



U.S. Department
of Transportation

**Federal Railroad
Administration**

Administrator

1200 New Jersey Avenue, SE
Washington, DC 20590

NOV 06 2015

Bernard F. Reynolds
Vice President – Procurement & Logistics
National Railroad Passenger Corporation
60 Massachusetts Ave NE
Washington, DC 20002

Re: Request for Waiver of Buy America Requirement for Components of Next Generation
Trainsets

Dear Mr. Reynolds:

This letter is in response to your request dated November 3, 2014, that the Federal Railroad Administration (FRA) grant the National Railroad Passenger Corporation (Amtrak), a waiver from FRA's Buy America policy applicable to FRA's Railroad Rehabilitation & Improvement Financing (RRIF) loan program, which follows the requirements of 49 U.S.C. § 24405(a). FRA's Buy America requirement for rolling stock, including HSR trainsets, requires domestic final assembly of the trainsets and that all the components be manufactured in the United States.

FRA may waive the Buy America requirements if FRA finds that: (A) applying the requirements would be inconsistent with the public interest; (B) the steel, iron, and goods manufactured in the United States are not produced in sufficient and reasonably available amounts or are not of a satisfactory quality; (C) rolling stock or power train equipment cannot be bought or delivered to 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 seeks a waiver for the following components of Tier III high-speed rail (HSR) trainsets: (1) aluminum car body shells (shell structure/frame-end, floor, roof, side); (2) Integrated cab/CEM structure; (3) vehicle paint; (4) brake control unit; (5) disc brake equipment; (6) tread brake equipment/tread cleaners; (7) brake valves, and (8) parking brake units (Components). For the reasons contained in this letter, FRA is granting Amtrak's request.

Although FRA is granting Amtrak's request for these eight (8) Components, Amtrak's HSR supplier or its contractors will manufacture the other 126 HSR components, or 94 percent of all components, in the United States. Amtrak estimates the total cost of the Components under this waiver request is approximately 6.8 percent of the estimated \$1.6 billion cost for the 28 HSR trainsets and spare Components Amtrak will purchase. The cost by component per trainset is:

COMPONENT	ESTIMATED COST PER TRAINSET
(1) Aluminum car body shells (shell structure/frame-end, roof, side)	\$2,960,000
(2) Integrated cab/CEM structure	\$71,000
(3) Vehicle paint	\$78,000
(4) Brake control unit; (5) disc brake equipment; (6) tread brake equipment/tread cleaners; (7) brake valves, and (8) parking brake units	\$659,000
Total per Trainset	\$3,768,000

In July 2014, Amtrak issued a Request for Proposal for its procurement of HSR trainsets. In October 2014, Amtrak received technical proposals from manufacturers in response to its Request for Proposals. After reviewing the proposals, Amtrak determined there were seven (7) Components of the trainsets' 134 components that each manufacturer indicated it could not source domestically. On November 3, 2014, Amtrak requested from the FRA a Buy America waiver for these seven (7) components and the HSR trainset paint (discussed in more detail below).

Coordinating with FRA, in February 2015 Amtrak engaged the Department of Commerce's National Institute of Standards and Technology's Hollings Manufacturing Extension Partnership (NIST-MEP) to scout for domestic manufacturers of the Components. In its April 2015 report, NIST-MEP did not identify any suppliers making the exact Components. NIST-MEP did identify a total of 23 potential suppliers that either make products similar to the Components or claim to have the capability to manufacture the Components. FRA asked Amtrak to investigate whether any of the potential suppliers could manufacture the Components. After analyzing the NIST-MEP report and Amtrak's report regarding follow-up discussions with the potential suppliers, FRA finds that none of the potential suppliers currently manufacture the Components.

FRA supports Amtrak's required procurement timeline because the timeline addresses current capacity constraints on the Northeast Corridor and increasing demand for passenger rail. Further Amtrak's timeline meets FRA's goal of establishing Tier III HSR¹ in the United States as soon as possible. Amtrak wants the HSR trainsets to be in revenue service by 2018. To meet this date, the first body shell deliveries must arrive approximately seventeen (17) months after notice to proceed, which is scheduled for February 2016. Final assembly and 126 of the 134 trainsets' components will be manufactured in the United States. FRA believes that operational Tier III HSR in the United States will increase the attractiveness for manufacturers to establish more HSR factories in the United States, strengthen the business case for a new domestic HSR trainset industry to develop, stimulate the domestic supply chain, and bring new high quality jobs to the United States. As a result, FRA concludes that none of the NIST-MEP identified suppliers could

¹ Tier III HSR trainsets are capable of traveling 220 miles per hour.

design, test, manufacture, and deliver the Components to meet Amtrak's FRA-supported timeline, which means they cannot deliver the Components within a reasonable time.

Here is a summary of FRA's analysis based on Amtrak's and NIST-MEP's outreach efforts:

Component	Number of Potential Suppliers	FRA Findings
(1) Car body Shell	12	<ul style="list-style-type: none"> • None of the 12 potential suppliers currently manufacture aluminum car body shells for passenger / HSR trains. • After learning more about the requirements of the project, 6 of 12 potential suppliers expressed that they are not interested in the opportunity. • For the remaining 6 potential suppliers, FRA found at least one of the following applied to each manufacturer: <ul style="list-style-type: none"> ○ inexperience working with aluminum; ○ no experience building passenger/HSR aluminum car bodies; ○ no relevant experience manufacturing aluminum car bodies; and/or ○ have no equipment to manufacture larger extrusions necessary for HSR car body shell. • FRA estimates that it could take car body shell manufacturers a minimum of 18 to 24 months to establish the required facilities and techniques. As a result, FRA finds the remaining 6 potential suppliers not capable of manufacturing the car body shell within a reasonable time.
(2) Integrated cab / CEM structure	5	<ul style="list-style-type: none"> • None of the 5 potential suppliers currently manufacture CEM structures. • 3 of 5 potential suppliers were not interested in the opportunity after learning more about it. • For the remaining 2 potential suppliers, FRA found at least one of the following applied to each manufacturer: <ul style="list-style-type: none"> ○ no relevant experience manufacturing CEM structures; and /or ○ no experience building passenger/HSR CEM structures or similar relevant experience fabricating aluminum CEM

Component	Number of Potential Suppliers	FRA Findings
		<p>structures.</p> <ul style="list-style-type: none"> • FRA estimates it could take CEM structure manufacturers a minimum of 18 to 24 months to establish the required facilities and techniques. As a result, FRA finds the remaining 2 potential suppliers not capable of manufacturing the CEM structure shell within a reasonable time.
<p>(3) Paint</p>	<p>3</p>	<ul style="list-style-type: none"> • As applied to all 3 potential suppliers: <ul style="list-style-type: none"> ○ Paint must be applied where car body shells are manufactured to protect against corrosion and oxidation while in transit to the U.S.; ○ The requirements, including foreign environmental standards, for the trainsets' paint would involve at least one year to develop the paint, have it tested and qualified for this particular use, and then exported; • As a result, FRA finds that paint cannot be manufactured and delivered in a reasonable time.
<p>Brake System - (4) Brake Control Unit; (5) Disc Brake Equipment; (6) Tread Brake Equipment/Tread Cleaners; (7) Brake Valves, and (8) Parking Brake Units</p>	<p>6</p>	<ul style="list-style-type: none"> • For safety critical items such as the brake system, FRA believes the brake system and its components must be supplied by a single, service-proven supplier. • None of the 6 potential suppliers currently manufacture brake systems for HSR trains. • 5 of 6 potential suppliers have no experience manufacturing rail brake systems. <ul style="list-style-type: none"> ○ FRA finds that these 5 potential suppliers cannot supply the brake system. • 1 potential supplier is a major domestic brake system supplier that has experience manufacturing other types of non-HSR passenger rail brake systems. <ul style="list-style-type: none"> ○ FRA estimates it would take at least two years to deliver a HSR brake system. ○ FRA finds that the time to design, test, and manufacture a HSR brake system

Component	Number of Potential Suppliers	FRA Findings
		precludes this manufacturer from delivering the system in a reasonable time.

On November 20, 2014, FRA published on its website public notice of Amtrak's waiver request. FRA received thirteen (13) online comments to this notice. Only one of the commenters identified a domestic source for any of the Components. The commenter asserted that the potential supplier identified in the table above is a major domestic brake system supplier and is capable of providing the brake systems. However, as described above, FRA has determined that brake systems are not domestically available for HSR trainsets nor can the one potential supplier deliver a brake system within a reasonable time. Of the thirteen (13) comments, ten (10) commenters were in favor of granting the waiver and three were against granting the waiver. Several of the ten (10) commenters in favor of granting the waiver cited safety as their reason. Many commenters also asserted that granting the waiver would be necessary to establish HSR in the United States and would lay a foundation for future domestic HSR manufacturing.

The three commenters opposing the waiver argued that granting a waiver will lead to more waivers and that manufacturers could produce the HSR trainset components in the United States. Though domestic production of the HSR trainset components for which a waiver has been requested is theoretically possible, FRA believes significant safety, capacity, and technology transfer problems would result. Moreover, the delays to overcome these issues would negatively impact the schedules proposed by Amtrak.

FRA believes a waiver is appropriate because the Components are not manufactured in the United States and because domestically-produced Components meeting the specific safety/service-proven, technical, design, and schedule needs of Amtrak cannot be delivered within a reasonable time. FRA bases its determination on the following:

- All of Amtrak's bidders independently indicated in their responses to Amtrak's Request for Proposal that the Components, other than vehicle paint, could not be sourced domestically. As noted above, the paint may be able to be manufactured domestically but cannot be produced and exported in time to for use on the car shell components.
- The National Institute of Standards and Technology's Hollings Manufacturing Extension Partnership (NIST-MEP) did not identify any domestic manufacturer *currently* producing the Components.
- Amtrak conducted extensive outreach with manufacturers NIST-MEP identified as potential future manufacturers for the non-available components. FRA agrees with Amtrak's assertion that even if any of the identified manufacturers would attempt to

produce the Components domestically, the Components could not be bought or produced in the United States within a reasonable time.

Pursuant to 49 U.S.C. § 24405(a)(4), FRA is publishing notice of its decision to grant Amtrak's waiver request in the Federal Register to provide notice of such finding and an opportunity for public comment after which this waiver will become effective. This waiver applies only to the HSR trainset Components, including spares, for Amtrak's HSR trainset procurement as identified in its November 3, 2014 waiver request. Moreover, excluding assembly of prototype trainsets, which have been addressed in a separate waiver, the trainsets must be finally assembled in the United States, and all other components that are not described in this waiver must have been produced in the United States or be the subject of a future waiver.

Questions about this letter can be directed to, John Johnson, Attorney-Advisor, at john.johnson@dot.gov or 202-493-0078.

Sincerely,

A handwritten signature in blue ink, appearing to read "Sarah E. Feinberg". The signature is fluid and cursive, with a large loop at the end of the last name.

Sarah Feinberg
Administrator