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 **Track & Infrastructure**

# Zonegreen

## Spearheading Improvements in Depot Safety



**W**orking in a rail depot is inherently dangerous – high-speed vehicles, high-voltage electricity and powerful machinery are just some of the risks staff face every day.

So why isn't there more focus on improving safety standards? Should workers accept that injury (or worse) is part of the job?

According to RSSB figures, maintenance facilities account for 20% of all workforce harm and 25%

of workforce fatalities in the last five years. This impaired health is a huge problem for the industry. The safety board estimates it costs £899 million annually, with 1.3 million days lost to sickness absence. This is twice the national average.

Despite these frankly shocking statistics, there has been no notable reduction in workforce harm in depots for the last five years. Surely it is time for change?

### Mitigating Risks to Staff

We've all heard the adage 'to err

is human' and that may be so, but we don't have to accept the risk of human error in rail depots.

Technology is available that can automate safety procedures, removing manual processes and allowing the safe and effective movement of vehicles.

The rail safety specialist, Sheffield-based Zonegreen, has been finding innovative ways to reduce the risks to maintenance staff for the last 25 years. The firm's Depot Personnel Protection System (DPPS) safeguards workers by using Network Rail-approved powered

derailers, linked to road end panels that control vehicle movements.

Staff log on to the road end panels via RFID tags that record where they are working. Access permission for trains will then only be given if the road is clear. After a derailler has been lowered, a shunt signal shows a proceed aspect, at which point audible and visual warnings are activated to signify imminent danger.

## Tried and Tested

Quality is the key to ensuring depot protection has a real and lasting impact on the welfare of staff and DPPS leads the way.

Zonegreen's system is tested, during and post-construction, to prove it exceeds the highest regulatory standards and offers unrivalled reliability. At its heart is the concept of 'distributed intelligence', which means there is no master controller or any signal point failure.

Empty coaching stock movements (predominantly in depots) make up only 4% of the train service nationally, yet account for almost 20% of SPADs, highlighting the need for derailleurs to be readily available to provide physical protection to staff. They are required to operate under significant forces when called into action, meaning quality products are essential if reliable results are to be achieved.

All derailleurs provided by Zonegreen are produced to the highest standard, fabricated by coded welders and supported by material certificates. Likewise, its road end panels undergo 3,000 independent

checks and by using a local supply chain, the firm has total control of the manufacturing process, whilst minimising its carbon footprint.

The result of this commitment to quality is that all DPPS installations meet the performance requirements of SIL2 – an independent assessment of the relative risk reduction provided by a safety system. This has been achieved by employing standardised hardware and software that has been assessed as a whole system, instead of relying on compliant off-the-shelf components and software of unknown pedigree.

DPPS is the only depot safety system on the market that is independently certified to comply with the electromagnetic compatibility (EMC) standards, which define the frequency range and limit of unnecessary radiation emitted by electrical devices, preventing interference or similar problems. Its latest RFID panel is also certified by Eurofins to meet the EN standards for radio emissions and railways.

## Working Worldwide

DPPS is installed some of the

world's most advanced maintenance facilities, including depots serving the metro systems in Dubai, Doha and HCMT in Melbourne, Australia. Zonegreen also works extensively across the UK and has contributed to high-profile projects such as Thameslink, Crossrail and the Intercity Express Programme.

The firm will be showcasing its flagship safety system at InnoTrans in Berlin from 20–23 September. Visitors will find Zonegreen in the British Pavilion (Hall 2.2) on Stand 230G, where they will be able to see DPPS in action and learn about its wide-ranging capabilities.



Depot Equipment

**For more information, contact**  
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on Twitter: @zonegreen.





# WHAT'S THE COST OF LIVING?



Renowned as global market leaders in depot protection systems, the **SMART DPPS™** delivers physical protection from vehicle movements to rail depot staff whilst providing visual and audible warnings.



**InnoTrans 2022**  
20–23 SEPTEMBER  
BERLIN

Visit us at Stand 230G / Hall 2.2