. Wiring, ducting and ceiling supports installation continues on Carshell #2. Interior work continues on Carshell #3 with wiring, toilet module and ceiling supports. Wiring and toilet module assembly also continues on Carshell #4. Interior work is in process on Carshells #5 and 6. The underframe and cable tray has been installed and cable routing and piping continues on Carshells #7 and 8. Carshells 9 through 27 are in various stages of component installation, welding, integration, painting or storage.

The FAI process continues and most system-level FAIs have occurred. The FAIs for Vestibule Liners and Trap Door are occurring this week. The End Door FAI is scheduled for the last week of August. The complete Coach Car FAI and Sample Car Inspection are scheduled for Mid-September or Early October. SCOA and Siemens continue to work with CALIDOT SMEs to address the FAI open items.

- Status Update: Metro North Dual Mode Locomotive Procurement as of 7-30-19:

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 – 9-30-19:

On the Acela:

The Acela trainset 1 remains on schedule for TTCl testing in January 2020. Trainset 2 is on track for NEC testing in March 2020

On the Charger Locomotive procurement:

It is on schedule – no major issues.

On the Trainset Procurement:

It remains on schedule for a November timeframe for bid submission.

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

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

- Document Control Update – 7-30-19:

On 7-30-19, Tammy Krause provided the following update:

The first group of proposed changes to the Trainset Specification have been sent to the Technical Subcommittee members. I have asked for comments on these DCRs to be sent to me by July 12. So far, I have received just a handful of comments on the first group of DCRs. The second group of proposed changes was sent to the TSC and I have requested comments back by August 7. I will then put all comments together and submit them to the TSC for discussion at the 8/8 meeting followed by acceptance or rejection at the 8/22 meeting. The accepted DCRs will then be submitted to the EB and can be discussed at the 8/26 meeting. The EB can then request Larry Salci to review the changes and call for the review panel.

- VIA Rail Equipment Procurement – status as of 7-30-19:

On 7-30-19, Robert Becker provided a brief status update:

that things are going well and that they are close to wrapping up the conceptual design review phase.

In September, they will begin the next phase – preliminary design review.

There have been no major issues.

They are in the process of fine tuning the final configuration after beginning with a base specification.

The next update is scheduled for September 24, 2019.

- The Equipment Acquisition and Ownership Working Group activities as of 7-30-19:

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

All DRAFT sections (4) of the report have been submitted and are under review.

The working group will meet on 8-8-19 to discuss the submittals and determine next steps in compiling a full DRAFT report.

- Update: States and Amtrak – Charger Locomotive Experience as of 7-30-19:

Mid-West States Experience:

The Charger locomotives have been running for 2-years and are working well with all of the locomotives in service and only the normal “teething” issues occurring and being worked through.

One area that they are striving for improvement and are making improvements on is parts availability and field service. These issues are challenging but being worked out and improving.

There have been several vehicle strikes and debris strikes in the Mid-West, but the good news is that the Crash Energy Management (CEM) performed very well. The engineers were very satisfied with the safety of the cabs.

Overall, they are very pleased with the performance of the locomotives.

California Experience:

Caltrans reported on the average number of miles and engine hours for the locomotives in the various sections of the state where they are being used and noted that they are performing well.

There have been several debris strikes and Siemens and Amtrak are working on repairs.

Caltrans has exercised its option for continuing technical support with Siemens after the warranty has expired.

There have been some instances of ice build-up on the HVAC and they are working on determining the root cause.

Overall, the locomotives are performing very well.

Washington State Experience:

No report provided

Amtrak Experience:

Amtrak has held several meetings with Siemens on parts availability as “we continue to support the states” as our partners.

Amtrak is leasing a state unit to test in Long Distance service. Rolling Stock Engineers are on board to see how the locomotives perform in the hot days and high altitudes. The locomotive is in the trail, not lead, position on this test.

So far it has performed extremely well.

The intent is to also conduct a test in the winter weather to see how it fares. And they are working on resolving the snow ingestion issues that occurred last winter.

- 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 7-30-19 the NGEC program Manager, Steve Hewitt, has distributed 265 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 7-30-19:

Total Grant amount: \$1,250,000

Balance = \$800,000 (approximately)

- FASC discussion on S305 NGEC reauthorization – proposed language, funding amount, and performance length:

On 7-30-19, Tim Ziethen, NGEC Treasurer and Chair of the Finance and Administrative subcommittee (FASC) reported that the initial Grant amount of \$1,250,000 has a balance of \$800,000. The current Grant agreement runs through 9-30-2020 which includes the approved/executed 12 month no cost extension. At the current spend rate of between \$15 - \$20,000 an additional no cost extension of about 2 years beyond 9-30-2020 would be possible.

Tim went on to report on discussions taking place among the members of the Finance and Administrative subcommittee (FASC) around reauthorization of the NGEC in the next surface transportation authorization bill which is now being developed. Discussion on the last FASC call (7-24-19) revolved around preparing language that could be used by Amtrak and others in making their authorization requests. The language would need to include, not only the scope of the NGEC's work, but also the length of time and amount of funding that would be requested.

At the current spend rate, and with no change to the current scope, and through a performance period of 5 years, the NGEC would need, as a floor, \$250,000 per year or \$1,250,000 for the full 5 years. This would basically be a scope of work that does not allow for additional activities.

The FASC has been discussing what additional activities the NGEC should include in its scope as it goes forward.

Eric Curtit noted that discussions have revolved around continued document control management/ specification refreshment efforts, the ongoing work of the Equipment Acquisition and Ownership working group, and potential new specifications – possibly even getting involved in developing HSR specs.

Michael Lestingi, FRA, added that another question that should be asked is whether Congress should direct the FRA to make use of the NGEC specifications mandatory for future state/Amtrak procurements. In the current NOFO's FRA has remained silent on this as a requirement.

Eric agreed that this is a good point and should be a part of the discussion. He also noted that AASHTO, SPRC, Amtrak, and others are including the NGEC as a part of their reauthorization principles, and, in some cases, will need to be provided with more information – including scope and funding requirements for the future.

Steve Hewitt commented that Amtrak (Ken Altman) was looking for some language and funding amounts to include in Amtrak's request and asked Tim Ziethen if there was a timeline for providing that information to Ken.

Tim noted that he did not have an exact timeline, but likely it is within a few weeks – less than a month.

With that in mind, Eric Curtit agreed to send out some of his thoughts to the states for consideration so that, on the next NGEN Executive Board call - 8-13-19 – the Board could come to agreement on proposed language, scope and funding for a 5-year authorization that could be provided to Amtrak and to others (such as AASHTO) as they develop/finalize their authorization requests.

Eric also noted that he and Steve Hewitt have had some discussions about an NGEN session at TRB in January and will brief the Board on this on the next call. The session would tie in well with this reauthorization discussion.

Tim Ziethen will let Steve and Eric know if the Amtrak timeline is sooner than the next two weeks and whether placeholder language may need to be provided.

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 July 2019, the Technical subcommittee met twice, via conference call, on the 11th and the 25th.

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

- Status of the activities to update ECP Standards: This is an ongoing item which the Technical subcommittee is tracking:

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 NGEN 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.

On 7-11-19, Paul Jamieson reported that all reviews are done, and the report is in the hands of APTA to package the report. Paul has requested that APTA let him know the anticipated date of completion. Once the report is made available, Paul will provide it to Steve Hewitt for distribution to the NGEN members.

- Backgrounder educational document:

On 2-22-19, at the NGEN 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 7-30-19, 265 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 NGEN website at www.ngec305.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 July 25, 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 NGEC 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 7-25-19:

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.

On 7-11-19, Tarek Omar reported that the procurement has been submitted and is awaiting final approval. Tarek expects that it will be awarded in the next 3-4 weeks.

- University of Nebraska study on High Speed wireless technology as of 7-25-19:

They have completed the computer simulation model and performance evaluation and conducted some lab testing.

They are in the process of preparing for field testing. They are assembling their own test equipment. They have acquired the equipment and will evaluate it before taking it out for field testing.

On the next update Hamid will inform the subcommittee on how the testing is going.

Contact Information:

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- Update: Electronics on Trains Working Group as of 7-25-19:

The NGEC Electronics on Trains working Group held its most recent call on July 16th and is revisiting 305-919 to make some minor edits. This will should help members to follow the specification. The net web-call is planned for August 6th.

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 July 2019, the Finance and Administrative Subcommittee met once, on the 24th.

- Treasurer's Report as of 7-24-19:

Amount Spent through the May 2019 invoices: \$435,409.53

Balance remaining: \$814, 590.67

Spend Rate per month: \$13, 606.54

On 7-24-19, FASC Chair Tim Ziethen noted that FRA has confirmed that "we can request an additional no-cost grant agreement extension for a period of time commensurate with our funding". This would likely take place around 6 months prior to the end of the current grant period – 9-30-2020.

- NGENC – Looking Ahead – Tim Ziethen:

- a. Ensuring that the NGENC is reauthorized in the FAST Act successor

- 1. Confirming with Amtrak – obtaining documentation – that NGENC is a part - Tim Ziethen of their reauthorization package.

Tim Ziethen reported that he has been talking with Ken Altman and others at Amtrak on how what their request for NGENC reauthorization will be and how it can be supported.

Tim noted that Ken Altman has asked him how much the ask will be for and for how long. There is some proposed language being developed but funding amount and performance period needs to be provided.

Tim noted that he will need FRA to let us know if they have rules around performance period.

Shayne Gill, AASHTO, recommended that the NGENC call for a 5-year authorization – which would match the length of the Surface Transportation Authorization being considered and being called for by AASHTO. Shayne also suggested a possible number in the amount of \$1 million per year (\$5 million total).

Shayne added as background that the SAIPRC number is \$2 million per year and the Northeast Corridor Commission number is \$5 million per year.

Tim welcomed Shayne's recommendations and agreed that a 5-year authorization makes sense. He did raise a concern over being able to justify the \$1 million per year request when the spend rate is currently less than \$15,000 per month. Tim suggested the floor request could be based on a spend rate of \$20,000 per month or a total of \$1,2 million and a ceiling of \$5 million.

Shayne asked if there were other specs that the NGENC is planning to develop. Steve Hewitt responded that there are two minor specifications (hardware and software" for electronics on trains under development, and over a 5-year authorization period, with ever emerging new technology there will likely be other specs forthcoming. Steve recommended that the committee look beyond the current spend rate and request an amount that provides flexibility for expansion of the current activities.

Tim Hoeffner, Michigan noted that with the NGENC may well be asked to look into overhaul and long-term maintenance as well as the relationship between owner and maintainer.

Eric Curtit commented that he has talked to FRA several times asking if they would want the NGENC to begin developing High-Speed Rail specifications to standardize that segment of equipment.

Tim Hoeffner added that the amount – be it \$5million or whatever – is small in the overall scheme of things and that the critical part is to be able to justify whatever is put forward. “We will need documentation”.

Shayne Gill emphasized that AASHTO has not put numbers in its re-authorization request yet but wants to make sure that its request is consistent with whatever the NGENC decides is the right amount.

Ultimately, it was agreed that this topic will be brought forward to the NGENC Executive Board on its next call – 7-31-19. Tim will put something together as food for thought and send it on to Steve Hewitt for distribution prior to the Board Meeting.

Tim Ziethen also noted that he may be asked by Ken Altman for a number and performance period prior to the Board making a decision and if so, he will provide at least a placeholder until the decision is arrived at by the NGENC Board.

2. Conveying the message - Distribution of the NGENC two-pager - Steve Hewitt

Steve Hewitt reported that he has distributed 265 hard copies of the NGENC 2 pager educational document and 352 electronic copies. The hard copies have largely been distributed by representatives of transportation associations for distribution on the Hill. Some have also been used by industry members when speaking or attending various industry conferences.

This document is another way of getting the message out and is useful to many organizations to have to include with their information packets as they make their rounds on the Hill.

For copies– contact Steve with the number requested and where to send them.

- Preparation of the Quarterly Grant Progress Report – Due to FRA – 7-31-19:

The progress report for the period ending June 30, 2019, was submitted to FRA, as required, by July 31, 2019.

NGEC Specification Review Panel(s):

For each PRIIA NGENC 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 NGENC 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 NGENC 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 NGENC website.

The Specification Review Panel(s) did not meet in July 2019, however, the Technical subcommittee is preparing to consider approval of changes to the Single Level Trainset Specification 305-007 in August 2019 (likely 8-22-19) and after that the Review Panel will be reconvened and the review process will go forward for Executive Board consideration – likely to occur in early September 2019.