



KB SIGNALING™

News Release

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FOR IMMEDIATE RELEASE

KB SIGNALING DELIVERS MAJOR TRAIN CONTROL UPGRADE FOR FORTESCUE'S HEAVY-HAUL RAIL NETWORK IN AUSTRALIA

*Decade-Long Technology Relationship Expands with Enhanced ITCS Platform,
ElectroLogIXS® Wayside Upgrade, and Advanced Track Monitoring Capabilities*

GRAIN VALLEY, Mo. – July 9, 2026 – KB Signaling Inc. (KBS) is delivering a multiyear upgrade to the Incremental Train Control System (ITCS) that governs train movements across Fortescue's heavy-haul iron ore railroad in Western Australia. The program introduces dynamic en-route trip updates, modernizes wayside server hardware on KB Signaling's ElectroLogIXS® platform, and brings real-time rail condition monitoring to hundreds of kilometers of remote desert track.

The project, now underway and expected to run through mid-2027, deepens a technology relationship with one of the world's largest mining companies that dates back more than a decade. KB Signaling first deployed ITCS on Fortescue's private rail network in the Pilbara region of Western Australia in the early 2010s. Since then, the system has managed train separation, enforced speed limits, and enabled the high-frequency ore movements that connect mine sites to Port Hedland for export.

"Fortescue's operation is built around moving ore safely, efficiently, and without interruption – and ITCS is what helps make that possible at scale," said Craig Daniels, head of commercial at KB Signaling. "This upgrade reflects a level of trust that's been built over many years of working closely together. They are a valued customer and have been early adopters of our technology at every stage of the relationship."

ITCS is a GPS-based, virtual-block train control system that manages train separation, speed enforcement, and movement authority without relying on conventional physical signals or extensive trackside detection equipment. Vital onboard computers – the Ultra-Cab® II platform from KBS – determine train location via GPS and communicate with wayside servers over a

wireless network to receive movement authorities and enforce speed limits. The system can automatically intervene to stop a train that approaches a boundary or exceeds a speed restriction.

For operations spanning vast distances of remote territory, the ultralow wayside footprint matters. Less equipment along the track means lower maintenance costs and fewer field service visits.

Globally, ITCS has accumulated more than 25 years of revenue service and over 2.1 million operation hours across freight, mining, and passenger rail deployments on multiple continents.

Upgrading the Platform

At the core of the current KBS program is a new capability that allows ITCS to update a train's trip data dynamically while the consist is in motion. Under the previous-generation system, any mid-trip change to a train's destination or routing required the operator to stop, pull onto a siding, and reupload a new trip profile before resuming. For heavily loaded ore trains, that stop-and-restart cycle imposed significant delays.

The upgraded system removes that constraint. Dispatchers can now reroute trains on the fly as conditions change – whether responding to congestion at a loading point, shifting to an alternate spur, or adapting to unplanned maintenance windows.

Running in parallel is a server unification program that replaces legacy VHLC[®] systems with KB Signaling's current-generation ElectroLogIXS[®] interlocking platform. ElectroLogIXS serves as the vital hardware backbone of ITCS, communicating the status of switches, signals, and track occupancy to trains in real time and – in virtual signaling territories – determining all signal aspects vitally from train position data and field equipment status. The upgrade gives Fortescue a current, fully supported platform and a clear path for future capability expansion.

The routing upgrade gives dispatchers more flexibility to adjust train movements without delays. The ElectroLogIXS migration addresses the wayside hardware. For equipment spread across Western Australia's extreme heat and dust, where a single field visit can require significant time and travel, the improved reliability and remote diagnostic capability of the new platform directly reduce that exposure.

The project met a significant milestone in February 2026 with the successful cutover of the first ElectroLogIXS-hosted ITCS server, retiring the legacy VHLC equipment. Further upgrades are in progress, with complete ElectroLogIXS deployment scheduled for completion by the end of 2026.

“This upgrade gives Fortescue the ability to adapt in real time without stopping a train – and it puts the wayside hardware on a modern, supportable platform. That combination changes

both day-to-day flexibility and long-term sustainability,” said Pete Rogers, director of projects at KB Signaling.

Next-Generation Rail Intelligence

Beyond the core contract, KB Signaling is deploying several of its newest technologies for evaluation on Fortescue’s network.

Fortescue is trialing Electro Code™ 6 (EC6™), an advanced digital track circuit that enables precise train detection, longer-segment operation, and data-driven insights into ballast condition and rail integrity. EC6 is an upgrade from an earlier-generation Electro Code product already in service on the network, with Fortescue looking to take advantage of EC6’s enhanced diagnostic and detection capabilities.

KB Signaling is also deploying its Rail TempEst™ application, which runs on the company’s Wayside Intelligence platform and uses existing track circuit infrastructure to estimate rail temperature in real time. Conventional practice relies on regional weather forecasts to gauge when thermal expansion might compromise rail integrity – often triggering broad slow orders across long stretches of track as a precaution. The Rail TempEst solution provides circuit-level data instead, allowing targeted speed restrictions over specific short segments so railroads can maintain higher average velocities while improving safety precision.

“Fortescue consistently pushes us to bring our newest capabilities into their operation,” said Daniels. “That willingness to evaluate emerging technologies alongside proven systems is what keeps the relationship productive.”

Global Collaboration, Local Presence

The latest Fortescue project also shows how being a part of the Munich, Germany-based Knorr-Bremse Group has greatly improved the company’s ability to serve international customers. KB Signaling joined the Knorr-Bremse Group in 2024 following Knorr-Bremse’s acquisition of Alstom’s North American conventional signaling portfolio. Since then, the company has reestablished direct lines of communication with Fortescue and built local support capacity by hiring Australia-based technologists familiar with its product portfolio through the Knorr-Bremse Group’s Australian operations.

Fortescue now has on-the-ground expertise locally and a direct connection back to the core technology and project teams in the United States – a level of responsiveness that has strengthened the working relationship and positioned KB Signaling as a more accessible, globally coordinated support provider.

“From the day we became KB Signaling, we reached out to our Knorr-Bremse colleagues in Australia to build a better support model,” said Daniels. “That collaboration across

time zones has made a real difference for Fortescue – and it's the kind of approach we're replicating in other markets where our technology is a fit.”

Expanding International Reach

The Fortescue project is part of KB Signaling's broader strategy to grow its international presence in heavy-haul and mining rail markets – a priority that has accelerated since the company joined the Knorr-Bremse Group. With renewed engagement in Australia, growing activity in South America, and interest from operators in other resource-intensive regions, KB Signaling is connecting its proven train control, wayside intelligence, and track monitoring technologies with a wider customer base through the Knorr-Bremse Group's global structure.

The international expansion reflects the Knorr-Bremse Group's broader strategic intent to develop scalable Control, Command, and Signaling (CCS) offerings worldwide. KB Signaling plays a central role in that effort, bringing end-to-end signaling system capabilities and established engineering leadership to markets where operators are looking for alternatives to rigid, vertically bundled systems – solutions that support local integration, work with existing infrastructure, and deliver long-term flexibility.

KB Signaling's work with Fortescue demonstrates that the company can deliver complex, multiyear train control programs to international customers while providing the kind of direct, responsive technical support that heavy-haul operators require – backed by local presence and global engineering depth.

About KB Signaling

KB Signaling develops and supplies unparalleled end-to-end wayside and onboard conventional signaling Control, Command, and Signaling (CCS) platforms and solutions. A trailblazer, we are driven to provide the best solutions for improved safety, performance, and lower overall operating cost for today's transit and freight railway systems and operators in North America and beyond. Our 700 team members have a deep customer commitment that fuels us to deliver solutions for improved rail performance, safety, and overall operating cost. KB Signaling is a member of the Munich, Germany-based Knorr-Bremse Group, the global market leader in braking systems and a leading supplier of other safety-critical rail and commercial vehicle systems. Visit us at [kb-signaling.com](https://www.kb-signaling.com). Follow us on LinkedIn at <https://www.linkedin.com/company/kb-signaling>.

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