

## **Report 03/2020: Class investigation into human performance in signalling operations**

### **On publication of RAIB's class investigation into human performance in signalling operations, Simon French, Chief Inspector of Rail Accidents, said:**

“The decisions made by signallers have an immediate, vital impact on the safety of people using the railway. Whether giving a level crossing user permission to cross the line, or making sure that track workers are protected from the approach of trains, a good decision by the signaller is often the last line of defence against tragedy.

“It's easy for an outsider to assume that on the modern railway, everything to do with signalling trains is automatic, fail-safe, and relies on the latest technology. While there is a huge amount of complex hardware and software out there, supported by thousands of engineers and technicians, many decisions about everyday operations are still down to the human beings who operate the system.

“RAIB has been concerned for some time about this decision-making process, and how the performance of signallers can be affected by multiple, systemic factors that are within the control of railway management. As the railway has got busier, so the demands on the signaller have increased. Much of what signallers deal with – mostly successfully – is down to experience and implicit knowledge, but current processes don't recognise this.

“When, rightly, managers seek to reduce the amount of work on the track that is done while trains are running, the burden on the signaller, to block the line so that work can take place, increases. When trains get faster, so that it's no longer possible for users of private level crossings to rely on seeing them approaching in time to be able to cross safely, the signaller has to respond to more telephone calls asking for permission to cross. As the areas supervised by signallers get larger, many more level crossing users, and track workers, are phoning up during each shift. It's asking a lot of signallers to always make the right call, and we have found that the support they need isn't always there.

“We are recommending that Network Rail looks closely at how it manages the day-to-day work of signallers. The experience and knowledge of signalling staff is a vital asset, and needs to be properly and consistently developed, supported and made use of, for the safety of everyone who interacts with the railway.”