



Abstract Title: To close in on the causes and background of the Shinkansen coupling incidents and realize “Safety as a top priority of management”

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Intervention outline by JR East Union

To close in on the causes and background of the Shinkansen coupling incidents and realize “Safety as a top priority of management”

On September 19, 2024, between Furukawa Station and Sendai Station on the Tohoku Shinkansen line, the coupled “Hayabusa” and “Komachi” trains were decoupled while traveling at 315 km/h, causing the trains to come to a stop on the tracks. Additionally, on March 6, 2025, the coupling between the “Hayabusa” and “Komachi” trains got separated while the trains were traveling at 60 km/h between Ueno Station and Omiya Station on the Tohoku Shinkansen line, causing the trains to come to a stop on the tracks. In both incidents, there were no injuries to crew members or passengers. However, due to the recurrence of such incidents, the Ministry of Land, Infrastructure, Transport and Tourism's Transportation Safety Commission has identified them as major incidents, and investigations to determine the cause are currently ongoing.

After the incident in March 2025, JR East assumed it was due to abnormalities in the electrical circuits or terminal issues in the coupler of the “Komachi,” as it was found that a splitting operation had been repeated on the side of the “Komachi.” The company has since resumed operations of the “Hayabusa” and “Komachi” trains in a coupled mode with mechanical devices installed to prevent splitting.

JR East identified that the first splitting incident had been caused by metal fragments discovered behind the switch that triggers forced splitting, which resulted in short-circuit. Although operations were resumed after identifying this cause, similar incidents occurred within a short period, prompting the need for a thorough investigation into the root cause and implementation of countermeasures.

The JR East Union views this situation seriously and believes it is essential to not only identify the direct cause but also investigate the underlying reasons and circumstances that led to the incidents.

The Tohoku Shinkansen has been plagued by ongoing issues since the end of 2023, when a notice was posted by the head of the Shinkansen Operations Headquarters stating, “We will not stop or delay the Shinkansen,” “We will pursue structural reforms aimed at maximizing profits



while continuing to increase revenue and reduce costs, and remain committed to generating revenue.” On January 23, 2024, a power outage caused by a sagging overhead line occurred between Ueno Station and Omiya Station on the Tohoku Shinkansen, followed by an electric shock accident during restoration efforts. In March of the same year, there was another power outage on the Tohoku Shinkansen, followed by a prolonged transportation disruption in April due to a malfunction and oil leak in a maintenance vehicle between Fukushima Station and Shiraishi-Zao Station on the Tohoku Shinkansen. In June, a hole was discovered in equipment under the floor after passengers reported unusual noises, and in September, a train splitting occurred between Furukawa Station and Sendai Station on the Tohoku Shinkansen. In November, the pantograph of a Shinkansen train in operation was damaged, along with damage to overhead power lines, and in March 2025, a train splitting occurred between Ueno Station and Omiya Station on the Tohoku Shinkansen.

One of the factors contributing to these issues is believed to be cost-cutting measures. Cost-cutting efforts have been implemented not only on the Shinkansen but across all systems, including the closure of station ticket windows, the removal of clocks from station premises, and the removal of televisions from workplaces. Additionally, maintenance methods have shifted from TBM (time-based maintenance), which involves regular component replacements, to CBM (condition-based maintenance), which addresses issues only when faults or problems are detected. In the case of power outage caused by a sagging overhead line, the heavy counterweight rods, which were said to have a service life of 30 years, had been used for 38 years. Additionally, electronic devices used in the vehicle-mounted split and combine device have exceeded the manufacturer's recommended use period.

JR East has declared that “safety is the top priority of management,” but to truly achieve this, JR East Union will delve into the underlying causes of incidents and propose measures to overcome them.