



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: April 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 April 2019, the Executive Board met twice, via conference call, on the 9th and on the 23rd.

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

- Equipment Procurement Updates:

Status Update - Multi-State Rail Car Procurement as of 4-23-19 - provided by Caltrans to the NGEC Executive Board:

All FDR System Level approvals for standard coach are complete. Four FDR-related submittals require update for FDR milestone approval. Siemens is preparing for a new café car & galley PDR meeting with IDOT on 5/7 and 5/8/2019 in Chicago. Caltrans cabcar PDR sessions are scheduled for week of May 20. Reviews that week will include Carshell, Cab HVAC, and F-end H-type coupler.

The first 14 carshells are in production at Siemens Sacramento Facility. Carshells #1 and #2 are in the final assembly phase. The HVAC Units have been installed in carshell #1. Windows have been installed and Floors bonded in Carshell #2. Insulation installed in Carshell #3. Carshell #4 is in the Final Assemble Phase. Carshell #5 and Carshell #6 have been released to final assembly build. Carshell #'s 7, 8, 9, 10 and 11 are in various stages of integration or storage.

The FAI process continues and FAIs have occurred for the Carshell Complete, Digital Communication System, Lighting System, Couplers, Sanitary System, Sidewall Lining, FRP Panels, Brake System, Interior Doors, Truck Frame, Flooring and heated panel and Battery Charger, HVAC, Full Truck, Sliding Step, Seats, Electrical Cabinet, Windows, Analog Communications and Fully Assembled Bogie, Double Sliding Step and Vestibule FRP Panels. Open items are being addressed and the FAIs are revisited for closure by the customer team as needed. FAI Closure Approval has been provided to SCOA/Siemens for Lighting, Digital Communication, HVAC, Truck Frame, Analog Communications, Passenger Windows, and Brakes. FAI's for Trap Door, Double Sliding Step and Vestibule lining are all scheduled for May 2019.

Asked by Chairman Curtit when Caltrans anticipates the first car to be in revenue service, Momo responded that delivery is expected by January 2020 – with a summer 2020 timeline for revenue service (6 months testing after delivery).

Status Update: Metro North Dual Mode Locomotive Procurement as of 4-23-19:

The Phase 2 proposal due date is May 10, 2019

Amtrak Locomotive Procurement – 4-9-19:

On the locomotive procurement:

Amtrak is in the process of “pulling the program together...no big changes”.

On the passenger vehicle procurement:

Responses from Equipment manufacturers are due to Amtrak on 5-10-19. Anyone wanting to compete for the trainset or cars or DMUs – whatever type vehicle – responses are due 5-10-19.

Amtrak is putting a technical committee together to develop the weighting factors for proposals. Amtrak Mechanical is a part of the effort as are other segments of Amtrak including IT, Engineering, Customer Service, etc.

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 they plan to use it or if they will be in contact with the NGEC or not.

- Document Control Update – 4-23-19:

- a. Status: Revision B.2 – compiling changes into 305-003 Rev B.2 specification document
Tammy reported that she has not received a completion date from the technical writer for compiling the changes into the specification that will comprise 305-003 Revision B.2. The technical writer has all of the changes and should be able to complete the document fairly quickly. Tammy will reach out again for a timeline for completion.
- b. Status: Single Level Trainset Specification Revision
Tammy anticipates the completion of the DCR reviews by the Interior and Mechanical working groups next week. The Electrical working group has completed its review. The VTI and Structure working groups have not yet provided an eta for completion of their work.
- c. Status: Electronics on Trains Working Group - development of DTL software specification

The Electronics on Trains working group has a new chair (team leader) – David Brabb- and is getting its work resumed. Tammy has provided a list of working group members David Brabb and to Steve Hewitt (for the record).

d. Status: Verifying/updating Technical working group member lists

Tammy has received updated member lists from some of the technical working groups (Electrical, Mechanical, Interiors, and Electronics on Trains. She has not yet heard from the VTI and Structure working groups.

Tammy Krause has received one additional DCR for the single level trainsets spec.

- Equipment Acquisition and Ownership Best Practices Working Group – 4-23-19:

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

Eric Curtit has reached out to Momo Tamaoki, Caltrans, to get an ETA for the Implementation Draft section to be submitted and to Joe Paul, Amtrak, on getting his input on the Revenue Service Draft section.

Once all sections have been received, time will be allotted for all working group members to review them all in total and provide comments. After adequate time for review has been provided, a next call will be scheduled.

Eric is anticipating sometime in June or early July 2019, for a full DRAFT to be ready for distribution to the NGEC Executive Board for review and comment.

- 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 April – updates will be requested periodically.

- 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 4-30-19 the NGEC program Manager, Steve Hewitt, has distributed 240 hard copies and 351 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 4-9-19:

The accrued amount (spent) from the initial \$1,250,000 Grant through February 2019 is \$380,685.20. This leaves a significant balance of about \$869,314.80. The FASC is beginning to explore options for future funding, and potentially, a request for an additional no-cost extension beyond the current end date of 9-30-20.

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 April 2019, the Technical subcommittee met twice, via conference call, on the 4th and the 18th.

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

- Status of the activities to update ECP Standards: This is an ongoing item which the Technical subcommittee is tracking. Status as of 4-4-19:

ECP Project: As of February 2019, the revenue service demonstration has accumulated 968,922 ECP miles and 2,116,949 emulation miles for a total of 3,085,871 miles since the start in June 2014. The 8 APTA PRESS Standards are in the final public comment period. Any public comments should be resolved during April and the standards forwarded for final process approval within APTA. The FRA final report has been drafted and a test committee meeting will be scheduled to approve the submittal. Amtrak has filed a waiver extension required to continue the revenue service operation.

- 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 4-30-19 240 hard copies have been distributed along with 351 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.

No further updates have been provided. This item will be reported on whenever an update is forthcoming.

- 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 NGEN 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 Updates as of 4-18-19:

Phase 2 – Static Testing – was completed two months ago – the final report has been delivered.

Phase 3 – Dynamic Testing – should begin within May or in a few weeks.

- University of Nebraska study on High Speed wireless technology as of 4-4-19:

On 4-4-19, Hamid Sharif-Kashani reported that the modeling and simulations continue in the lab. They are in the process of preparing for phase 2. Field testing was slowed down by the government shutdown. As soon as all approvals come in, the testing will begin. In the meantime, they will continue the modeling and simulations. Hamid noted he is available for any states that are interested in hearing more about the study or its modeling or simulations.

Contact Information:

Hamid Sharif Kashani
Phone: 402-554-3628
Email: hsharif@unl.edu

- Update: Electronics on Trains Working Group as of 4-18-19:

On 3-21-19 Steve Hewitt reported that Tom Sisler, the working group team leader, had resigned from the working group due to going on family medical leave. He has asked that a new leader be appointed in his place.

As of 4-18-19, David Brabb, Sharma and Associates had been appointed as the new team leader of the working group. A status update on the group's development of the DTL Software specification is anticipated to be provided in May 2019.

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 April 2019, the Finance and Administrative Subcommittee met once, on the 3rd.

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

- Treasurer's Report – 4-3-19:

On 4-3-19, Tim Ziethen reported that the accrued amount (spent) from the initial \$1,250,000 Grant through February 2019 is \$380,685.20. This leaves a significant balance of about \$869,314.80.

The invoices are coming in very consistent with a monthly spend rate of around \$10-12,000.

Last year the grant agreement was extended (no cost) through 9-30-2020, and there is enough of a balance to easily extend the grant for several years beyond that date at the current spend rate.

- Overview: Quarterly Grant Progress Report to FRA – submitted 1-31-19:

The next report was due to FRA April 30, 2019 and will be based on the information attached to the March 31, 2019 NGEC Monthly Activities report.

- NGEC Looking Ahead

As of 4-3-19:

The first order of business is to make sure that the NGEC is reauthorized in the successor to the FAST Act. The committee was reauthorized in the FAST act without any additional funds being included and would need to be authorized again – and potentially with funding attached.

Tim Ziethen will follow up with Amtrak's Government affairs office to make that point.

Another important step, one which the FASC should take on, is looking at whether or not it is eligible for another extension of the current grant agreement (no-cost). If the answer is yes, the process should begin soon. If the answer is no, then the effort to get an appropriation for a new grant is crucial.

Tim Ziethen agreed to talk to the grants office at Amtrak to see if it is possible to get another no-cost extension of the grant.

Ensuring that the NGEC is reauthorized in the FAST Act successor:

As of 4-3-19, Tim Ziethen had checked in with Joe McHugh and others at Amtrak to ascertain whether Amtrak will play an active role in requesting that the NGEC be reauthorized in the successor to the FAST act. He has not gotten internal communications back yet but will follow up. Tim added that there is an awareness within Amtrak of the importance of the NGEC and its need to be reauthorized.

Eric Curtit commented that he believes that Amtrak and the states (and others) should advocate for the NGEC to be reauthorized and noted that he believes NGEC should be a part of Amtrak's reauthorization principles.

Action item from 4-3-19: Tim Ziethen asked Steve Hewitt to keep this as an agenda item for the next call (5-1-19), and he will try to confirm within Amtrak what their role will be in advocating for the NGEC reauthorization.

Determining whether another no-cost grant extension is possible and what the steps are

As of 4-3-19, Tim Ziethen took on the action of checking with Amtrak grants to determine whether they can apply for another no-cost grant agreement extension. The belief internally (Amtrak) is that it is possible to do so. Amtrak grants has submitted the question to FRA asking for confirmation that it is doable and asking whether it can be for two years and what the process is.

Action Items: Mike Murray, FRA, will give the FRA grants office a heads up that this question is coming. Tim Ziethen asked Steve Hewitt to keep this as an agenda item on the 5-1-19 FASC call as a follow up to confirm if another no-cost extension is possible, and if so, for what length.

Looking ahead to long term future funding options – making the case – identifying the needs?

The NGEC Executive Board has looked at various potential funding options several times over the years and it has always come back to the view that it is a federal interest in having these specifications developed and maintained, and a federal responsibility to fund it.

The NGEC grant is a nominal amount and the committee is looking to FRA for investment. The NGEC has been good stewards of its funds and frugal with its spending. Much work is done on a voluntary basis – by the states, Amtrak, FRA and the industry. The volunteer time has never been quantified, but it is substantial.

If the NGEC is at the point where it is in the review and maintain mode (which it seems to be approaching) the total spend rate annually would be about \$120,000. There is a tremendous amount of value derived for a very small grant amount.

It was discussed on 4-3-19 that it may be possible to advocate for a longer-term grant covering a few years with such a low grant amount.

It was agreed that bullet points should be developed highlighting the NGEC value for use in the reauthorization effort.

Action item from 4-3-19: Eric Curtit and Tim Ziethen agreed to work together to develop some bullet points by the next FASC call (5-1-19) and asked Steve Hewitt to add this as an action and agenda item for 5-1-19.

Revising/updating the two-page NGEC Educational Document and the NGEC "vision" statement:

The new two-pager was distributed at the NGEC Annual meeting and is available by request through Steve Hewitt.

As of 4-30-19, 240 hard copies have been distributed and 351 electronic versions have been distributed.

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.

The Specification Review Panel(s) did not meet in April 2019.