Derailment and fire involving a tanker train at Llangennech, Carmarthenshire, 26 August 2020.

On publication of RAIB's report concerning the derailment and fire involving a tanker train at Llangennech, Carmarthenshire, on 26 August 2020, Simon French, Chief Inspector of Rail Accidents, said:

"Trains carrying dangerous goods play an important role in the UK economy, but the risks which their operation presents must be adequately controlled. The consequences when things go wrong can be disastrous, as we saw at Llangennech in August 2020. Thankfully no one was hurt, but people were evacuated from their homes and the damage, both to the environment and to people's livelihoods, will take years to put right. The accident also closed the railway line for more than six months whilst the railway was being rebuilt and engineers worked to minimise the damage to the local environment.

"The rail industry's approach to the safe maintenance of freight wagons needs to improve. In this investigation we found that there were inadequate maintenance practices, and a failure to appreciate the importance of the correct fastening of the various components of the tanks wagons' braking system. This is not the first time that we have investigated an accident where RAIB has identified serious issues with the maintenance of a freight train. Over the last decade we have identified deficient wagon maintenance as a factor in more than ten investigations, including maladjusted suspension, undetected frame twist and worn bogie pivot liners.

"In our report we have recommended a review of the technology and systems currently being used in the UK and other European countries to identify how improvements can be made to the railway's ability to detect a wagon defect that may lead to a derailment, such as dragging brakes. The smarter use of track side technology to warn the railway that a train is endangering its infrastructure is a familiar RAIB theme; some of our previous investigations have urged the greater use of wheel impact load detection data to identify uneven wheel loads. RAIB would like to see more work in this area focused on how track side systems could be used to reliably detect dragging brakes, but also, how such data can be used in an intelligent way to benefit both real-time operations and fleet maintenance management.

"The majority of our recommendations following our extensive investigation of the derailment at Llangennech relate to improved maintenance processes for freight wagons. The widest ranging of these urges the freight sector, in conjunction with Network Rail, to develop a comprehensive programme of measures designed to promote the improvement of freight wagon maintenance in the UK. This is intended to be a collaborative effort, which is appropriate given the potential benefits of better information sharing across the sector.

"I would like to stress the importance of getting this right. It's time that freight wagon maintenance practices were subject to careful examination and for the industry to think through the way that it can best deliver on its legal and moral obligation to present wagons that are fit to operate through the nation's towns and cities. The prize for getting this right is improved safety, better reliability and compliance with the freight sector's legal obligations – and all at a reasonable cost.

"Since RAIB has been concerned about the quality of freight wagon maintenance for many years, I welcome the actions that ORR has taken to reinforce its supervision of entities in charge of maintenance. This will provide improved visibility of maintainers' important work and verify the extent to which the important role of ECMs is properly understood and applied across the UK freight sector, and the adequacy of surveillance undertaken by certification bodies (whether based in the UK or in the EU).

"I have been struck by the extent to which the safe condition of freight wagons is critically dependent on people being given the tools and training they need to do a difficult job, very often in dark, wet and cold working conditions. So, I urge freight operators and maintainers to think carefully about the people who do the hands-on work, and the things that could be done to develop the capability of the work force."