Preventing Track Workers Being Struck by a Train

What is the situation?

As the need to undertake work on or near the track (open lines) continues, our track workers are continuing to get struck by trains. Increased volumes of traffic and operating hours, along with fewer signallers will in future exacerbate the need for safer trackside working and increase this risk. As a result, both protection and warning systems are required for the future. These must be of a higher integrity and remove the potential for human error. The Safer Trackside Working Programme (STW) sets out to contribute to the elimination of track workers being struck by trains through risk reduction by deployment of Network Rail’s Trackworker safe access strategy.

The deployment of this risk reduction strategy is a phased approach over a number of Control Periods. The STW programme is designing and developing new protection and warning systems. These new systems will be both tactical short term solutions to give some early reduction of risk and longer term sustainable solutions aligned to deployment of digital railway technologies.

Analysis of causes

- Lack of local knowledge
- Emergency/reactive response
- Size of problem
- Availability of training

Scope

This strategy for sustainable risk reduction was built on the following principles:

- Highly reliable Train Blocking Systems and Technical Activated Warning Systems
  - Low human error failure modes
  - Low installation failure modes
  - Low complexity of use
  - Low hardware costs
  - Low installation costs
  - Low system maintenance costs

Very high number of installations to maximise geographic coverage and availability to track workers to gain maximum impact to the risk profile.

The strategy is to continue reduction of the national risk profile through the early deployment of high integrity tactical protection and warning systems. At the same time sustainable long term solutions are developed that will be dependent upon, but exploit and compliment digital railway technologies.