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TRANSPORTATION  
ASSOCIATION

REVISED

August 20, 2009

The Honorable Joseph Szabo  
Administrator, Federal Railroad Administration  
U.S. Department of Transportation  
Docket Management Facility  
1200 New Jersey Avenue, SE  
West Building Ground Floor  
Room W12-140  
Washington, DC 20590-0001

**RE: Docket Number FRA 2008-0132**

Dear Administrator Szabo:

On behalf of the 1,500 member organizations of the American Public Transportation Association (APTA), I write to provide comments on the Federal Railroad Administration's (FRA) Notice of Proposed Rulemaking (NPRM) concerning Positive Train Control (PTC) Systems, published July 21, 2009 at 74 FR 35950.

#### ***About APTA***

APTA is a non-profit international trade association of 1,500 public and private member organizations, including public transit systems; high speed rail agencies; planning, design, construction and finance firms; product and service providers; academic institutions; and state associations and departments of transportation. More than ninety percent of Americans who use public transportation are served by APTA member transit systems.

Among our members, we count both the commuter railroad operators in the United States and the legacy members of the former High Speed Ground Transportation Association (HSGTA), the leading proponents and developers of high speed passenger rail systems in the nation. Collectively, our members provide the vast majority of passenger rail trips in the country and will continue to do so as rail transportation continues to gain prominence in America's transportation system.

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## **General Comment**

APTA commends FRA on its superb efforts in carrying out the statutory mandate to implement PTC. As with FRA's parallel high speed rail efforts, the substantial time constraints, scope, and complexity of the work make FRA's progress all the more impressive. We believe the suggestions that follow will assist in maximizing the efficiency of implementation and avoiding unforeseen issues that could delay that implementation.

## **Cost Implications**

While we understand that FRA has been statutorily directed to implement PTC, we believe it important that FRA adjust its economic analysis to better reflect the full costs of implementation and to take steps to assist the railroads' efforts to control those costs.

Using a combination of available cost estimates from individual commuter railroads and the data and assumptions used by FRA where no individual cost estimate is available, we estimate the minimum cost of implementation for commuter railroads to be in excess of \$2.014 billion. In gathering costs estimates from commuter railroads, we found the majority of those railroads' estimates to far exceed the amounts as calculated using the FRA data and assumptions. We are concerned that using the apparent dramatically underestimated FRA cost estimates will give Congress a set of false expectations as to public agencies' ability to fund PTC implementation. Further, our overall estimate does not account for anticipated increases in access fees for those commuter railroads that are tenants on rail lines owned by others. We recommend FRA incorporate, to the maximum extent available, the specific costs estimates received from individual commuter railroads to improve accuracy.

Additionally, in calculating the costs of implementation, we believe FRA must include the likelihood that many commuter railroads will be forced to divert funding from routine operations and maintenance. In the current economic situation, most commuter railroads have already had to increase fares and some have reduced service levels. One agency, for instance, has recently increased fares 25 percent and has deferred numerous capital projects in order to avoid cutting approximately 30 percent of its service. Moreover, even these significant actions will not provide sufficient capital for many of these railroads to fund PTC implementation consistent with the legislative mandate.

The combination of increased fares, decreased service levels, and deferral of state-of-good-repair projects that will be required to fund PTC will have a negative impact on service reliability and marketability. This will ultimately drive a portion of current rail customers back to the highways where, as has been clearly established, they will be seventeen times more likely to suffer fatal injuries. We believe that this is a significant impact that also must be addressed in FRA's economic analysis.

We believe FRA should fashion the final rule to minimize implementation costs. The regulatory requirements should not exceed the statutory requirements. Our comments below identify several of these areas.

Finally, we believe FRA should, in cooperation with the Surface Transportation Board, take affirmative steps to ensure allocation of PTC costs is not improperly weighted against passenger railroads through access and other fees. FRA must plan for and facilitate both expansion of existing passenger rail service and implementation of high speed rail service and ensure the cost of PTC implementation does not quash those services.

### **Timing and Sequence of Submittals**

In section 236.1009 and elsewhere, the draft envisions April 2010 submission of a PTC Implementation Plan (PTCIP), along with a PTC Development Plan (PTCDP), and a PTC Safety Plan (PTCSP). While we understand FRA's desire to move through the process as quickly as possible, inclusion of the PTCDP or PTCSP in the April 2010 submission is problematic. Submittal of these plans implies the selection of specific hardware and systems which is not possible given the current state of development of industry standards now in development by the Railroad Electronics Standards Committee (RESC).

It would be impossible for the vast majority of public agencies that operate passenger rail systems to identify and contract with vendors by April 2010. We understand that freight railroads have selected a proprietary technology as a basis for their PTC implementation. However, the competition standards for publicly funded contracts limit public agencies ability to follow a similar procurement strategy. Additionally, the lack of specific hardware and system standards to support interoperability further limits the public agencies ability to enter into contracts by April 2010. Thus, if required to submit PTCDP and PTCSP documents in April 2010, the documents will, of necessity, be incomplete and unacceptable.

The sole legislative requirement tied to April 2010 is for submission of the PTCIP. We believe FRA should allow submission of the PTCIP in a "product neutral" fashion to meet the statutory deadline and defer submission of the PTCDP and PTCSP to allow flexibility, avoid incomplete submissions, and avoid compilation and review of documents that cannot be approved.

### **Data Transmission and Spectrum Issues**

Commuter railroads operate almost exclusively in corridors where rail service of all types is highly concentrated. This gives rise to concerns about radio spectrum availability. Interoperable communications among freight and passenger railroad operations is critical. The freight railroad industry has acquired spectrum in the 220 Mhz band to accommodate PTC and we are awaiting the results of the Association of American Railroad's capacity analysis to determine if that spectrum is sufficient to accommodate both freight and passenger operations in congested areas. Preliminary indications are that the spectrum will be insufficient to accommodate both. Also, there does not appear to be a spectrum management plan in place to support PTC on a nationwide scale.

These circumstances create additional cost implications and practical issues. There is no reliable estimate available on costs associated to access the current or other spectrum and there is no provision for obtaining additional spectrum that may be necessary. We believe FRA should both advocate for appropriate funding and work with officials at the Federal Communications Commission to ensure adequate spectrum is available to support the statutory mandate for PTC.

Additionally, we believe FRA should take appropriate steps to ensure the system currently being developed by the Interoperable Train Control (ITC) committee reflects the specific characteristics necessary for passenger operations, since the 2015 deadline virtually assures that system will ultimately be selected for PTC data transmission.

### **Interoperability**

The NPRM does not address key issues of interoperability and the implications for competition in public contracting inherent in those issues. The proposed rule would require railroads to manage agreements with adjoining railroads, tenants, and hosts but does not lay out minimum functional capabilities that would allow full interoperability. This could lead to a patchwork system that would not allow for true interoperability.

We encourage FRA to continue to work with the Association of American Railroads as they design an appropriate standard to address these issues. Not only will that provide interoperability, it will guard against inappropriate limits on competition. It is imperative that vendors be allowed to compete for PTC projects to control pricing, ensure maximum quality, and support innovation.

### **“Cease Operations” Provision**

We are concerned that draft section 236.1005(b) singles out intercity and commuter rail operations and directs railroads to cease operations unless a certified PTC system is installed and operative by the December 2015 deadline. This provision presumes passenger railroads control their own facilities and can ensure PTC is installed in a timely manner. It does not apply to other required applications and does not provide any means to address failure beyond the control of the railroad. We believe FRA should address this in the final rule and provide some means of redress or relief where PTC is not installed and operational by December 2015 due to issues beyond the control of the passenger railroads.

### **Evaluation of Plans**

The NPRM offers minimal guidance on what criteria FRA will use in accepting or rejecting a system. We believe FRA should draft and vet criteria that accomplishes the basic purposes of PTC while allowing for innovation in meeting the performance requirements envisioned in the draft.

### **Technical Issues**

#### *Unacceptable Risk*

In draft section 236.1005(e)(2)(ii), we suggest FRA remove the explanatory second sentence as unduly limiting. The safety plan can address whether a particular configuration is an acceptable risk. The examples cited can include a non-signaled siding or auxiliary track several feet below the grade of the mainline track. The possibility of the equipment on the auxiliary track conflicting with movement on the main line track is no greater because it is a crossover than if it is a single switch and turnout. Presence of a crossover could be considered mitigation. Main to main is another topic which deserves discussion in the risk analysis. The presence of a hand operated crossover will require its

own Wayside Interface Unit (WIU) if the language stands. An enforced stop can be accomplished via the onboard database, however APTA believes this will result in an unnecessary negative impact on operations.

#### *En Route Failure*

Draft section 236.1029(b) is unduly restrictive. The PTCSP should describe the response to various failure modes and their effects. There may be failures that do not warrant such an extreme response. Since the PTCSP already requires railroads to present a valid safety case, inclusion in the plan should be sufficient.

#### *Grade Crossing Requirements*

The requirements of draft section 236.1005(a)(4)(ii) are unclear. FRA should clarify that it is intended solely to provide that a dispatcher can place a restriction on a crossing that PTC shall enforce in the event that a malfunction is reported. This provision should not be read to require a PTC system to protect a grade crossing and prevent a movement authority of a train from being advanced across the crossing in the event of a failure being detected or to require a grade crossing warning system to self-monitor itself and impose a speed restriction or stop to an approaching train if in a degraded condition.

#### *Overspeed Derailments*

The requirement in draft section 236.1005(a)(1) should be amended to account for the situation where speed restrictions are far below speeds that would cause a derailment. We believe a PTC system should display a speed higher than the actual speed restriction but below a speed that could cause a derailment. This will provide flexibility without compromising safety.

#### *PTCIP Review and Correction*

APTA suggests the requirements of draft section 236.1011(c) be amended to allow at least 90 days – the time allotted for FRA plan review – for railroads to correct deficiencies and re-submit their plans.

#### *Integration of Signaling Systems*

The language in draft section 236.1005(a)(2) would appear to disallow systems such as moving block overlays that may provide superior service. We do not believe this was the intent of the language and suggest FRA clarify this provision.

#### *PTCSP Requirements*

The reference in draft section 236.1015(c)(13) to 236.1011(a)(10) should be clarified – the latter does not exist.

*Calculating MTTHE Values*

We request FRA provide additional guidance on acceptable methods for calculating Mean Time To Hazardous Event (MTTHE) values for processor-based subsystems and components.

*Event Recorders*

Draft section 236.1005(d)(iii) establishes requirements for data recorders. It is unclear whether the operator's display must be replicated in the event data recorder in real time for later analysis and FRA should clarify its intent.

APTA greatly appreciates the efforts and outreach of FRA and the opportunity to assist in crafting this important program. For additional information, please contact James LaRusch of APTA's executive office at (202) 496-4808 or email [jlarsch@apta.com](mailto:jlarsch@apta.com).

Sincerely yours,



William Millar  
President

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