

On June 24, CSX Transportation (CSX) Vice President of Service Design Frank Lonegro testified before the U.S. House of Representatives Subcommittee on Railroads, Pipelines, and Hazardous Materials about the implementation of Positive Train Control. At issue is the looming December 31, 2015 deadline for PTC implementation. Here's a snapshot of what happened at the hearing. [Click here](#) to watch the full hearing.

Key Messages

- PTC is an important safety upgrade, but it is an unfunded mandate that requires development of an entirely new technological system that must operate seamlessly across all U.S. railroads.
- CSX and the entire rail industry are working diligently to safely implement PTC as quickly as possible.
- The industry has been consistent in its commentary that the December 2015 deadline is not achievable. Any deployment of PTC must recognize that seamless, safe operation is imperative to maintain the fluidity of the national rail network and prevent adverse impact on customers, communities and passengers.

What is PTC?

Positive train control (PTC) is a safety overlay system that will monitor train movements and provide train braking in certain circumstances. In essence, PTC is designed to prevent four types of human factor incidents:

- certain train-to-train collisions,
- derailments caused by excessive speed,
- unauthorized incursions by trains onto sections of track where maintenance or construction activities are taking place, and
- movement of a train through a track switch left in the wrong position.

These requirements are part of the Rail Safety Improvement Act (RSIA) of 2008, which called for implementation of PTC technology across most of the U.S. rail network. All passenger and Class I railroads must install PTC on mainlines that carry passengers or toxic-by-inhalation materials by December 31, 2015.

In addition to CSX's Frank Lonegro, who testified at the hearing?

- Russell Kerwin, deputy project manager of PTC, Metrolink
- Don Orseno, executive director/CEO, Metra, and Chair of APTA Commuter Rail Committee
- Charles Mathias, associate chief, Wireless Telecommunications Bureau, Federal Communications Commission
- Sarah Feinberg, acting administrator, Federal Railroad Administration

Will CSX meet the deadline? And if not, why not?

Despite the entire rail industry's best efforts, PTC's complexity and the enormity of the implementation task require more time to implement PTC than the government allotted when it mandated the system in 2008. At that time, the technology needed to build and deploy the PTC system did not exist. Much of CSX's and the other railroads' efforts to date have been directed toward development and initial testing of the various technologies that can meet the requirements of the legislation and then be scaled to the enormous requirements of a national, interoperable system.

For CSX, PTC must be installed across roughly two-thirds of the company's 21,000 mile network and on 3,900 locomotives. Installation includes multiple upgrades and technological systems, including new locomotive computers, new signals, new base stations to transmit signals between the PTC computer and locomotives, GIS mapping of the entire CSX network, and back-end software development, testing and implementation. Currently, about 1,000 CSX employees are diligently working toward PTC implementation. Their tasks are not only to install the PTC infrastructure, but also to develop and test the customized suite of software necessary for such a complex system. Lonegro explained that PTC has hundreds of inputs that need to be taken into account when building and operating the system, such as train location, locomotive speed, track curvature and grade, signal and work zone locations, and many more. Lonegro testified that CSX will not meet the current deadline, and stated that CSX's current plan calls for all hardware to be installed by 2018, with full deployment by 2020. PTC was CSX's third largest capital expense between 2009 and 2014, behind only track maintenance and freight cars, with more than \$1.2 billion spent to date.

Are there factors out of CSX's control that have delayed implementation? From a regulatory perspective, CSX must create a PTC safety plan which will be approved by the FRA. These highly technical plans, which are thousands of pages in length, must be filed by all 40 railroads required to install PTC and each plan takes a significant amount of time to review by FRA. In addition, the Federal Communications Commission (FCC) must approve the location and placement of the thousands of base stations needed to transmit signals. The FCC placed a moratorium on installation of PTC antenna towers for a year while it developed a new approval process.

From a technology perspective, the rail industry is heavily reliant on third party suppliers who are also challenged by with the complexity and enormity of PTC.

What happens if rail lines do not meet the current 2016 deadline?

Unless Congress changes the deadline, FRA Acting Administrator Sarah Feinberg testified that the agency would enforce the deadline and railroads failing to meet the deadline could face daily fines and other FRA enforcement penalties. It is also unclear whether a railroad might face increased legal

exposure if an accident were to occur on track requiring PTC after January 1, 2016, if the deadline is not extended. The company is also evaluating whether it is legally allowed to carry TIH commodities and allow passenger service on its routes without PTC after January 1, 2016.

What did CSX recommend to the Subcommittee panel?

Lonegro repeatedly emphasized that the current December 31, 2015 deadline is unachievable and that a meaningful extension is required. There is also a functionality concern. As he stated, "Rushing PTC development and installation and foregoing a logical plan for sequencing its implementation would sharply increase the likelihood that the system would not work as it should, and potentially lead to degradations in safety and efficiency, which is an outcome that serves no one's purpose."

Lonegro further stated that the industry and Congress must work together to find a reasonable extension that recognizes the magnitude and complexity of the PTC mandate, rewards those railroads that will be completed by the current deadline, holds the remaining railroads' accountable to complete the project as expeditiously as possible, and provides legal certainty for shippers, passengers and railroads alike.