

Docket No. FRA–2016–0002–N–6

On March 11, 2016, the Association of American Railroads (AAR) submitted comments to the Office of Management and Budget (OMB) in response to the Federal Railroad Administration’s (FRA) request for emergency OMB processing of an Information Collection Request (ICR) to collect information on an annual form on railroads’ progress towards implementing a positive train control (PTC) system. See 81 Fed. Reg. 11878 (March 7, 2016); 49 U.S.C. § 20157(c)(1). Below are AAR’s comments and FRA’s responses.

AAR’s Comment on the Format of Submissions and Burden Hours

AAR comment: Submitting the annual PTC progress report in PDF or Word document format would “greatly reduce the amount of time necessary to produce the information as the railroads can integrate their data more readily into the document with their existing individual software systems.”

AAR also commented that if the railroads must manually transfer information into an on-line form, the time necessary to produce the information will be more than the 38.41 hours estimated by FRA. Even without having to manually input the data in an on-line form, 38.41 hours greatly underestimates the time it will take to complete the annual report; one AAR member railroad estimates that the actual time will be closer to three weeks.

FRA response: FRA will accept a railroad’s submission of the annual form as a PDF or Word document submission via FRA’s Secure Information Repository (SIR) at <https://sir.fra.dot.gov>. Once OMB approves the annual form, FRA will post a fillable form that railroads must use and can save in PDF or Word formats on its website.

FRA based the burden estimate on the 2-page PTCIP template information collection OMB already approved (OMB #2130-0553, Form FRA F 6180.164). The annual report form will collect substantially similar information but is longer (11 pages). FRA did not receive any comments on the PTCIP template information request or burden estimate. Therefore, FRA calculated the annual report burden hours for this information collection by multiplying it by a factor to account for the additional 9 pages. This accounted for the additional information being collected. This estimate also took into consideration the size of the railroads reporting to account for the fact that the burden would be higher for large Class I railroads, which will be implementing PTC on more track and equipping more locomotives, as compared to regional and commuter railroads. The 38.41 burden hours FRA estimated and provided in its supporting justification to OMB was an average of all railroads. However, the total estimated burden to complete the Annual PTC Progress Report Form for a Class I size railroad is **60 hours**, as described in the supporting justification.

AAR’s Comments on Specific Sections of the Annual PTC Progress Report

With respect to AAR’s comments about particular sections of the annual PTC progress report, FRA responds as follows:

AAR comment: For the information requested under section 1, “Summary,” there are two rows that should be modified. Quantifying “Back Office Locations Completely Installed and Fully Operable,” and “Dispatching Locations Completely Installed and Fully Operable,” does not meaningfully measure a railroad’s progress toward PTC implementation. Dispatching practices and back office operations vary by railroad, and counting the total number of locations “installed and fully operable” will not yield meaningful results. These data fields should be revised to simply reflect whether a railroad’s dispatching and back office systems are PTC mission-ready. For the PTC back office segment, the most meaningful question to be asked, with a yes/no response, is “Is the back office segment (office hardware and software and dispatch system enhancement for PTC) mission capable?”

FRA response: FRA has deleted the back office and dispatching location rows from Section 1. FRA has added a supplementary box below Section 3.2 of the form (Infrastructure/Back Office Status) to ask two “yes or no” questions, as AAR commented was more appropriate—specifically, FRA will ask whether the Back Office Location(s) are fully operable and whether the Dispatching Location(s) are fully operable. FRA will not use the term “mission-capable” as AAR suggested because that term is not used or defined in the PTC Enforcement and Implementation Act of 2015 (Act), Pub. L. No. 114-73, § 1302, 129 Stat. 568, 576–82 (Oct. 29, 2015) (Act) or in FRA’s regulations.

Although FRA eliminated the two rows in Section 1 asking for quantities, it will leave such rows in Section 3.2 because FRA is authorized by the Act to collect such information and because the Act requires railroads to submit any additional information requested by FRA. 49 U.S.C. § 20157(c)(1)(B), (G); *see also* 49 C.F.R. § 1.89. Moreover, the Act requires railroads to provide progress information with respect to “physical back office system equipment,” which is a term that FRA has now added to the form in Section 3.2. 49 U.S.C. § 20157(c)(1)(B), (i)(2). As AAR commented, the number of back office locations and dispatching locations for each railroad’s PTC system varies widely, which is precisely why FRA needs to track quantitative information about how many back office and dispatching locations a railroad has completely installed. There is no one-size-fits-all answer, and FRA must track each railroad’s back office and dispatch locations to meaningfully track the railroad’s progress towards PTC implementation and to understand each particular railroad’s PTC system functionality and needs, the progress the railroad has made, and possible implementation challenges. FRA believes that adding the two “yes or no” questions and amending those rows as described above will sufficiently address AAR’s comment because the railroads would not be required to quantify how many back office locations and dispatching locations are fully operable, but rather completely installed. FRA considers “completely installed,” for these purposes, to mean that all pertinent components or elements are in place (e.g., servers, wiring, power, etcetera) to enable the proper functioning of the system, whether in test or operation. The specific utility that FRA would gain from having quantitative information about installation—in addition to generalized information about whether the back office location(s) and the dispatching location(s) are fully operable (a simple “yes” or “no” answer)—is that quantitative information would better allow FRA to perform its inspection, enforcement, and oversight activities.

AAR comment: For the information requested under section 2, “Update on Spectrum Acquisition,” FRA asks for the “Spectrum Coverage Area or Location.” As these terms do not

appear in the PTC regulations, it is not clear what is intended. Many railroads have either purchased the perceived full spectrum requirement or do not need to acquire spectrum but rather need to join a spectrum lease arrangement. AAR suggests an effective way to measure progress on spectrum acquisition is for each railroad to identify any gaps in spectrum coverage by location in the annual report. If there are no such gaps, the railroad would not report any.

FRA response: FRA will not make the change AAR suggests to Section 2 of the form (Update on Spectrum Acquisition) because it would result in the submission of less information than the Act requires. *See* 49 U.S.C. § 20157(c)(1)(A). The Act requires each railroad to provide in its revised PTC implementation plan (PTCIP) “the calendar year or years in which spectrum will be acquired and will be available for use in each area as needed for [PTC] system implementation, if such spectrum is not already acquired and available for use.” 49 U.S.C. § 20157(a)(2)(A)(iii) (I). The also Act requires each railroad to provide, in its annual report, its progress with respect to spectrum acquisition and availability based on the information it provided in its revised PTCIP. 49 U.S.C. § 20157(c)(1)(A).

AAR comment: The data fields proposed in section 3.1, “Locomotive Status,” do not answer the truly relevant question of how many PTC mission-capable locomotives each railroad has available for PTC implementation. The number of antennas, event recorders, displays, and other components tells the FRA nothing relevant about how close that railroad is to adding mission-capable locomotives to its fleet. The data field for “software for train management and other applications,” is especially problematic. Software does not lend itself to numeric quantification, as the PTC software is versioned repeatedly over the course of the year with each release of defect remediation and improved functionality. Additionally, it would be an increased information collection burden to require the railroads to report metrics not required to be tracked, most notably, “event recorders,” and “GPS receivers.” The annual report should focus on useful information; FRA should ask for the number of locomotives that are PTC mission-capable and available compared to the PTCIP annual goal and total required.

FRA response: AAR commented that FRA should “ask for the number of locomotives that are PTC mission-capable and available compared to the PTCIP annual goal and total required.” FRA is indeed asking for that type of high-level information—see Section 1, Summary, where FRA asks for quantitative information regarding locomotives fully equipped. FRA will not eliminate the data fields for “number of antennas, event recorders, displays” etcetera from Section 3.1, Locomotive Status, as AAR requests. The Act requires each railroad to provide, in its annual report, information on its progress installing PTC hardware, broken down by category, and the Act authorizes FRA to request that railroads provide additional information in the annual report and requires railroads to provide such information. 49 U.S.C. § 20157(c)(1)(B), (G); *see also* 49 C.F.R. § 1.89.

The purpose of this additional information is to better understand the true state of PTC equipment installation on the locomotive fleet, and to identify any industry trends regarding the availability of critical components. Furthermore, updated information on event recorders is essential to understanding the true state of locomotive readiness. FRA’s understanding is that many of the existing event recorders will not be able to support PTC data needs, and will need to be supplemented or replaced with a new design. FRA’s PTC regulation requires each lead locomotive of a train equipped and operating with a PTC system to be equipped with an

operative event recorder, which in addition to meeting the crash-hardened memory requirements of 49 C.F.R. § 229.135, shall:

(i) Record safety-critical train control data routed to the locomotive engineer's display that the engineer is required to comply with; (ii) Specifically include text messages conveying mandatory directives, maximum authorized speeds, PTC system brake warnings, PTC system brake enforcements, and the state of the PTC system (e.g., cut in, cut out, active, or failed); and (iii) Include examples of how the captured data will be displayed during playback along with the format, content, and data retention duration requirements specified in the PTCSPP submitted and approved pursuant to this paragraph. If such train control data can be calibrated against other data required by this part, it may, at the election of the railroad, be retained in a separate memory module.

49 C.F.R. § 236.1005(d).

As stated above, the Act requires each railroad to provide, in its annual report, information on its progress installing PTC hardware, broken down by category, and the Act authorizes FRA to request that railroads provide additional information in the annual report and requires railroads to provide such information. 49 U.S.C. § 20157(c)(1)(B), (G); *see also* 49 C.F.R. § 1.89. Also, if a railroad is not already tracking this information internally, then it is impossible for them to manage or make any determination as to when a PTC system is going to be operational and useable. If the railroads are not tracking these hardware installations, and are not required to provide the information to FRA, then it would be impossible for FRA to determine the true status of implementation.

As for AAR's comment regarding software, FRA understands the complexity involved with configuration management (CM) of locomotive on-board software, so FRA is asking only for high-level information about software. Without software, the locomotive is not fully PTC operable. Once the software is installed, FRA expects that the railroad will manage version control using its established CM protocols.

If a particular category does not apply to an individual railroad's PTC system, the railroad can list the line item as "not applicable." Moreover, FRA has clarified in Section 3.1 that if any of the information called for in Section 3.1 is unavailable to the railroad at the time it is completing and submitting this form, the railroad can insert "TBD" in the appropriate field and/or use the comment box to explain when such information will be available and when the railroad expects to submit it to FRA.

AAR comment: For the reasons explained in item 1, above, the data fields in section 3.2, "Infrastructure/Back Office Status," which asks for the quantities of dispatching locations and back office locations that have completed PTC installation, are not helpful metrics in determining a railroad's progress in implementing PTC across its network. The true performance measures of PTC implementation include the total number of PTC route miles required, the total number of PTC route miles in Revenue Service Demonstration, and the total number of PTC route miles in normal revenue service. Information about the number of dispatching locations

and back office locations are irrelevant intermediary measurements which do not illustrate a railroad's true PTC implementation status.

FRA response: Regarding Section 3.2, Infrastructure/Back Office Status, AAR commented that the numbers of dispatching location installations and back office installations are “irrelevant intermediary measurements,” given other information in the annual report. However, the Act requires that each railroad provide in its annual report the railroad's progress installing hardware, including physical back office system equipment. *See* 49 U.S.C. § 20157(c)(1)(B), (i)(2). In addition, FRA is requesting that railroads provide their progress towards completing installations of the dispatching locations under 49 U.S.C. § 20157(c)(1)(G), which requires railroads to provide any additional information FRA requests. *See also* 49 C.F.R. § 1.89. Moreover, below Section 3.2 in the annual report form, FRA provided a narrative box where railroads may enter text and provide additional explanation.

AAR comment: Modifications should also be made to section 3.3, “Installation/Track Segment Status.” The column for “PTCIP Year End Goal,” and the row for “Planned Fiber or Ground Wiring,” should be eliminated, as railroads are not required to submit annual goals for each of these items in their PTC implementation plans and these are not metrics currently tracked by the railroads. Additionally, to better reflect the true implementation status of the railroad, the table should be modified to report the status of the overall system as opposed to each individual track segment.

FRA response: For clarification, FRA first wants to note that railroads are required by the Act to submit annual goals for installing wayside interface units, communication towers or poles, switch position monitors, wayside radios, and base station radios. *See* 49 U.S.C. § 20157(c)(1)(B), (i)(2). As authorized under 49 U.S.C. § 20157(c)(1)(G), FRA is requesting that railroads submit additional information in the annual reports, including, for example, information about planned fiber or ground wiring in Section 3.3. While FRA understands that the specific metric of “planned fiber or ground wiring” may be onerous for large territories, “in-ground” utility backbone is essential to most PTC systems, and it can prove to be a major installation hurdle if permits are required for utility relocation or installation. However, FRA will revise Section 3.3 by deleting the row regarding “Planned Fiber or Ground Wiring (per mile)” and instead providing a “yes or no” question below Section 3.3, asking the railroad to identify whether “all necessary communication backbone utilities (including fiber, copper, etc.) are installed and ready for operation,” for each track segment. FRA will also provide a text box where railroads may provide additional explanation, and FRA has clarified in Section 3.3 that if any of the information called for in Section 3.3 is unavailable to the railroad at the time it is completing and submitting this form, the railroad can insert “TBD” in the appropriate field and/or use the comment box to explain when such information will be available and when the railroad expects to submit it to FRA.

As for AAR's comment about reporting for the overall system rather than individual track segments, railroads should already have this information at the track segment level and have provided information at the track segment level to FRA previously (*see, e.g.,* 49 C.F.R. § 236.1011(a)(5)), and should be able to report their specific hardware installations by track segment by year. Indeed, track segments are defined and selected by the railroads, not by the

FRA, based on how the railroad elects to deploy PTC. The number of track segments depends upon the railroad's size, and how it has planned its implementation of the PTC system, so this should not be an additional burden for railroads. In addition, the overall system is already captured in the Summary section and would not provide sufficient detail about the specific installation status of the rail network, particularly with respect to interoperability (e.g., readiness of segments where passenger/commuter operations occur). FRA needs this level of detail to accurately assess whether a railroad is making progress towards implementing the PTC system on each required track segment and to understand which track segments are operational. FRA has clarified that railroads may provide this information in terms of territories, subdivisions, districts, track segments, etcetera.

AAR comment: The employee categories in section 4, "Quantity Update on Employees Trained," should match the categories in 49 C.F.R. § 236.1041. They are as follows:

- (1) Persons whose duties include installing, maintaining, repairing, modifying, inspecting, and testing safety-critical elements of the railroad's PTC systems, including central office, wayside, or onboard subsystems;
- (2) Persons who dispatch train operations (issue or communicate any mandatory directive that is executed or enforced, or is intended to be executed or enforced, by a train control system subject to this subpart I of Part 236);
- (3) Persons who operate trains or serve as a train or engine crew member subject to instruction and testing under part 217 of this chapter, on a train operating in territory where a train control system subject to this subpart is in use;
- (4) Roadway workers whose duties require them to know and understand how a train control system affects their safety and how to avoid interfering with its proper functioning; and
- (5) The direct supervisors of persons listed in paragraphs (a)(1) through (a)(4) of 49 C.F.R. § 236.1041.

FRA response: FRA agrees and will revise the employee categories in Section 4 to align with 49 C.F.R. § 236.1041(a).

AAR comment: Section 5, "Progress on Implementation Schedule/Milestones," is somewhat redundant with Section 7, "Progress on Revenue Service Demonstration (RSD) or Implementation." It would save an unnecessary information collection burden on the reporting railroads to eliminate Section 5 from this report and to focus on reporting in Section 7 on the number of districts/subdivisions under field test, revenue service demonstration or implementation for the year, as those are the major PTC implementation milestone goals.

FRA response: FRA disagrees. Section 7 provides a more succinct look at the status of a railroad's PTC network and the railroad's progress towards testing and eventual completion, as required by 49 U.S.C. § 20157(c)(1)(F). While Section 7 is useful from a high-level perspective, Section 5 calls for specific information that is required under 49 U.S.C. § 20157(c)(1)(C). To minimize the burden for the annual report due March 31, 2016, FRA has revised the form to clarify that railroads may describe the extent to which the railroad or other entity is *not* complying with the implementation schedule it provided in its revised PTCIP.

AAR comment: Section 9, “Update on Interoperability Progress and other Formal Agreements,” would present less of an information collection burden on the railroads if it provided a drop-down menu for the status of its tenants rather than inviting an open-ended narrative. A dropdown menu would also give the railroads more confidence that it is providing FRA with consistent information regarding the status of interoperability. The AAR roads are currently working on a standard format to describe tenant/host interoperability status which could be provided to FRA in the future.

FRA response: FRA is requesting that each railroad provide an update in its annual report on its progress towards achieving interoperability under 49 U.S.C. § 20157(c)(1)(G) (requiring railroads to submit any additional information that FRA requests in the annual report); *see also* 49 C.F.R. § 1.89. Given the complexity of cataloging interoperability issues, FRA believed that requiring a narrative for Section 9 was an effective approach. However, FRA recognizes that a drop-down menu could be a helpful addition, thus limiting the narrative portion to general statements or additional descriptions railroads wish to add and will revise the annual form to reflect that change. As AAR generally suggested, FRA is adding a drop-down menu that asks the host to identify each tenant (by adding a line for each), its estimated locomotive fleet (if the tenant does not have a separate PTCIP on file), and implementation status could be very useful.

AAR noted that its members are currently working on a standard format to describe tenant/host interoperability status that it could provide to FRA in the future, and FRA would be willing to consider that format in the future.

AAR comment: We assume completing Section 12, “Updated Information That FRA Can Use to Maintain Its Geographic Information System (GIS) Database – Segments Complete and Operable,” is optional based on the language in the first sentence stating that “a railroad or entity **may** (emphasis added) submit a GIS shapefile.”

FRA response: FRA is requesting that each railroad provide updated information that FRA can use to maintain its geographic information system (GIS) database, and the Act requires railroads to submit any additional information that FRA requests in the annual report. 49 U.S.C. § 20157(c)(1)(G); *see also* 49 C.F.R. § 1.89. Regarding AAR’s comments on Section 12, yes, the GIS shapefile format is optional, but submission of the specific geographical information is mandatory. *See* 49 U.S.C. § 20157(c)(1)(G). FRA needs accurate information about which lines are equipped with PTC to effectively perform its oversight role and its inspection activities. The boundaries of PTC do not necessarily fall within established, delineated points throughout the general railroad network. Therefore, FRA needs this specific geographical information to have a precise understanding of where PTC is in place, and FRA must have a means to easily convey this information to its staff and, most importantly, to its regional inspectors. If a railroad does not submit this information to FRA in a GIS shapefile, FRA will devote internal FRA resources and develop a plan for transcribing the data. However, for the geographical data to be useful to FRA, the railroad must provide enough specificity for FRA to have the ability to visualize and pinpoint the location.