

RSSB Human Factors

Case Studies - Operations

Causes, risks and mitigation of station stopping incidents

Issue

There are over 2500 stations in Great Britain and annually there are approximately 500 'station overruns', i.e. events where a train is scheduled to stop at a station and stops beyond the end of the platform so passengers cannot alight safely.

350 of these are associated with human error, as opposed to low-adhesion (normally brought about by the effects of leaf-fall and a build up of contamination on the railhead). There is an unknown number of 'failure to call' incidents where a train is scheduled to stop, and for a number of reasons, fails to stop at all.

Station stopping incidents represent a significant problem for passengers, though there are also reported problems for safety, operational and business performance.

What we did

Reviewed various industry data sources to understand the human errors leading to these events.

Workshops and interviews were held with key stakeholders to identify current management practices, focussing on reactive actions (for example: investigation effectiveness, relationship to recommendations etc) and preventative measures (for example: improved information provided to drivers, development of professional driving policies etc).

What we found?

All reported incidents are investigated and root and underlying causes are identified by operating companies.



The causes of the different types of station stopping incident are largely the same; slips and lapses by the driver, though errors in planning and information provided to drivers were also important.

Drivers that have two or more incidents are significantly more likely to have had other incidents, though there was no sequence effects (i.e. there were no patterns to the order in which drivers had incidents) so a driver that has a less minor incident can go on to have a more serious one, and vice-versa.

Some companies are starting to embrace human factors and human error in an effective way as part of their incident investigations and this has also seen improvements in the linkage between the incident causes and recommendations.

The direct impact on safety of station stopping incidents is generally small, though the indirect impact on safety is more significant. People exiting at the wrong points and at unintended stations can lead to injury; primarily these are slips, trips and falls.

What next?

The next phase of the project is to identify what data the industry needs to know about these incidents, and more importantly, what actions are necessary to help drive continual improvements.

