Passenger train derailment at Carmont, Aberdeenshire, 12 August 2020

On publication of RAIB's report concerning the passenger train derailment at Carmont, Aberdeenshire, 12 August 2020, Simon French, chief inspector of rail accidents, said:

"This was a tragedy that devastated the lives of the three families who lost their loved ones and brought terror and injury to six other people on the morning of 12 August 2020. Our thoughts are with them all. Nothing can undo this event, but we owe it to everybody who was affected by it to strive to learn safety lessons for the future.

"Although railway safety in the UK has been steadily improving over recent decades, the tragedy at Carmont is a reminder of just how disruptive and potentially dangerous Britain's volatile weather can be. The railway industry needs to get even smarter about the way it counters this threat, and to better exploit remarkable modern technology that enables the prediction and tracking of extreme weather events such as summer convective storms. There's also an urgent need for the railway to provide real-time decision-makers with the information, procedures and training they need to manage complex and widespread weather-related events across the rail network.

"No one wants to shut down the railway every time it rains. Railways need to operate safely and reliably in most weather conditions. If they're not able to achieve this, potential passengers will be forced onto the roads, which are undoubtedly much more dangerous in bad weather conditions. So, there's a balance to be struck and technology can help to get this balance right. Modern weather forecasting and monitoring systems can spot the truly exceptional events before they occur and as they happen, so allowing railway operators to implement precautionary measures when it's prudent to do so. This would benefit the safety of the line (by restricting train speeds, or suspending operations, when necessary) while reducing the need for imposing blanket speed restrictions over areas that are not at significant risk.

"This investigation highlights the risk of uncontrolled changes to railway infrastructure during construction. It is so sad that a project that was designed for the protection of the travelling public became unsuitable for its intended use and posed a hazard to trains because of such uncontrolled changes to the design. When anything is built in difficult conditions, such as on the side of a steeply sloped cutting, changes will often be needed for practical reasons. Although such changes are normal and can be highly beneficial in terms of saved time and cost, they need to be made with care. In each case, the original designer needs to understand the change that's proposed and review the implications of a change that may appear inconsequential to the team on site. I hope this example will resonate throughout the UK's construction industry.

"It's important for all of us in the rail industry not to dismiss this truly harrowing accident as a one-off event. The railway industry needs to think through the implications of severe weather on its infrastructure, whilst also looking to the behaviour of trains should they derail after striking obstructions such as washouts and landslips. Is there more that could be done to keep trains in line and closer to the track, to minimise the risk of jack-knifing and to keep bogies attached to rail vehicles? RAIB doesn't have all of the answers but is urging the railway industry to think about ways of guiding derailed trains, and to think about the longer-term implications of continuing to operate rolling stock that pre-dates modern standards."