

RSSB Human Factors

Case Studies - Engineering

Selective door opening (SDO)

Issue

In March 2007, SDO emerged as an issue due to the number of incidents occurring and risk of a person falling, or dismounting from a train, other than at a station platform”.

A train operating company approached the RSSB Human Factors team for support to understand what was leading to so many errors and identify mitigations for these errors.

What we did

The issues were reviewed via the following methods:

- Familiarisation: fact finding trip on two classes of train which led to the production of a task analysis for SDO operations on both types of rolling stock; review of HMRI reports.
- A workshop with guards, drivers and managers to identify hazards associated with SDO on specific rolling stock.
- Review of the operator’s SDO incident inquiry reports to understand the causal factors that may have led to the incident.

What we found?

Several areas were identified, which the operator has found useful and is now addressing. Topics included:

- Improve communications between front line staff;
- Improve the design of equipment (Passenger Information System (PIS) and door control system)
- Improve information for passengers and guards
- Review management processes

