

Listen & Learn sessions



BETTER TOGETHER
Southern Railway System



HUMAN NATURE:
AT ITS BEST

Ground Control and Geofencing
James Hanna
19.05.26



Who Are We?

- ❖ Established in 1973 (current ownership since 2004)
- ❖ Privately owned **Entrepreneurial** business
- ❖ Owned by its **employees**
- ❖ **Growing** sustainably - turnover 2004 **£8m**, 2024 **£220m+**
- ❖ **Absolute focus on Safety, customer service and outstanding delivery**

A few additional things you might not know about us...

- Queens Award in Innovation twice for systems
- Principal Contractor Licence and POS Licence Holder
- Service all Network Rail Routes in the UK
- We own and manage 2 environmental recovery centres – 400 acres.
- We own one of the largest EV fleets in the UK

500+
Clients

45,000+
Sites

1,100+
Employees

1,500+
Teams

RAIL AND INFRASTRUCTURE SERVICES



STRUCTURAL EXAMINATIONS



ROPE ACCESS, ASSET INSPECTION



PONTOON ACCESS



CCTV EXAMINATIONS, CULVERT JETTING



DRONE SURVEY, DATA CAPTURE AND ASSET ANALYSIS



MECHANISED ARBORICULTURE AND SITE CLEARANCE



DRILLING AND GEOTECHNICAL ENGINEERING



ECOLOGY SURVEYS AND BIODIVERSITY ENHANCEMENT



SURFACE REPAIRS AND CIVIL WORKS AROUND STATIONS AND DEPOTS



SWEEPING, TANKER AND PRESSURE CLEAN SERVICES



ROAD TO RAIL (RRV) ON-TRACK OPERATIONS



FENCING AND BOUNDARY PROTECTION



VEGETATION MANAGEMENT



LANDSCAPING AND TREE PLANTING



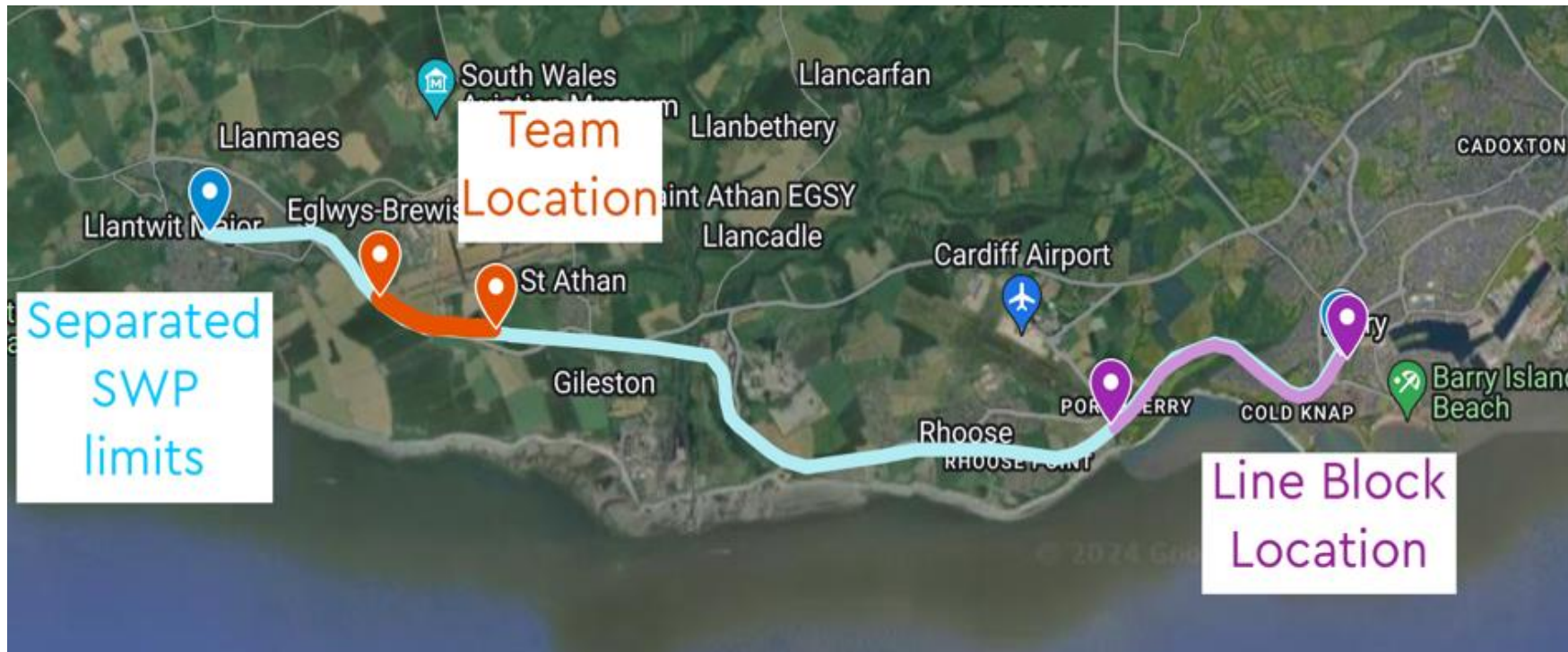
Some Context.....

On the 23rd of May 2024, a Ground Control team was out scoping on the Up VOG Line. The team was working under the assumption they were within an approved line blockage which covered an area from 0m to 09m.

After around 15 minutes the Site Warden heard and then saw a train approaching on the Up VOG Line. The team immediately moved to a position of safety in the Up Cess and acknowledged a train going past them. The train driver sounded his horn as he passed the group and carried on its journey.

The COSS rang the signaller and handed back the line block. It quickly became clear to the team that the approved line block was for 00m to 02m 10ch and the team was outside of those limits.

The incident was reported to Route Control and the Mobile Operations Manager met the team at the access point. Witness statements were submitted and for cause Drugs and Alcohol tests were completed.



HUMAN NATURE:
AT ITS BEST

Immediate Cause:

- A group working for Ground Control Limited was scoping unknowingly on an open line, outside of their approved line block limits. In a P.O.S only 6 seconds before train passed.

Root Causes:

- The Ground Control Planning Manager made a mistake when reading the initial line block request from the RM and only booked a block from 0-2m10ch rather than 0-9m.
- The project team assumed that the line block documentation was correct as per the original request, and the RM did not review the line block form before handing it to the COSS/PIC.
- PIC/COSS failed to review his SWP signal diagrams alongside the line blockage form before requesting the Line Block
- Classic Swiss cheese model of incident causation

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**Please request video from
James Hanna, Client Director
james.hanna@ground-control.co.uk**

How did we respond?

- Recognised a growing trend in LB/Possession Irregularities
- Not just within GC but a wider industry issue
- Situational awareness a common factor
- Highest area of risk around placing protection and where lines remained open to traffic
- Recognised the potential benefits Geofencing could provide to our operations
- Conducted an initial demo, followed by a more in depth 12 month trail in W&W
- 30 units at a cost of £55k inc tech support. Approx £2k per unit P/A



OFFICIAL
TENDED VIDEO

**Please request video from
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Outcomes and Learnings:

1. Correct placement of protection equipment

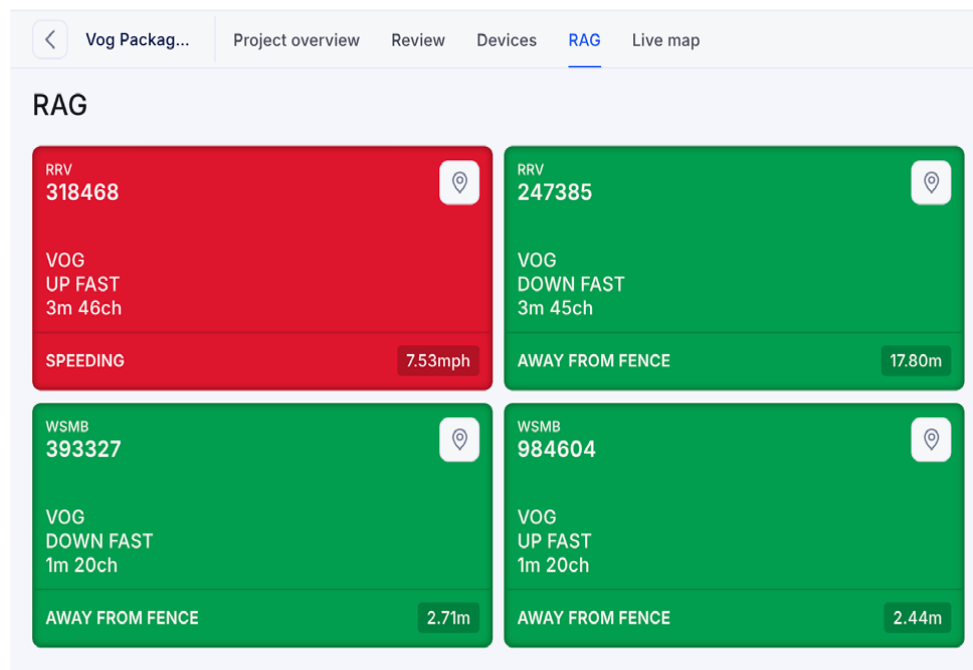
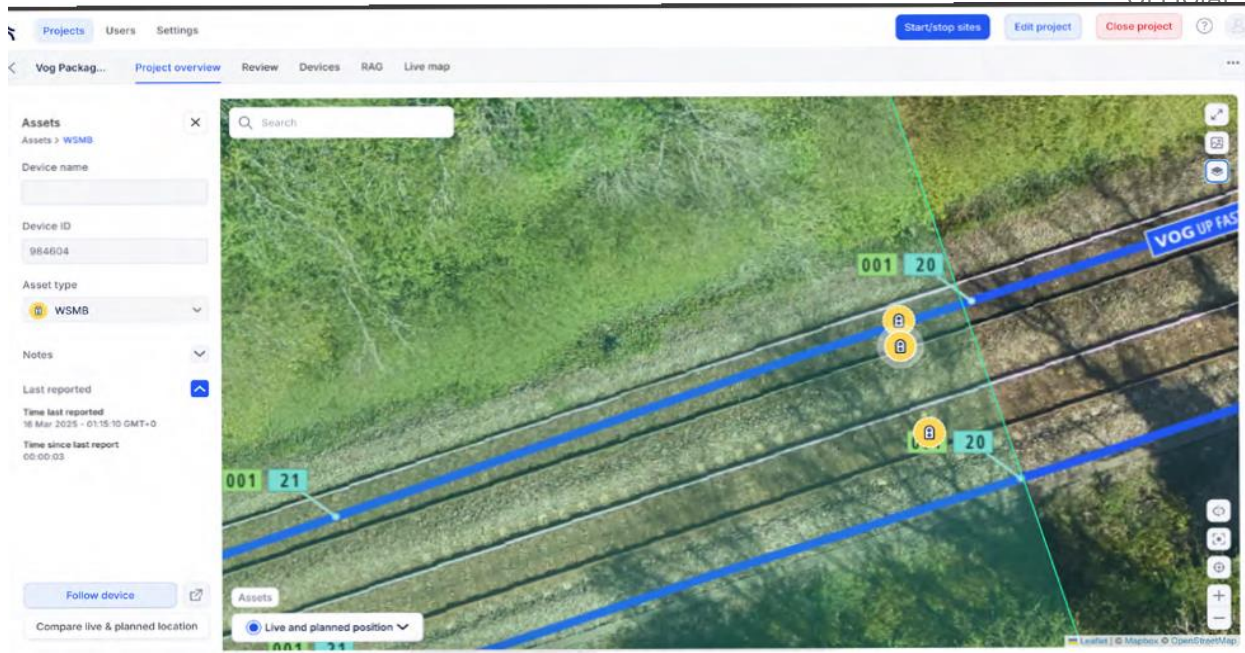
- Tended's system helped ensure correct placement of protection equipment during setup, reducing the risk of possession/LB irregularities.
- Used Tended Dashboard's Live Map to visually confirm equipment positioning against planned locations.
- The RAG view highlighted if boards were outside defined limits, allowing immediate corrective action.
- Devices audibly alerted users upon entering/exiting geofenced areas, validating correct placement and protecting staff from train movements.
- Identify discrepancies in planned vs physical placement, improving accuracy and coordination.
- More integrated planning and visibility, improving situational awareness

2. No objects left on the line post-shift

- The Dashboard provided full visibility of tagged assets across the site.
- ESs could confirm when all items were removed from the track at the end of a shift.
- Alerts were triggered if any asset remained within geofence boundaries after handback, supporting the LCV process.
- Faster handback time, reduce risk of overrun.

3. Safe access and movement of RRVs

- Devices attached to OTP meant that ESs could track the movement of RRVs around the worksite using the Live Map View.
- The ES could also check they were accessing the track at the right time and location, and remaining within safe work limits.
- The RAG view indicated when a vehicle when unsafe events were identified, such as speeding or leaving the worksite, so that action could be taken
- Monitor when Til Dawns were lifted/replaced – avoid points run-throughs



Conclusions and Next Steps:

- Geofencing absolutely has a place in our industry.
- Provides clear safety benefits for staff and plant movements. Would have prevented the incident in 2024, along with others across the industry.
- Expensive to implement everywhere, all the time.
- Biggest benefit in possessions and line blocks, where lines remain open
- Looking to roll this out Nationally in next 6-12 months.
- Virtual WSMBs next big step – trial commencing

Thanks for listening, any questions?

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LOWERY

SAFETY

*How we achieved two years without
accidents*

Speaker: Kristin Harmer-Jones



Safe. Responsive. Expert.

Safety Moment

Wessex Lineside Fire – June 2024



“

"This is a great example of helping us in Putting Passengers First, supporting our Happy Customer Enterprise Outcome and living one of our Enterprise Behavioural Charter Basics "We Take Action". Their actions were a credit to themselves and Lowery." -
SRE Leadership Team

”

The Achievement

24 months
ZERO accidents

LOWERY

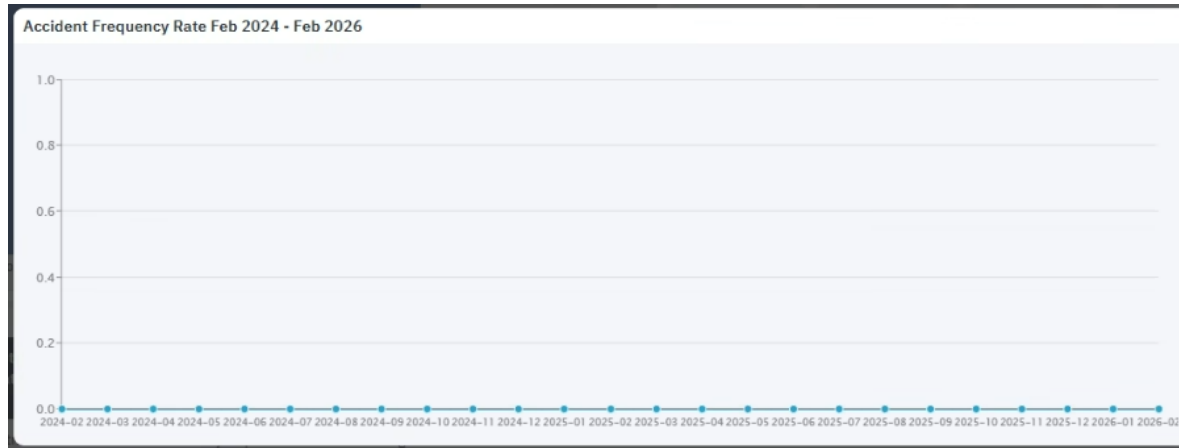
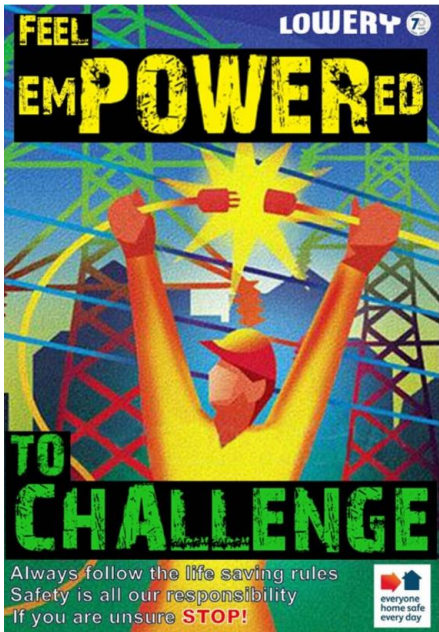


FEEL **EMPOWERED** TO CHALLENGE

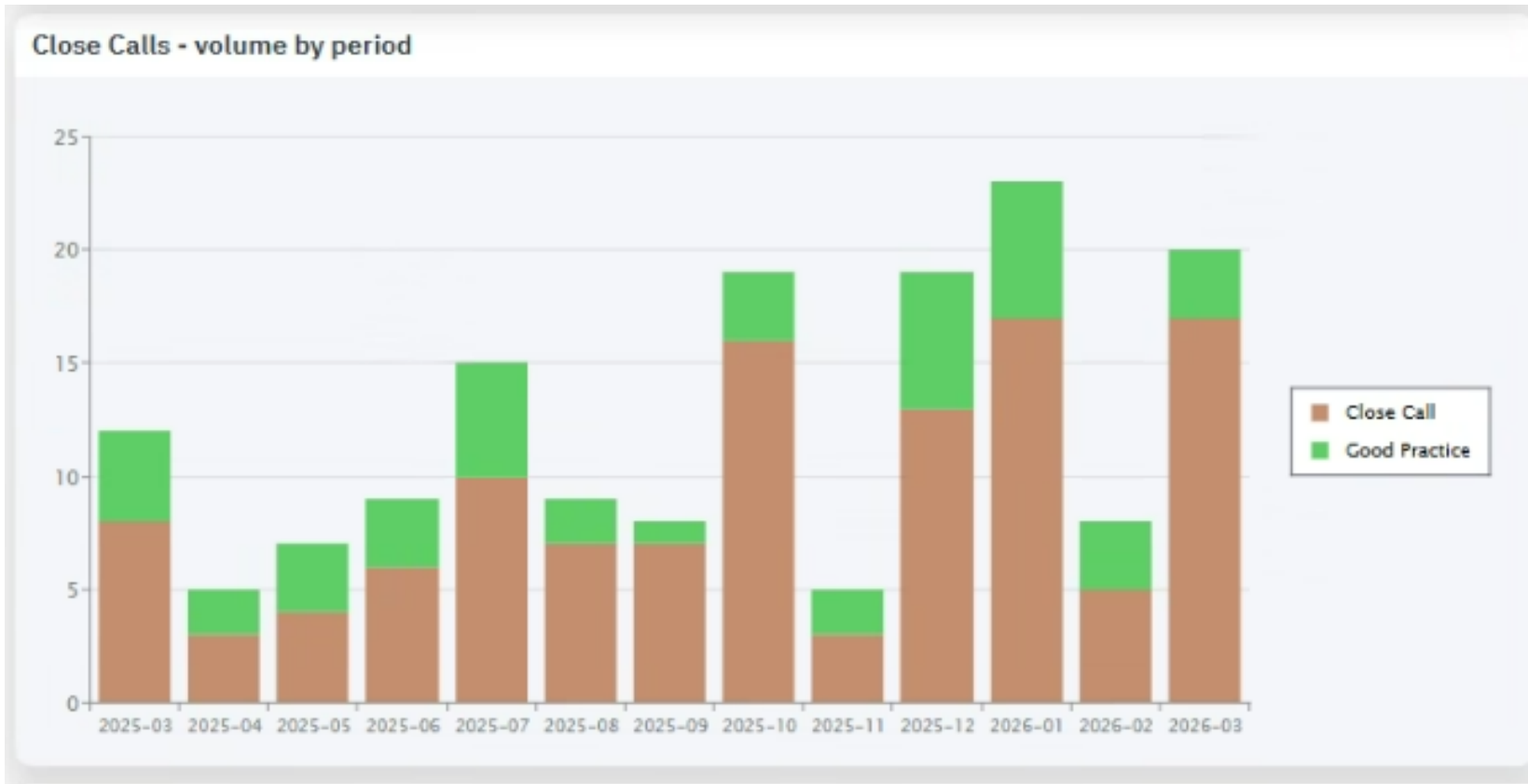
The Context: HV E&P



Culture and Practices



The Importance of Close Calls



Can it Last?



Contributing to the SRE

The screenshot shows a web browser window displaying the 'Supplier & Customer Portal' at the URL <https://io.octavius.co.uk/Supplier/ProjectRelatedIssue/AddProjectRelatedIssue>. The user is logged in as Kevin Griffiths. The page title is 'Project Opportunity'. It features a main navigation sidebar with 'Project Opportunity' selected. The form includes a QR code scanner, manual project number entry, and several input fields for project details and reviewer information.

Project Opportunity

If available, scan a QR code for project info

Scan Project QR Code

or enter project number manually

Project Number <input type="text" value="Project Number"/>	Project Name <input type="text" value="Project Name"/>
Reviewer Email <input type="text" value="Reviewer Email"/>	Reviewer Name <input type="text" value="Reviewer Name"/>
IO Category <input type="text" value="--Select--"/>	Location <input type="text" value="Specific site/location"/>

Description of what occurred

Solution to help prevent re-occurrence

Would you like the reviewer to respond to this submission?

Only jpg, png, pdf, doc, docx, xls,xlsx, ppt, pptx.

Developed by UNIGOLD
Kevin Griffiths logo

Contact



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 ganymede



Strapping Irregularities & Turning Insight into Control

Gary Lobue
Ganymede Solutions – Safety

What We're Seeing within the Rail Industry

Across the Southern Route, the same themes continue to appear:

- Straps applied to the wrong line or wrong mileage
- Incorrect positioning (block joints / earthing)
- Test before touch not consistently carried out
- Use of out-of-date or uncalibrated equipment
- Individuals accessing track alone

These are not knowledge gaps – they are behavioural and situational awareness issues.

What's Driving It

#SpeakUp



Situational Awareness

- Wrong line / wrong direction access
- Misidentification of location

Behaviour & Culture

- Assumptions and complacency
- Failure to challenge unsafe acts
- Lone working behaviours

Communication

- Gaps between planning and delivery
- Misalignment between ES / COSS / site teams

This is about decision making under pressure – not just competence.

What We've Changed

Strapping Assurance Checklist

- Used on every shift
- Reinforces key steps and safe application
- Supported through regular compliance checks

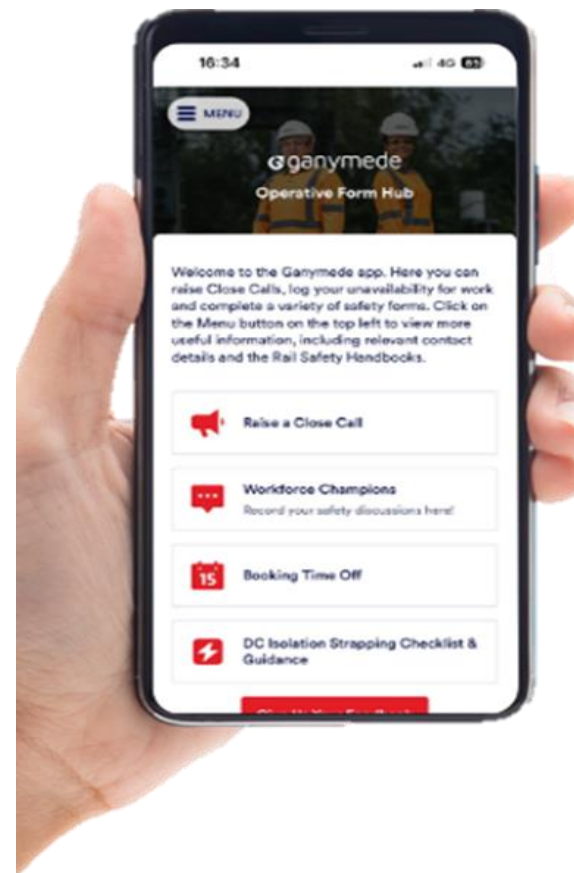
Workforce Champions

- Visible presence on site
- Driving engagement and challenge
- Reinforcing "Speak Up" and safe behaviours

Improved Resource Allocation

- Matching competence and experience to risk
- Considering route and site familiarity

Focus: practical controls that influence behaviour on site.



What's Making the Difference

We are seeing clear improvements in:

- Consistency of strapping application
- Increased challenge and intervention on site
- Earlier identification of risk
- Stronger engagement from the workforce
- Strapping plates project at London Bridge to ensure people are at the correct strapping point location

The biggest shift is behavioural:

People are more confident to stop, question and challenge.



Where We Believe the Industry Can Improve

Opportunities to go further:

019 Compliance

- Earlier engagement between planners and delivery teams
- Clearer alignment of ES and COSS responsibilities
- Structured and paid SSOWP reviews before shifts
- Consistent expectations across all suppliers
- Greater focus on behaviours, not just competence
- Improvement needs to be system-led, not just individual-led.

Cultural Step Change

We believe:

Strapping irregularities are not driven by lack of knowledge.

They are driven by human factors, behaviours and communication under pressure.

By applying simple controls, visible leadership and consistent standards, we can significantly reduce risk across the route.

If we want to eliminate strapping irregularities, we need to stop asking 'are they competent?' and start asking 'are we setting them up to succeed?'

Improved relationships