

# Office of Rail and Road publishes interim report on Hitachi train cracks

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The Office of Rail and Road (ORR) reports in its interim review that Hitachi's Class 800 and 385 series trains were affected by stress corrosion and fatigue cracks. These resulted in a significant number of Class 800 trains being withdrawn from service in May.

The regulator also commends the rapid industry response and subsequent work to safely reintroduce trains to service.

Cracks found in the area of the bolster close to the yaw damper bracket and anti-roll bar fixing points were a result of fatigue, and cracks found in the area where the lifting plates attach to the vehicle body were the result of stress corrosion cracking.

Stress corrosion cracking occurs when susceptible materials are exposed to a specific corrosive substance while subject to stress.

ORR's report found that once the cracks were identified, the industry worked collaboratively to swiftly withdraw the trains and then to establish a suitable process for assessing which trains were able to return

to service.

The regulator's interim report finds that since being put back into service, trains have performed as specified, with no unsafe conditions or harm arising from the cracking.

ORR continues to work with Hitachi and the industry and expects to publish a final report in December 2021.

HM Chief Inspector of Railways at ORR Ian Prosser CBE said: "Our interim findings confirm the cracking in the yaw damper and lifting plate are a result of fatigue and stress corrosion cracking – and that Hitachi made the sensible decision to withdraw all trains.

"Since then, the majority of trains have been put back into service with no unsafe conditions and no harm arising from the cracking.

"I welcome the good collaboration that has taken place since this issue arose. We are continuing to work with all parties to determine the root cause and will publish our final report in December."

ORR's final report will establish the root cause of the cracking and will review Hitachi's plan for long term fleet recovery and management and identify any areas for improvement for the industry.

In June, ORR published its review of the impact on passengers which found train operators affected by the cracks provided clear and consistent information to passengers during the disruption.

ORR's passenger review also identified areas aimed at further reducing the impact on passengers should similar disruption occur in future.

Hitachi Rail spokesperson said: "The ORR's interim report highlights how the industry took timely and appropriate decisions to maintain the highest levels of safety. This collaborative approach also helped to get trains back into service so passenger disruption was kept to a minimum.

"The interim report also demonstrates the significant amount of detailed, and independently verified, assessments Hitachi Rail has conducted to keep trains running safely. Our enhanced maintenance regime is helping to deliver stable passenger service, while we work tirelessly with all partners on long-term solutions."

*Photo credit: Office of Rail and Road*