

Case study

Reducing slips, trips and falls in railways

Railway safety has always been imperative for infrastructure companies, train operating companies and all other railway system providers.

When most people think of safety, several high profile issues tend to come to mind: derailments, signals passed at danger (SPADs) and incidents at level crossings, etc. These areas of safety have historically received heavy focus and generally performance has shown a year on year improvement in these critical areas. What many consider as a 'lighter' subject is the issue of accidents in stations, depots and on-trains involving people falling over, these incidents are known as Slips, Trips and Falls (STFs). In this area of safety, performance in controlled environments is deteriorating.

STFs have been highlighted as a focus area by the Health and Safety Executive (HSE) and railway companies are now gaining attention from the HMRI for their response to the increases in occurrences of these type of accidents.

Safety managers at GNER have acknowledged the issue of STFs and have made a corporate commitment to address the problem. As a result of Arup's experience of reducing STFs with train operating companies, we were selected to partner GNER to assist

in the development and implementation of the STF reduction programme.

York station was selected as a pilot environment to develop the STF reduction methodology that could then be rolled out throughout the remainder of GNER managed stations.

Our specialist consultants worked closely with management and staff to develop a programme that would reduce occurrences and provide a sustainable programme based on continuous improvement principles such that over time the culture changed.

We developed a training plan that was delivered to all staff and local management and that also assisted the station management in the implementation of the programme.

This included the development and implementation of customised tools for proactive reporting of hazards, near misses and dangerous behaviours and managing the data collected by front line staff to enable identification of 'hot spots' such that preventative measures could be taken before the occurrence of an accident.

This approach involved placing the ownership of controlling risk with front line staff and supporting them in this



A collapsed wet floor sign turns into a trip hazard



A spillage is warned using cones but customers are allowed to walk through exacerbating the problem

quest. It is estimated that reported accidents form only 1-2% of the STF problems present and as such the objective of the programme was to eliminate all potential risks and therefore reduce or stop accidents.

Within the first two months of operation the STF programme has already been responsible for highlighting some 60 'hot spot' incidents and this has been the basis of three separate corrective action interventions.

It is acknowledged that this kind of programme will not provide a quick fix for the challenge of STF accidents but will reduce the number of accidents in the medium to long term by pro-actively addressing root causes and effectively changing the safety culture within the organisation.

For more information on this subject please contact Ian Rowe: ian.rowe@arup.com



Route choice can be an issue. Customers that are impaired physically (personally or by luggage) choose to use the stairs and not the lift