BAILING | Frequently Asked Questions

What is CEPM?

Comprehensive Equipment Performance Monitoring (CEPM) is a multi-phase, multi-year program to create an industry process and related technology tools for capturing data around railcar equipment components. The ability to view railcar component health data will improve safety through the identification of failure trends and a more effective recall process; improve productivity by ensuring that the right equipment stays in service for longer periods; and reduce costs associated with maintenance planning and component recalls.

What benefits will the CEPM program provide?

The CEPM program will give repair shops, equipment owners, reconditioners, classifiers and original equipment manufacturers (OEMs) visibility into equipment and component health status and history, enabling them to identify wear and failure trends as well as defective components. This visibility delivers three primary benefits:

- 1. **Safety:** The rail industry will achieve greater visibility into the current and historical health status of rail equipment at the component level, enabling users of Railinc's Umler system and Car Repair Billing (CRB) to identify failure trends, improve the recall process and improve rail safety.
- 2. **Productivity:** Tracking information on side frames, bolsters and couplers from manufacture to association means that recalls will be issued faster and with greater confidence that only components with identified safety issues are included. With more effective recalls, the right equipment stays in service for longer periods.
- 3. **Reduced Costs:** The capability provided through the CEPM program will ensure more targeted recalls and reduce administrative burdens associated with recalls. Industry participants will benefit from the reduced costs associated with this new recall process.

Who will use the systems enhanced by CEPM and what will they be able to do?

While the entire rail industry—including rail carriers—will benefit from the CEPM program, the five primary industry segments that will access and use CEPM-Side Frames, Bolsters and Couplers functionality will be repair shops, equipment owners, reconditioners, classifiers and OEMs. With CEPM-Side Frames, Bolsters and Couplers functionality:

Repair Shops Can:

- Improve maintenance planning and prioritize work
- Apply registered side frames, bolsters and couplers
- Reconcile work with system records through daily reports
- Query applied and removed side frame, bolster and coupler details

Equipment Owners Can:

- Improve equipment productivity and asset utilization
- Make more informed fleet management decisions
- Validate billing more effectively
- Better plan fleet maintenance

Reconditioners and Classifiers Can:

- Access higher quality data on the components that they recondition
- Seed new component registrations
- Query and review tagged components

OEMs Can:

- Request special reports on side frame, bolster and coupler data
- Get greater insight into the quality and failure rate of the components they produce
- Issue smaller, more effective recalls

How will other rail industry participants benefit from CEPM?

All rail industry participants will benefit from CEPM. For example, American Association of Railroads (AAR) subscribers will be able to receive notifications on which cars and components are affected by recalls. Railroads will benefit from improved safety and reliability of equipment in service, and a decrease in the number of incidents that lead to property and rail damage.

Is CEPM a new Railinc system?

No. CEPM is a multi-year, multi-phase program. It is an ongoing effort to create a way for users to view detailed railcar component health data by leveraging existing Railinc systems such as the Umler system and CRB.

What is CEPM-Side Frames, Bolsters and Couplers?

CEPM-Side Frames, Bolsters and Couplers is the second phase in the CEPM program and focuses on side frames, bolsters and couplers. This includes centralizing the registration of component details and identifying the component association, including AAR and non-AAR repairs. Users will be able to register side frame, bolster and coupler components through Railinc's Umler[™] component registry and report the association of these components via the Umler system and Car Repair Billing (CRB). The development of CEPM-Side Frames, Bolsters and Couplers will occur throughout 2012. Users with permission to access Umler or CRB will be able to report data on side frames and bolsters beginning in June 2012 and on couplers beginning in December 2012.

What level of confidentiality will component data have?

Railinc products and services meet the highest standards for data security and confidentiality. Railinc will support the confidentiality of owner-related information while providing the most value to the industry through safety-related recalls, tracking and health-related inquiries. For example, a reconditioner that is refurbishing a side frame will be able to access historical data related to that specific side frame. However, an OEM will not be able to access another OEM's component data and view information that would provide a competitive advantage. Limited high-level data such as the average life of all couplers, side frames and bolsters, which OEMs can use as a benchmark, will be available to the public through www.railinc.com.

How will users access component data?

You must have a Railinc Single Sign-On (SSO) account to take advantage of CEPM-enhanced systems. To create one, go to www.railinc.com. The SSO login is located at the top, right of the page. Click Register Here and follow the prompts to establish your account. You will receive an email confirmation of your profile, which you must verify within 14 days to unlock your account. You can establish an SSO account anytime during 2012. If you already have an SSO account, you do no need to create a new one.

Once you have established an SSO account, you must request permission to access the Umler system or CRB—the Railinc systems that will have CEPM-Side Frames, Bolsters and Couplers functionality—after you have logged on with your SSO account at <u>www.railinc.com</u>. Current users of these systems will not need to request access again. Users with permission to access the Umler system or CRB can report data on side frames and bolsters beginning in June 2012 and on couplers beginning in December 2012.

Why is Railinc developing CEPM?

Safety is a top priority for the rail industry, which historically has issued expansive recalls to ensure the removal of faulty equipment from service. The result: time-consuming, complicated and costly recalls. The CEPM program will leverage existing systems to capture component data, validate component existence, incorporate mileage information and provide visibility into the current health status of equipment and an initial level of visibility into the health-related history of equipment. This information will help industry participants expedite more effective recall management, improve maintenance planning and make more informed repair decisions, lowering costs and improving safety.

How will this component data facilitate more effective recalls?

The data will ensure targeted recalls and reduce administrative burdens that industry participants face with recalls. Railinc will maintain component details through existing systems that support criteria related to recall requests. If a recall is requested, Railinc will identify all equipment with components that match the recall criteria and provide this information to the AAR, which will file an Early Warning Alert for inspection of the equipment identified for recall.

How will this improve alerts?

Currently, alerts on components do not distinguish between normal wear of parts such as when bolsters are being broken in and critical events such as when bolsters are nearing failure. The data collected through these enhanced Railinc systems will enable data summaries and alerts to be configured based on mileage. This type of enhanced detail will provide a more complete view of equipment health and prevent unnecessary alerts on components that are experiencing normal wear, saving equipment owners time and money. It also will help equipment owners improve maintenance planning by providing detail that will enable a better prediction of a component's time to failure.

How will CEPM-Side Frames, Bolsters and Couplers affect existing Railinc systems?

Repair shops, equipment owners, reconditioners, classifiers and OEMs will register components through the Umler system and will report the association of these components through the Umler system and CRB. Here is how these existing systems will function with CEPM:

- **Umler:** Confidential component details and information about component association to equipment will be stored in the Umler component registry. Component IDs will appear in Umler equipment records when associated with an owner's equipment.
- **CRB:** Information about bolster, coupler and side frame associations or repairs can be submitted through CRB.

The development of CEPM-Side Frames, Bolsters and Couplers will occur throughout 2012. Users with permission to access Umler or CRB will be able to report data on side frames and bolsters beginning in June 2012 and on couplers beginning in December 2012.

How will CEPM-Side Frames, Bolsters and Couplers affect the movement of freight?

The ability to view railcar-component health data will improve productivity by ensuring that the right equipment stays in service for longer periods. Rail carriers will receive better-qualified alerts on components, which will help keep in service cars with components that are not in need of repair or that are not subject to recall.

Will companies be required to use CEPM-Side Frames, Bolsters and Couplers functionality?

Rail industry rules and standards will require repair shops, equipment owners, reconditioners, classifiers and OEMs to use CEPM-Side Frames, Bolsters and Couplers functionality. These rules and standards are in development.

Who is developing the industry rules and standards around CEPM-Side Frames, Bolsters and Couplers and when will they be effective?

Representatives from across the industry, including railroads, shops, equipment owners, manufacturers, industry committees and the AAR, are guiding the development of requirements for CEPM-Side Frames, Bolsters and Couplers. Railinc will communicate to industry participants the details of any rule changes.

Will Railinc provide CEPM-Side Frames, Bolsters and Couplers training?

Yes. Visit <u>www.railinc.com/cepm</u> for a schedule of training events, including webinars, presentations and town hall meetings, and for resources such as technical documentation and web demos. Railinc will update this website regularly during the CEPM-Side Frames, Bolsters and Couplers development period.

What is the timeline for CEPM-Side Frames, Bolsters and Couplers?

The development of CEPM-Side Frames, Bolsters and Couplers will occur in 2012 and in parallel to updates to the component framework. Railinc will make training opportunities and technical documentation available throughout the year. Planned milestone dates for CEPM-Side Frames, Bolsters and Couplers and updates to the component framework are:

- June 2012: Users can register bolsters and side frames through Railinc's Umler component registry. Updates to the component framework will include the inclusion of CRB data for automation and data backfill.
- August 2012: Users can report the association of side frame and bolster components via CRB.
- **December 2012:** Users can register couplers through Railinc's Umler component registry and report the association of side frame and bolster components via CRB. Updates to the component framework will include Early Warning recall notifications and advanced query features.

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