NATIONAL RAILROAD PASSENGER CORPORATION
60 Massachusetts Ave NE, Washington, DC 20002

November 3, 2014

Mr. Joseph C. Szabo
FRA Administrator
Federal Railroad Administration
U.S. Department of Transportation
1200 New Jersey Avenue, S.E.
Washington, D.C. 20590

RE: Request from National Railroad Passenger Corporation ("Amtrak") for a Waiver from the FRA's Buy America Requirements

Dear Mr. Szabo:

National Railroad Passenger Corporation ("Amtrak") is hereby applying for a waiver from the Federal Railroad Administration's ("FRA") Buy America requirements set forth in Section 301 of the Passenger Rail Investment and Improvement Act of 2008, which can be found at 49 U.S.C. 24405(a) (the "FRA Buy America Statute"), to permit the manufacturer of Amtrak's new Tier III Next Generation High-Speed Trainsets ("Amtrak's Trainsets") to purchase and incorporate into Amtrak's Trainsets certain components that are not manufactured in the United States. Specifically, these components are (1) car body shells (shell structure/frame-end, floor, roof, side); (2) Integrated cab/CEM structure; (3) vehicle paintwork; (4) brake control unit; (5) disc brake equipment; (6) tread brake equipment/tread cleaners; (7) brake valves and (8) parking brake units. A detailed justification for Amtrak's request is set forth below.

I. Executive Summary

Amtrak's premium service on Amtrak's Northeast Corridor ("NEC") operating under the brand name *Acela Express*, posted record ticket revenues for its Fiscal Year 2014 ending September 30, and achieved an increase in ridership over the prior fiscal year, reflecting a strong continued demand for passenger rail. This premium service utilizes twenty late 1990s vintage trainsets that are both capacity constrained and exceed the assumed mid-point of the service life in premium service.

The current *Acela Express* equipment was customized for Amtrak and developed integrating technologies for the first and only time from France (first generation TGV power cars, trucks designed for French regional trains) and Canada (car shells and tilting mechanism). As the equipment ages, it becomes difficult and expensive to maintain as component manufacturers have stopped making parts based upon this aging technology.

The trainsets Amtrak seeks will meet or exceed current *Acela Express* trip times without requiring significant additional investment in the NEC infrastructure, have approximately 425 seats (compared to the 304 seats of the current equipment) in the same trainset length (~200 meters), and be expandable to respond to future market conditions. The equipment will be service-proven in international high-speed commercial operation, with comparatively minor

modifications for NEC service (e.g. carbody width, compliance with the Americans with Disabilities Act and the Tier III passenger equipment standard recommendations of Engineering Task Force II of FRA's Rail Safety Advisory Committee).

Amtrak seeks to acquire up to 28 trainsets which will be sufficient to operate on current *Acela Express* schedules from Washington, D.C. through New York City to Boston and to supplement this service with half hourly service between Washington and New York City during peak travel hours. With the new trainsets, the number of *Acela Express* seats available during peak travel hours will increase by approximately 180% and by 40% during the remainder of the day between Washington and New York City and by 40% for service between New York City and Boston. This increased capacity will help Amtrak meet the ever-growing demand for passenger rail, have substantial benefits in the areas of energy efficiency and the environment, including reduction in greenhouse gas emissions, generate substantial domestic employment, and will permit Amtrak to make substantial investments to address the capital needs of the NEC with internally generated funds to supplement funds appropriated by Congress. Because of Amtrak's great need for the new high speed trainsets, Amtrak anticipates placing the first trainsets in revenue service by 2019.

II. The Request for Proposal

In January 2013, Amtrak, in conjunction with the California High Speed Rail Authority ("CHSRA"), issued a request for information ("RFI") to car builders that have successfully built trainsets in high speed (>250 km/hr) commercial operation. For Amtrak, the objective of the RFI was to survey current state-of-the-art high speed trainset technology for its potential use on the NEC with limited modification from *existing and proven* designs. In addition to requesting written responses to the questions in the RFI, Amtrak and CHSRA held one-on-one meetings with each of the car builders.

In the RFI, and then again in the one-on-one meetings, car builders were asked whether they anticipated any difficulties in meeting the FRA Buy America Statute. Almost without exception the car builders responding indicated that they could not manufacture a Trainset that meets the requirements of Amtrak's Tier III Next Generation Trainsets Performance Specification, which specified a Trainset of a service-proven design or a variant of a service-proven design with a high level of safety and reliability, without at least some waivers under the FRA Buy America Statute[1].

On July 1, 2014, Amtrak issued a Request for Proposal for the Provision of Tier III Next Generation Trainsets and Other Related Goods and Services (the "RFP" or "Solicitation").[2] The Solicitation, which is ongoing, is a two-step process which required that only Technical Proposals be submitted by the due date of October 1, 2014. (Financial proposals have another

[1] The one exception involves a builder that did not submit a proposal in response to the Amtrak RFP that is the subject of this petition.

[2] Amtrak and CHSRA issued a joint request for proposal for trainsets on January 24, 2014. The Amtrak/CHSRA request for proposal was ultimately cancelled for various reasons.

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due date, which will turn on the FRA's response to this waiver request.) Amtrak intends to award two contracts. One contract is for the production of Trainsets and related capital spares with an option for additional individual passenger car vehicles. The other contract is for the award of a Technical Support Spares Supply Agreement ("TSSSA") for those trainsets and vehicles.

The new high speed Trainsets will supplement and may eventually replace the existing Acela Trainsets that operate the *Acela Express* service between Boston, MA and Washington, DC. While Amtrak anticipates that based upon its current experience, it will order a maximum of 28 trainsets, the specific quantity of Trainsets that Amtrak will be acquiring will be based on its business case and has not yet been determined. The RFP requested that Offerors submit proposals based on four possible alternatives that relate to Amtrak's future operating plans as follows:

> *Alternative 1*: Phase 1 of the Operating Plan calls for the addition of peak hour and half hourly service that requires six additional Trainsets to operate alongside the existing Acela.
>
> *Alternative 2*: No change to the existing *Acela Express* service, but replacing the existing fleet with the new Trainsets. Amtrak estimated that this would require at least 16 new Trainsets.
>
> *Alternative 3*: Replacement of the existing Acela fleet and with the addition of the extra half hourly service set out in Phase 1 of the Operating Plan; the operational requirement is for 22 operating Trainsets each day.
>
> *Alternative 4*: Replacement of the existing Acela fleet and the addition of Trainsets to operate the 25 services needed each day as outlined in Phase 2 of the Operating Plans.

The RFP made it clear that Amtrak was seeking a Trainset of a service-proven design. It also provided information regarding Amtrak's technical vision for the proposed Trainsets. Among other things, Offerors were advised that the new Trainset design shall:

- ensure that safety is inherent in the design, production, operation, and maintenance of the Trainset;
- achieve required reliability after introduction of the Trainset into revenue service; and
- employ proven technologies, be efficient and effective, achieve excellent technical hardware and software integration, and balance both conventional and innovative new technologies and their applications with a need to minimize both overall costs and downtimes.

Pursuant to the RFP, the proposals are being evaluated using a comprehensive four stage process. Stage 1 of the evaluation process evaluates Offeror's ability to meet certain pass/fail criteria. If an Offeror's proposal passes Stage 1, it will move on to Stage 2 where it will be

evaluated for compliance with the Performance Specification. Proposals moving on to Stage 3 will be evaluated based on the Offeror's deliverability of the technical description. And in Stage 4, the proposals' whole-life cost will be evaluated. Compliance with the FRA Buy America Statute shall be evaluated as part of the Stage 3 evaluation.

II. Buy America Requirements

Amtrak will seek to finance the acquisition of Amtrak's Trainsets with a loan made under FRA's Railroad Rehabilitation and Improvement Financing ("RRIF") program and submitted a draft application for that financing to FRA on July 31, 2014. Recent guidance on the implementation of the RRIF program posted by FRA on the FRA website states that the agency will require that applicants comply with the FRA's RRIF Buy America policy, which generally follows the requirements of the FRA Buy America Statute. Accordingly, the RFP requires Offerors to comply with the FRA Buy America Statute.

Amtrak worked very closely with the FRA to comprehensively address the Buy America requirements in the RFP, which are comprised of the following three parts:

Part I – *Buy America Certification and Waiver Processes*

In this part, Offerors are required to complete an HSR Trainset Buy America Component List or Worksheet (as described more fully below) and execute the appropriate Buy America Certification.

Part II – *Buy America Domestic Content Evaluation and Improvement Plan*

To support and encourage domestic manufacturing of the offered Trainsets and their components, the RFP utilizes among its proposal evaluation criteria, the amount of domestically manufactured components as a measure of the domestic content of the offered Trainsets. In addition, to encourage further exploration of increasing domestic content beyond the component level, Offerors are required to submit a Domestic Content Improvement Plan.

Part III – *Buy America Pre-Award, Ongoing, and Post-Delivery Audits*

The Buy America process will include pre-award and post-delivery audits.

As part of Part I, which is of particular import, the FRA developed a list of all of the items that it considers to be components, as that term is defined by the FRA, of rolling stock. Each of these components was assigned a score from 1 to 5 based on the expected difficulty in sourcing the items domestically ("Difficulty Score"). Items with a score of 1 are considered to be difficult to source. Items with a score of 5 are considered not to be.

Offerors were required to complete the Trainset Component List and provide information regarding whether certain components of their offered trainsets will be manufactured in the U.S. If a particular component is not to be manufactured in the U.S., Offerors were instructed to provide an explanation and identify the risks associated with manufacturing the component in the U.S. The RFP was specifically looking for Offerors to advise whether there would be any impact to safety, if the item is safety critical, and to identify the impact to cost or schedule. Offerors were also asked to indicate whether they would be seeking a waiver from the FRA to incorporate any of the nondomestic components that they listed on the Trainset Component List in the new Trainset if they are awarded a contract.

III. Waivers in Common

When Amtrak learned from the car builders that manufacturing a Trainset in the U.S. that meets all the requirements of the FRA Buy America Statute was unlikely, Amtrak contacted the FRA regarding granting waivers prior to the submission of proposals for certain items that are considered to be safety critical and/or that the majority of the car builders indicated that they could not source domestically. While the FRA indicated that it would not be willing to grant such waivers without additional evidence presented in a formal proposal from the car builders, the FRA did support Amtrak's proposal that if a number of car builders responding to the Amtrak RFP indicated that they could not source a component domestically, Amtrak may apply, and the FRA may in its sole discretion grant, a Waiver in Common, which would apply to all Offerors whose proposals are under evaluation, for the component. Prospective Offerors were advised of this in the RFP, which provides as follows:

> Based on the information received in the Technical Proposals rendered in response to this RFP, Amtrak may request Waivers in Common from FRA for particular component(s) which appear in the Component Worksheets. Waivers in Common will be considered by FRA for a component or components based upon a petition from Amtrak for such waiver(s). The Amtrak petition in turn will be based upon those waivers identified in Technical Proposals as being needed and related supporting information. FRA is required to receive public comment on decisions to grant waivers; therefore, in order to maintain the confidentiality of Offerors, information identifying the particular Offeror will not be included in the Amtrak petition to FRA for Waivers in Common. If granted, such Waiver(s) in Common would apply to those Offerors whose proposals remain under consideration.[3]

Prospective Offerors were also advised that when the FRA responds to Amtrak's Waivers in Common application, Amtrak may revise the RFP to identify the Waivers in Common granted and request Financial Proposals and any revised Technical Proposals as a result of the waivers granted.

[3] Offerors were also advised that after award, the selected Contractor may request additional individual waivers directly from FRA using FRA's standard Buy America waiver process for components not covered in any Waiver in Common granted by the FRA.

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On October 1, 2014, Amtrak received Technical Proposals in response to the RFP. Amtrak reviewed the Technical Proposals and determined that of the 134 components listed on the Trainset Component List there were eight components that all of the Offerors responding to the RFP indicated they could not source domestically and for which they would need a waiver from the FRA. All but one of these components has a Difficulty Score of 1. These components are listed in the table below.

System	Component	Difficulty Score	Estimated Quantity[4]	
			From as few as	to as many as
Vehicle Body	Shell structure/frame-end, floor, roof, side	1	75	400
Vehicle Body	Integrated cab/CEM structure	1	75	400
Vehicle Fitting Out	Vehicle paintwork	5	75	400
Train Operation Controls	Brake Control Unit	1	56	450
Brake System	Disc Brake Equipment	1	480	2,240
Brake System	Tread brake equipment/tread cleaners	1	600	2020
Brake System	Brake Valves	1	16	36
Brake System	Parking brake units	1	290	1000

Note: The vehicle paintwork is the only component that does not have a Difficulty Score of 1. Notwithstanding the Difficulty Score designation for this component, Offerors indicated that due to the risk of corrosion it would be quite risky and very impractical to transport a car body shell from overseas without first painting it. A review of proposals indicated that if a Waiver in Common is not granted for the car body shells one Offeror anticipated having the shell at sea for approximately 20 days.

IV. Bases for Component Waivers in Common and Request for a Waiver

The eight components are integrated into two of the major systems on the Trainsets: the car body shell and the brake system. A summary of the information received from Offerors and Amtrak's bases for requesting waivers for these components is provided below.

A. Car Body Shell: (1) shell structure/frame-end, floor, roof, side; (2) integrated cab/CEM structure; and (3) vehicle paintwork

[4] The estimated quantity of components purchased will vary depending upon the manufacturer selected for award of the contract and the number of trainsets ordered.

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All proposals received in response to the RFP indicate that the service-proven designs use car body shells made of extruded aluminum elements that are then welded together to create the car shell. While common overseas in high-speed trainsets to help the trainsets meet the weight requirements for such equipment, aluminum car shell designs are rare in their use in the U.S. and those that do exist were fabricated overseas. Passenger cars in the U.S. are almost exclusively built of steel, with stainless steel being the most commonly used material. This includes Amtrak's current acquisition of new single level long-distance cars, and the design standards developed by the Next Generation Corridor Train Equipment Pool Committee created pursuant to Section 305 of PRIIA that will govern acquisition of passenger equipment by the States for the foreseeable future.

The manufacture of car body shells for high-speed trainsets internationally is undertaken directly by the equipment manufacturer and not by third parties including other equipment manufacturers due to the proprietary nature of the equipment design and the critical role the car shells play in the safe and reliable performance of the equipment. Given that there is little or no market for aluminum passenger car shells for intercity passenger rail service in the U.S. and the limited prospects for Amtrak's selected vendor to also be building high-speed trainsets in the U.S. beyond the current Amtrak order, if the waiver request were not granted it is very likely that the car body shell manufacturing capability would be created solely for this project. In this circumstance, Amtrak will be required to finance both the establishment of the facility and its retirement, including the return overseas of any design-specific machine tools and related manufacturing capability brought to the U.S. for this project. One Offeror stated that in its experience, it will take over a year to build and outfit an appropriate car body shell facility of the type needed, an additional six to nine months to transfer the technology and implement and prove out the tooling and additional time to train employees in the manufacturing process. This could add up to two years to the schedule. Moreover, the Offeror estimated that the absorption of the capital equipment cost and the technology transfer cost alone would add at least $2,000,000 to the cost of each Trainset, which could amount to some $56,000,000.[5] In addition, Amtrak believes that since the performance of the trainsets will be dependent upon the high-quality fabrication of the car shells, it is also highly likely that those positions requiring the highest skills will be filled by experienced workers from the manufacturer's existing overseas manufacturing facilities to assure timely production and quality control.

As stated above, Amtrak will finance the acquisition of the trainsets. The source of repayment will be the net operating revenues from Amtrak's NEC operations. Section 9102 of the President's Grow America Act legislative initiative proposes that the net operating revenues of the NEC be used for NEC-related capital investments. This parallels Amtrak's own proposal contained in its FY 2015 legislative and grant request to Congress. Thus, to the extent that creating the ability to manufacture the aluminum car shells in the U.S. increases the cost of the equipment, Amtrak will have less internally generated funds to invest in the NEC. As a consequence, creating the ability to manufacture aluminum car shells in the U.S. for this project will not increase U.S. economic activity but rather shift the type of economic activity from other

[5] Although this is a material amount, it does not increase the cost of such a large project by 25%. Therefore, a waiver is not sought on that basis.

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investments such as reducing the amount of deferred maintenance in the NEC infrastructure to equipment manufacturing. While investments in the NEC will have lasting benefits to the many users of the NEC, the benefits of manufacturing of aluminum carshells will most likely be more ephemeral.

Under Section 24405(a)(2) of the FRA Buy America Statute, the Secretary of Transportation may waive application of the statute upon the finding of one of the following:

(A) applying the requirement would be inconsistent with the public interest;
(B) the steel, iron, and goods produced in the U.S. are not produced in a sufficient and reasonably available amount or are not of a satisfactory quality;
(C) rolling stock or power train equipment cannot be bought and delivered in the United States within a reasonable time; or
(D) including domestic material will increase the cost of the overall project by more than 25 percent.

Amtrak believes that the components related to the car body shells (shell structure/frame-end, floor, roof, side; integrated cab/CEM structure; and vehicle paintwork) for which it is requesting a waiver should be granted under categories (A)(B) and (C) above. The cost of creating and then likely decommissioning a facility to manufacture aluminum carshells exclusively for the short-term production of the Amtrak Trainsets would divert funds from addressing critical investment needs on the Northeast Corridor, in particular investments to address accumulated deferred maintenance that limit the capabilities of this nationally-significant transportation asset and hence would be inconsistent with the public interest.

As set forth above, the required goods, the car body shell and related components needed for incorporation in the Amtrak Trainsets are not available in a sufficient and reasonably available amount or are not of a satisfactory quality. Additionally, as noted herein, the new trainsets may ultimately replace Amtrak's existing *Acela Express* trainsets, which are far along in their useful life spans. To address the capacity constraints of the NEC and the continued demand for passenger rail, Amtrak has a compelling need to put the new trainsets in operation as quickly as possible. This is evidenced by the aggressive schedule in the RFP which requires the first body shell deliveries some 17 months after issuance of the notice to proceed.

B. Brake System: (4) brake control unit; (5) disk brake equipment; (6) tread brake equipment/tread cleaners; (7) brake valves and (8) parking brake units

The Brake System is one of the most critical systems for safety and reliability. Those being proposed are systems that have been successfully used in high speed operation in their current configurations related to the specific design of the equipment and are service proven where this equipment operates. One Offeror pointed out that the Brake System components form a service proven friction brake control system of the Trainset with cardinal quality and safety demonstrated through field testing and millions of kilometers of revenue service. They operate as a system, integrated with the traction control system, and are available from a very limited

number of qualified suppliers. Offerors indicated that they sought suppliers that could manufacture the Brake System components in the United States, but were unsuccessful. One particular Offeror met with several well-known worldwide brake suppliers, but each of the suppliers declined to propose a domestic plan. Based on the proposals received, Amtrak has concluded that if cultivating a domestic source for the brake system components was even possible, using these unproven components would lead to high costs, reduction in reliability, delays to Amtrak's schedule and other risks associated with departing from a service proven design.

Under Section 24405(a)(2) of the FRA Buy America Statute, the Secretary of Transportation may waive application of the statute upon the finding of one of the following:

(A) applying the requirement would be inconsistent with the public interest;
(B) the steel, iron, and goods produced in the U.S. are not produced in a sufficient and reasonably available amount or are not of a satisfactory quality;
(C) rolling stock or power train equipment cannot be bought and delivered in the United States within a reasonable time; or
(D) including domestic material will increase the cost of the overall project by more than 25 percent.

Amtrak believes that the components related to the brake system, specifically the brake control unit; disk brake equipment; tread brake equipment/tread cleaners; brake valves and parking brake units, for which it is requesting a waiver should be granted under categories (A), (B) and (C) above. As set forth above, applying the requirement would be inconsistent with the public interest because, among other things, the Brake System is a safety critical system that may be affected by using components that have not been tested in their current configuration in high speed operation. Additionally, the Brake System components for high speed trainsets are not available in sufficient quantity and of a quality that is satisfactory for the high speed trainsets proposed under the RFP. Finally, developing a new supplier is not feasible within the timeframes that Amtrak requires the new trainsets. As noted herein, the new trainsets may ultimately replace Amtrak's existing *Acela Express* Trainsets, which are far along in their useful life spans. To address the capacity constraints of the NEC and the continued demand for passenger rail, Amtrak has a compelling need to put the new trainsets in operation as soon as possible, which is evidenced by the aggressive schedule in the RFP.

Amtrak has sought the services of the National Institute of Standards and Technology's Hollis Manufacturing Extension Partnership ("NIST-MEP") to begin the supplier scouting process that the FRA itself would typically contract with NIST-MEP to conduct once it receives an FRA Buy America Statute waiver request. Amtrak understands that the supplier scouting process will include contacting domestic suppliers throughout the United States to determine whether there are any that can provide the same or similar components as those for which Amtrak is seeking

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waivers.[6] Amtrak intends to provide any information received from NIST-MEP to its Offerors and we are confident that they will work closely with NIST-MEP to explore any sources that may be identified. (Indeed, during proposal evaluations, we were pleased to learn that one of the Offerors, who is familiar with the services of NIST-MEP, has already contacted it to assist it in identifying subcontractors.) While Amtrak generally does not have to comply with the FRA Buy America Statute, we understand its importance and are committed to complying with its high standards. We look forward to introducing a new high-speed Trainset to the NEC that meets all of Amtrak's goals, complies with its Performance Specification, and incorporates as much domestic content as possible. Thank you for considering Amtrak's Buy America waiver request. Please contact me or Andrew Wood should you have any questions concerning this matter. I may be reached at (215) 349-3170 and Mr. Wood may be reached at (215) 349-1882.

Respectfully,

Bernard F. Reynolds
Vice President – Procurement & Logistics

[6] Amtrak has also sought the assistance of NIST-MEP to begin the scouting process for other components that car builder Offerors indicated they would need if they are awarded a contract. These components are not discussed in this waiver petition.