

# Zonegreen

## Improving Safety One Depot at a Time

### How many workplace fatalities are too many?

In 2023/24, two people died at work on Australia’s railways and yes, that’s two too many. In addition, 23 incurred serious injuries. Both figures are an increase on previous years.

These statistics are from Australia’s Office of the National Rail Safety Regulator (ONSR) report, which pledges to ‘influence safety practices and build safety knowledge’ as a strategic priority by 2027. To do this, accredited operators have been assigned to the rail sector to identify where safety procedures need to be improved or implemented, including in yards, sidings and terminals.

As these statistics prove, rail maintenance depots are undeniably dangerous places to work. Moving vehicles, high-voltage electricity and powerful machinery create daily risks for staff.

The good news is positive steps are being taken at ground level. In the last ten years, four depots in Australia have invested in Zonegreen rail safety solutions, which are supplied by local partner, Andrew Engineering. All are now using the Zonegreen Depot Personnel Protection System (DPPS) to automate safety and remove the margin for human error.

### Unrivalled Expertise

DPPS allows rail vehicles to be moved safely and efficiently around maintenance facilities, whilst providing physical protection to staff. Workers log on using personalised RFID cards that record where



they are located in the depot and prevent Network Rail-approved derailleurs from being lowered, stopping vehicles entering a road where staff are logged on to work.

Train movements can only be authorised by a supervisor, using a road end panel positioned in a convenient location within the maintenance building – they are normally located near the doors to give a

clear line of sight to incoming and outgoing trains. This can only happen when all personnel have logged off the road and it is safe for the movement to take place. The shunt signal will then move to 'proceed' after the derailer has been lowered and audible and visual warnings are activated to let everyone know a train is in motion.

Included within the DPPS package is the advanced Zonegreen Depot Manager SCADA software, which offers an overview of the entire protection system and complete traceability. It displays the location of personnel and the status of plant and equipment, whilst providing key information to make operations easier and quicker to implement.

DPPS is one of the safest systems on the market, boasting independent certification to prove its compliance with both the hardware and software requirements of SIL 2 – a reliability assessment of the relative risk reduction. It is also the most thoroughly tested and proven in use, offering a low-risk option to depots looking to improve their working environment.

The benefits of DPPS are extensive. It utilises modern electronics to future proof the system, boasts an innovative software design to allow for future depot upgrades, is easy to modify and expand according to a depot's requirements and includes an 'inputs and outputs' diagnostic feature that makes maintenance easier, whilst also expanding the lifetime of the product.

## Government Approval

Last year, DPPS received official government product approval from Transport for New South Wales (TfNSW), which leads the development of safe, integrated and efficient transport systems.

The design and functionality of DPPS was found to comply with industry standards and safety regulations by the director of signals and control systems on behalf of the New South Wales government.

Two depots in the region now operate the system, with the most recent installation taking place at the new billion-dollar Mindyarra Maintenance Centre in Dubbo. Three tracks at the entrance to the purpose-built facility have been fitted with road end panels (REPs), operating the Crowder derailers. Andrew Engineering



worked closely with main contractor, CPB Constructors, to install the Zonegreen system equipment as part of the final stage of the depot's development.

*Christian Fletcher, Head of Engineering, said: "It is a huge honour to receive product approval for DPPS, after providing Australian rail personnel with safer working conditions for more than a decade. It is a testament to the quality of the Zonegreen DPPS product and the continuing relationship with Australian partners, Andrew Engineering. Following installation, contact with the depots is maintained so they can be supported for upgrades or any queries they may have about the system."*

Zonegreen rail safety solutions are the result of more than a century's engineering experience and are currently protecting maintenance workers and infrastructure worldwide. The innovative products not only include DPPS, but also the Zonegreen Points Converter and the latest addition to the range – the Zonegreen Electronic Interlocking Solution (EIS), a modern interlocking system. Each product is renowned for its quality, safety and reliability, and can be tailored to the individual needs of a depot.

## Zonegreen at Ausrail

Zonegreen rail solutions will be available to view at this year's Ausrail exhibition, held at the Melbourne Convention and Exhibition Centre from November 25-28.

Information about the full range of products will be available from Andrew Engineering on stands 89,106 and 107.

This is the fifth time Zonegreen solutions have been exhibited at the event, which attracts more than 100 exhibitors and 6,000 attendees.

To find out more, telephone (0114) 230 0822, visit [zonegreen.com](http://zonegreen.com) or follow on LinkedIn: [Zonegreen Ltd.](#)





# SAFE. EFFICIENT. RELIABLE.

## Zonegreen Electronic Interlocking Solution (EIS) for rail depots.

Zonegreen EIS is a state-of-the-art safety system designed to control depot equipment and access to hazardous areas. Zonegreen EIS uses fail-safe principles to prevent personnel injury or costly damage.

[zonegreen.com](http://zonegreen.com)

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