

REQUEST TO EXPEDITE PROCESSING OF EXPERIMENTAL LICENSE

Applicant: Short Line Technologies, LLC

File No.: 0610-EX-PL-2006

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The applicant seeks to use this license to develop technology to comply with a proposed rule of the Department of Homeland Security (DHS).

On December 21, 2006, DHS (through the Transportation Security Administration) published a Notice of Proposed Rulemaking titled "Rail Transportation Security."¹ The proposal would require freight rail carriers and certain facilities handling hazardous materials to be equipped for reporting location and shipping information to TSA upon request.² Although technologically neutral on its face, the NPRM mentions two options: RFID, which the railroad industry calls Automatic Equipment Identification (AEI); and GPS.³

AEI is already in heavy use by Class I and Class II railroads. (These categories reflect annual revenues and correspond roughly to national and regional railroads, respectively.) So-called "short line" railroads -- which link related industries or interconnect larger railroads -- lag in the application of AEI technology. The obstacle to short line adoption has been the historically high cost of AEI tag reader systems.

The applicant here is developing a new generation of AEI tag readers that will not only reduce costs of AEI systems by a wide margin, but will also offer more reliable reading of tags and lower power consumption. Reduced power consumption makes stand-alone power sources such as solar, flameless thermoelectric converters, and wind power more practical and less expensive.

(The GPS alternative has several disadvantages for this application: far higher cost than AEI tags; the need to power every car-mounted device; fragility; and reliance on the unreliable consumer cellular network. In contrast, car-mounted AEI tags much less expensive, extremely durable, and need no power, except for a relative handful of locomotives, refrigerator cars and end-of-train devices that use active tags in addition to the ubiquitous passive tags.)

In short, the applicant is actively addressing an issue of homeland security -- better reporting on hazardous materials being shipped by rail -- in response to a specific proposal from DHS.

The experimental license is necessary for field-testing of prototypes to assess properties the demanded of railroad equipment, including accuracy, reliability, durability, and tolerance of extreme environmental conditions.

¹ *Rail Transportation Security; Proposed Rule*, Docket No. TSA-2006-26514, RIN 1652-AA51, 71 Fed. Reg. 76851 (Dec. 21, 2006).

² *Id.* at 76864-76865.

³ *Id.* The applicant participated in the rulemaking.